Draft results of the 6th prioritisation of the SVHCs on the Candidate List with the objective to recommend priority substances for inclusion in Annex XIV

The prioritisation results presented in this report have been obtained by applying ECHA's revised prioritisation approach as described in the document *"General Approach for Prioritisation of Substances of Very High Concern (SVHCs) for Inclusion in the List of Substances Subject to Authorisation"*, version 10 February 2014¹.

Substances assessed regarding their priority

The Candidate List contains currently 155 substances (see Annex 3). All substances on the Candidate List except those already included in one of ECHA's previous Recommendations (43 substances) and those included in the Candidate List in December 2013 and June 2014 (7 and 4 substances, respectively) have been considered in the prioritisation presented in this report. The latter will be considered in subsequent prioritisation round(s). Therefore, 101 substances were assessed for priority with regard to ECHA's 6th Annex XIV Recommendation.

Prioritisation process

The substances were assessed against the three criteria set out in Article 58(3) of REACH on intrinsic properties, wide-dispersiveness of uses and volume in the scope of authorisation using the revised prioritisation approach. More information on how these criteria are assessed and what factors are taken into account can be found in the document describing the revised prioritisation approach¹. In addition, Annex 2 to this report provides some examples of how the approach has been implemented in practice, in particular related to the assessment of the wide dispersive use criterion.

Section 6 of the prioritisation approach document refers to other aspects which can be considered in addition to the three Art 58(3) criteria, e.g. related to potential grouping or other on-going regulatory risk management activities. A need for grouping was considered for substances on the Candidate List for which the available information gives an indication that they could potentially replace other substances included in the draft recommendation or already included in Annex XIV, for (some of) their uses. The basis for such assumptions was either a combination of structural similarities and common registered uses or explicit information provided by stakeholders about the potential for using the two substances in the same type(s) of applications.

The information used for priority setting amongst the Candidate List substances is based on information provided in the registration dossiers on quantities on the European market and on identified uses. In addition, information from downstream user reports, PPORD notifications, the Annex XV SVHC dossiers of the substances, or information received during public consultation on the SVHC identification in accordance with Article 59 of the REACH Regulation has also been taken into account, where relevant.

¹ <u>http://echa.europa.eu/documents/10162/13640/gen_approach_svhc_prior_in_recommendations_en.pdf</u>

Prioritisation results

Table 1 presents ECHA's conclusions with regard to the priority substances among the 101 Candidate List substances assessed in this round for inclusion in Annex XIV. Annex 1 provides information on the registration status and the priority assessment of the substances. In Annex 1, the substances are listed in a descending order based on their total priority score based on the three criteria set out in Article 58(3).

For the remaining 24 of those 101 substances no registration (or notification in accordance with Directive 67/548/EEC) has been received by ECHA. Furthermore, for another 16 substances only registrations for intermediate uses (in accordance with Articles 17 and 18 of REACH) have been submitted. Based on registration information, these 40 substances do not appear to have uses within the scope of authorisation and consequently no scores or description of the volume and wide dispersiveness is provided in this recommendation round. The priority of these substances appears to be lower in comparison with the remaining substances in the Candidate List. However, some of them have been considered to be of priority due to grouping considerations (see below).

Further considerations related to potential grouping and on-going restriction processes under REACH that may affect the final conclusion on the priority of a substance are also provided in Annex 1. Seven phthalates have been grouped with phthalates already included in Annex XIV and they have been considered of priority regardless of their score. The same applies for 1-bromopropane, which has been grouped with trichloroethylene (already included in Annex XIV), as well as for five lead compounds and two boron compounds, which have been grouped with those lead and boron compounds which were assessed in this round and received high priority.

Based on the information available and the justifications provided in Annex 1, ECHA has included the following substances in the draft 6th recommendation of priority substances for inclusion in Annex XIV (list of substances subject to authorisation):

Substance name	EC	CAS
Anthracene oil	292-602-7	90640-80-5
Pitch, coal tar, high temp.	266-028-2	65996-93-2
4-Nonylphenol, branched and linear, ethoxylated [<i>substances with a linear and/or</i> <i>branched alkyl chain with a carbon number</i> of 9 covalently bound in position 4 to phenol, ethoxylated covering UVCB- and well-defined substances, polymers and homologues, which include any of the individual isomers and/or combinations thereof]	-	_
Boric acid	233-139-2, 234- 343-4	10043-35-3, 11113- 50-1
Disodium tetraborate, anhydrous	215-540-4	1330-43-4, 12179- 04-3, 1303-96-4
Diboron trioxide	215-125-8	1303-86-2

Table 1.

Tetraboron disodium heptaoxide, hydrate	235-541-3	12267-73-1
1-bromopropane (n-propyl bromide)	203-445-0	106-94-5
Orange lead (lead tetroxide)	215-235-6	1314-41-6
Lead monoxide (lead oxide)	215-267-0	1317-36-8
Tetralead trioxide sulphate	235-380-9	12202-17-4
Pentalead tetraoxide sulphate	235-067-7	12065-90-6
Pyrochlore, antimony lead yellow	232-382-1	8012-00-8
Silicic acid, lead salt	234-363-3	11120-22-2
Acetic acid, lead salt, basic	257-175-3	51404-69-4
Diisopentylphthalate	210-088-4	605-50-5
1,2-Benzenedicarboxylic acid, di-C6-8- branched alkyl esters, C7-rich	276-158-1	71888-89-6
1,2-Benzenedicarboxylic acid, di-C7-11- branched and linear alkyl esters	271-084-6	68515-42-4
1,2-Benzenedicarboxylic acid, dipentylester, branched and linear	284-032-2	84777-06-0
Bis(2-methoxyethyl) phthalate	204-212-6	117-82-8
Dipentyl phthalate (DPP)	205-017-9	131-18-0
N-pentyl-isopentylphthalate	-	776297-69-9

Number of substances to be recommended

According to Article 58(3) and Recital (77) of REACH, the number of substances included in each recommendation needs to reflect the capacity of ECHA and the Commission to handle applications in the time provided for and also consider workability and practicality for applicants preparing their applications for authorisation. At this stage of the process, the potential workload in the application for authorisation phase per specific prioritised substance or group of substances can only be estimated in a rudimentary manner, e.g. on the basis of factors like the number of registrations, number of uses and volumes.

The anticipated workload related to the substances included in the draft 6th Annex XIV recommendation appears to exceed ECHA's and the Commission's foreseen capacity to handle applications in the time provided for. Therefore, a subset of the substances in the draft recommendation will be chosen for ECHA's final recommendation to the Commission. After the public consultation, any new relevant information regarding the Art. 58(3) prioritisation criteria, or on the potential for substances to be "grouped" with the high priority ones or with substances already included / previously recommended for inclusion in Annex XIV will be taken into account – always in accordance with the revised prioritisation approach.

It should however be pointed out that substances which are not included in this ECHA's recommendation will be reconsidered, together with other substances in the candidate List, in the future recommendations.

Substance	EC no.	CAS no.	Registration status YES/INT/NO (INT=only intermediate registrations)	Inherent properties	Volumes	Wide- dispersive use	Inherent properties	Volumes	Wide-dispersive use	Total score (range)	Total score (middle value)	Further considerations (grouping, other)	Final conclusions
Bis(pentabromophenyl) ether (decabromodiphenyl ether; DecaBDE)	214-604-9	1163-19-5	YES	15	15	15	PBT (Article 57 d); vPvB (Article 57 e)	The amount of decaBDE imported into the EU is according to registration data in the range of 10,000-100,000 t/y. All tonnage appears to be in the scope of authorisation. Therefore, in conclusion, the volume in the scope of authorisation is estimated to be in the range of 10,000- 100,000 t/y.	Registered uses of decaBDE in the scope of authorisation include: - uses at industrial sites (plastics/polymers/composite materials, textile industries, adhesives, sealants, coating and inks), - uses by professional workers (composite materials, coating and inks) and - uses by consumers (coating and inks). [score 15] Furthermore, according to registrations the substance is used in articles (e.g. wires, cables, pipes, mattress textiles, tentage) in volumes >10 t/y.	45	45	Other: Regulatory action ongoing, currently foreseen to cover considerable share of uses in scope of authorisation [ECHA has submitted on a request by the Commission an Annex XV restriciton dossier. Consequently DecaBDE is currently subject to restriction process in accordance with Title VIII of the REACH Regulation.]	Due to on-going REACH restriction process, it has been considered appropriate to postpone the recommendation of decaBDE for inclusion in Annex XIV. Therefore, it is proposed <u>NOT</u> to recommend decaBDE for inclusion in Annex XIV in this recommendation round.
Anthracene oil	292-602-7	90640-80-5	YES	15	15	12	Carcinogenic ¹ , PBT and vPvB (articles 57a, 57d and 57e)	The amount of anthracene oil manufactured and imported into the EU is according to registration data above 100,000 t/y. Some uses appear not to be in the scope of authorisation, such as uses as intermediate. Based on available information regarding the volume for uses outside the scope of authorisation, the volume in the scope of authorisation is estimated to be above 10,000 t/y.	Registered uses of anthracene oil in the scope of authorisation include: - uses at industrial sites: in the carbon and graphite industry, in the metallurgic smelting, in the aluminium and electro steel industry, for refractories, coatings, paints, waterproofing materials and sealants. The substance is used as absorbent for industrial gas cleaning (scrubber) and as industrial solvent, and - uses by professional workers: in coatings, paints, waterproofing materials and sealants. [initial score 10] Furthermore, according to registrations and the Annex XV report (2009) the substance is used in articles (such as component in tar paints for special application (e.g. underwater corrosion protection) and component of waterproof membranes for roofing and other sealing purposes) in volumes > 10t/y. [refined score 12]	42	42	Grouping: with CTPHT (CL) [could potentially replace it in some of its uses such as binding agents in the production of anodes/electrodes in the metal industry, in refractories, and as anti-corrosion agents in (specialty) coatings, paints and adhesives). There is uncertainty regarding the potential grouping with further coal- stream-substances in the Candidate List.]	On the basis of Art. 58(3) prioritisation criteria, anthracene oil gets high priority for inclusion in Annex XIV among the Candidate List substances. Therefore, it is proposed to <u>recommend</u> anthracene oil for inclusion in Annex XIV.
Pitch, coal tar, high temp.	266-028-2	65996-93-2	YES	15	15	12	Carcinogenic, PBT and vPvB (articles 57a, 57d and 57e)	The amount of CTPHT manufactured and imported into the EU is according to registration data in the range of 1,000,000 - 10,000,000 t/y. Some uses appear not to be in the scope of authorisation, such as uses as intermediate. Based on available information regarding the volume for uses outside the scope of authorisation, the volume in the scope of authorisation is still in the same range as the total volume in the EU > 10,000 t/y.	Registered uses of CTPHT in the scope of authorisation include: - uses at industrial sites (as binding agent in the manufacture of anodes/electrodes in the metal industry - aluminium, metallurgic smelting, electro steel - , in refractories and for clay pigeons and as anti-corrosion agent in (specialty) coatings, paints and adhesives), and - uses by professional workers (binding agent for clay pigeons and as anti-corrosion agent in (specialty) coatings, paints and adhesives). [initial score 10] Furthermore, according to registrations and the Annex XV report the substance is used in articles (e.g. clay targets, metal articles, articles related to the use in paints and adhesives) in volumes > 10 t/y. [refined score 12]	42	42	Grouping: with Anthracene oil (CL) [could potentially replace it in some of its uses such as binding agents in the production of anodes/electrodes in the metal industry, in refractories, and as anti-corrosion agents in (specialty) coatings, paints and adhesives). There is uncertainty regarding the potential grouping with further coal stream-substances in the Candidate List.]	On the basis of Art. 58(3) prioritisation criteria, Pitch, coal tar, high temp. gets high priority for inclusion in Annex XIV among the Candidate List substances. Therefore, it is proposed to <u>recommend</u> Pitch, coal tar, high temp. for inclusion in Annex XIV.
4-Nonylphenol, branched and linear, ethoxylated [substances with a linear and/or branched alkyl chain with a carbon number of 9 covalently bound in position 4 to phenol, ethoxylated covering UVCB- and well- defined substances, polymers and homologues, which include any of the individual isomers and/or combinations thereof]	-	-	YES	7	15	15	Equivalent level of concern having probable serious effects to the environment (Article 57 f) ED	According to registration data for 4-Nonylphenol, ethoxylated (NPEO), the amount manufactured and/or imported into the EU is in the range of 1,000 – 10,000 t/y. Based on indications about the fraction of 4-Nonylphenol used to manufacture its ethoxylates (in registrations of 4-Nonylphenol) and the estimated average contribution to the molecular weight of its ethoxylates, a further volume of ethoxylates manufactured in the EU is roughly estimated to be in the range of 10,000 – $50,000 t/y$. Further, imported amounts of NPEO cannot be excluded. All tonnage appears to be in the scope of authorisation, apart from (minor) uses in SRD (RCOM). Therefore, in conclusion, the volume in the scope of authorisation is estimated to be in the range of 10,000 – $50,000 t/y$.	Registered uses of NPEO in the scope of authorisation include uses at industrial sites (formulation and use as floating agent in mining applications; as reducing agent in surface treatment; formulation and use of paints; emulsion polymerisation), and professional and consumer uses (of products such as paints containing NPEO; these uses are identified in registrations for 4-Nonylphenol) [score 15]. Furthermore, the substance is used in articles (e.g. containing paints).	37	37	Grouping: with 4-tert-OPnEO (5th A.XIV Recommendation) [it could potentially replace it in some of its uses such as in paints and in emulsion polymerisation]	On the basis of Art. 58(3) prioritisation criteria, 4- Nonylphenol, branched and linear, ethoxylated gets high priority for inclusion in Annex XIV among the Candidate List substances. Therefore, it is proposed to <u>recommend</u> 4-Nonylphenol, branched and linear, ethoxylated for inclusion in Annex XIV.
Orange lead (lead tetroxide)	215-235-6	1314-41-6	YES	1	15	12	Toxic for reproduction (Article 57 c)	The amount of orange lead (lead tetroxide) manufactured and/or imported into the EU is according to registration data in the range of 10,000 - <100,000 t/y. Some uses appear not to be in the scope of authorisation, such as use as raw material in manufacture of certain pigments, and use in PTC / piezoelectric ceramics. The volume used in glass and frits is taken into account when allocating the volume score. It is recognized that the intermediate/non-intermediate status of these uses is a complex issue, and stressed that this prioritisation exercise is not taking a formal position whether certain uses of substances are regarded as uses as intermediates in accordance with the definition in article 3(15). It is further noted that whether or not the uses in glass and frits are taken into account does not ultimately change the volume score. Taking into account the volume corresponding to uses appearing to fall outside the scope of authorisation from registrations and further information sources, the volume in the scope of authorisation is estimated to be in the range of 10,000 - <100,000 t/y.	Registered uses of orange lead (lead tetroxide) in the scope of authorisation include uses at industrial sites (e.g. use in the production of batteries, rubber and explosives, use in adsorbents) and uses by professional workers (use in paints). [Initial score 10] There might potentially also be professional use in explosives as according to the information from industry (RCOM, 2012) the explosives are used in civil works. In addition, according to the information from the industry (RCOM, 2012) the substance can be used in graphite containing dispersion pastes, machining, scraping compounds, friction breaks. There is no further information on these uses and therefore it is not possible to conclude whether the uses take place at industrial sites or whether some of them could be carried out by professional workers. The lead registrant and most of the member registrants have recently updated their registrations and they have removed the consumer use of artists' paints containing lead tetroxide from their dossiers and CSR. Furthermore, the International Lead Association has informed that the use in artists' paints is an obsolete use and the lead registrant has asked the member registrations, and the use remains in their dossiers. However, these members refer to the lead registrant's CSR which no longer supports the use. Finally, based on registration information the substance is used in articles (e.g. rubber articles), painted articles). [refined score 12]	28	28	Grouping: Lead monoxide and lead tetroxide appears to be used in similar applications as other lead substances on the Candidate list, among which pentalead tetraoxide sulphate, tetralead trioxide sulphate, pyrochlore antimony lead yellow, silicic acid lead salt and acetic acid lead salt, basic (applications in batteries, pigments/paints, glass or frits). However, it has not been assessed whether the precise function of these substances in these applications is the same and whether or under which conditions substitution could happen in practice.	On the basis of Art. 58(3) prioritisation criteria, orange lead gets high priority for inclusion in Annex XIV among the Candidate List substances. Therefore, it is proposed to <u>recommend</u> orange lead for inclusion in Annex XIV.

1-Methyl-2-pyrrolidone	212-828-1	872-50-4	YES	1	15	12	Toxic for reproduction (article 57c)	The amount of 1-Methyl-2-pyrrolidone (NMP) manufactured and/or imported into the EU is, according to registration data, in the range of 10,000 - 100,000 t/y. Some uses appear not to be in the scope of authorisation, such as in plant protection products and in the manufacturing of pharmaceuticals. The volume corresponding to those uses is ~30 %, based on information from registrations. Therefore, in conclusion, the volume in the scope of authorisation is estimated to be in the range of 10,000 - 100,000 t/y.	Registered uses of 1-Methyl-2-pyrrolidone (NMP) in the scope of authorisation include uses at industrial sites (formulation & (re)packing of substances and mixtures, in coatings, cleaning agents, oil field drilling and production operations, as binders and release agents, as functional fluids, in laboratories, polymer processing, water treatment), and uses by professional workers (in coatings, cleaning agents, oil field drilling and production operations, as binders and release agents, as functional fluids, road and construction applications, polymer processing) [initial score 10]. Furthermore, according to registrations, the substance may be present in articles (e.g. coated articles) [refined score 12]	28	28	Other: Regulatory action ongoing; not clear whether it would have an impact on the volume of NMP in the uses in scope of authorisation. [The Netherlands has submitted an Annex XV restriction dossier. Consequently NMP is currently subject to restriction process in accordance with Title VIII of the REACH Regulation.]	Due to on-going REACH restriction process, it has been considered appropriate to postpone the recommendation of NMP for inclusion in Annex XIV. Therefore, it is proposed <u>NOT</u> to recommend NMP for inclusion in Annex XIV in this recommendation round.
Boric acid	233-139-2, 234-343-4	10043-35-3, 11113-50-1	YES	1	15	12	Toxic for reproduction (article 57 c)	The amount of boric acid manufactured and/or imported into the EU is according to registration data (which also report recent figures collected by EBA) in the range of 10,000 - 100,000 t/y. Some uses appear not to be in the scope of authorisation, suct as uses as intermediate in manufacture of other substances (including glass and ceramics/frits), uses of mixtures below the specific concentration limit for classification, and uses in SRD. The volume in the scope of authorisation is estimated to be in the range of 10,000 – 100,000 t/y.	Registered uses of boric acid in the scope of authorisation include: • uses at industrial sites (e.g., formulation, uses of some mixtures, incorporation into articles, and use as a processing aid; such uses take place in a high number of sectors; main fields of application include, e.g., cellulose insulation, metallurgy, construction materials, adhesives, refractories, industrial fluids, paints and coatings, photographic solutions, abrasives, metal treatment, detergents), and • uses by professional workers (e.g., formulation/use of fertilisers, use in cellulose insulation, construction materials, swimming pool tablets, photographic solutions, coatings, detergents/cleaners) [initial score 10]. In the above examples, where the substance is used in mixture, part of the mixtures supplied to the end use may have concentrations below the SCL. Furthermore, article service life is relevant for several of the uses listed above, e.g. cellulose insulation, construction materials, refractories, coatings, metallic equipment, etc. [refined score 12]	28	28	Grouping: with disodium tetraborate anhydrous and diboron trioxide (CL) [it could potentially replace them in many of their uses, based on structural similarities and almost identical pattern of registered uses]	On the basis of Art. 58(3) prioritisation criteria, boric acid gets high priority for inclusion in Annex XIV among the Candidate List substances. Therefore, it is proposed to <u>recommend</u> boric acid for inclusion in Annex XIV.
Disodium tetraborate, anhydrous	215-540-4	1303-96-4, 1330- 43-4, 12179-04- 3	YES	1	15	12	Toxic for reproduction (article 57 c)	The amount of disodium tetraborates manufactured and/or imported into the EU is according to registration data (which also report recent figures collected by EBA) in the range of 100,000 – 1.000,000 t/y. Some uses appear not to be in the scope of authorisation, such as uses as intermediate in the manufacture of other substances (including in the glass and ceramic/frit sectors) and uses of mixtures below the specific concentration limit for classification, and uses in SRD. The volume in the scope of authorisation is estimated to be > 10,000 t/y.	Registered uses of disodium tetraborates in the scope of authorisation include: • uses at industrial sites (e.g., formulations, uses of some mixtures, incorporation into articles, and processing aid; such uses take place in a high number of sectors; main fields of application seem to include cellulose insulation, metallurgy, adhesives, construction materials, detergents, refractories, industrial fluids, paints and coatings, abrasives, swimming pool tablets, metal treatment, nuclear system, cement, etc), and • uses by professional workers (formulation/use of fertilisers, use in cellulose insulation, construction materials, coatings, swimming pool tablets, detergents/cleaners, and potentially further registered uses) [initial score 10]. In the above examples, where the substance is used as mixture, part of the mixtures supplied to the end use may include the substance in concentrations below the SCL. Furthermore, article service life is relevant for several of the uses listed above, e.g. cellulose insulation, refractories, construction materials, coatings, metallic equipment, etc. [refined score 12]	28	28	Grouping: with boric acid and diboron trioxide (CL) [it could potentially replace them in many of their uses, based on structural similarities and almost identical pattern of registered uses]	On the basis of Art. 58(3) prioritisation criteria, disodium tetraborate, anhydrous gets high priority for inclusion in Annex XIV among the Candidate List substances. Therefore, it is proposed to <u>recommend</u> disodium tetraborate, anhydrous for inclusion in Annex XIV.
Lead monoxide (lead oxide)	215-267-0	1317-36-8	YES	1	15	7-10	Toxic for reproduction (Article 57 c)	The amount of lead monoxide manufactured and/or imported into the EU is according to registration data above 100,000 t/y. Some uses appear not to be in the scope of authorisation, such as use in manufacturing of PVC stabilisers, explosives, certain pigments, technical ceramics and use as laboratory reagent and in chemical analysis. The volume used in glass and frits is taken into account when allocating the volume score. It is recognized that the intermediate/non-intermediate status of this use is a complex issue, and stressed that this prioritisatior exercise is not taking a formal position whether certain uses of substances are regarded as uses as intermediates in accordance with the definition in article 3(15). It is further noted that whether or not the use in glass is taken into account dues not ultimately change the volume score. Taking into account the volume corresponding to uses appearing to fall outside the scope of authorisation from the registration dossiers and other information, the volume in the scope of authorisation is estimated to be in the range of 100,000 - 1,000,000 t/a.	Registered uses of lead monoxide in the scope of authorisation include uses at industrial sites (batteries, glass, frits, rubber, adsorbents). [initial score 5] In addition, according to the information from the industry (RCOM, 2012) the substance can be used in graphite containing dispersion pastes, machining, scraping compounds, friction breaks, and sealants. There is no further information on these uses and therefore it is not possible to conclude whether the uses take place at industrial sites or whether some of them could be carried out by professional workers. The lead registrant and most of the member registrants have recently updated their registrations. They have, inter alia, removed the professional and consumer use of paints and pigments (e.g. artists' paints) containing lead monoxide from their registrations and they have clarified that the use of adsorbents is industrial rather than professional. The International Lead Association has also informed ECHA of the relevant updates to the registration dossiers. However, there are some members who have not yet updated their registrations, and the professional and consumer uses in paints (and professional use of adsorbents) remain in their dossiers. These members refer to the lead registrant's CSR which no longer supports these uses. Finally, according to registrations the substance is used in articles and information provided by industry (RCOM, 2012) indicates that this is in volumes above 10 t/y (e.g. rubber articles). [Refined score 7- 10]	23-26	25	Grouping: Lead monoxide and lead tetroxide appears to be used in similar applications as other lead substances on the Candidate list, among which pentalead tetraoxide sulphate, tetralead trioxide sulphate, pyrochlore antimony lead yellow, silicic acid lead salt and acetic acid lead salt, basic (applications in batteries, pigments/paints, glass or frits). However, it has not been assessed whether the precise function of these substances in these applications is the same and whether or under which conditions substitution could happen in practice.	On the basis of Art. 58(3) prioritisation criteria, lead monoxide gets high priority for inclusion in Annex XIV among the Candidate List substances. Therefore, it is proposed to <u>recommend</u> lead monoxide for inclusion in Annex XIV.
1-bromopropane (n-propyl bromide)	203-445-0	106-94-5	YES	1	12	10	Toxic for reproduction (Article 57 c)	The amount of 1-bromopropane (n-propyl bromide) manufactured and/or imported into the EU is according to registration data above 1,000 t/y. Some uses appear not to be in the scope of authorisation, such as use as an intermediate in manufacture of chemicals. Furthermore, according to information from the industry (RCOM), the substance may also be used in some laboratory analyses but this use seems to fall outside the scope of authorisation due to the generic exemption on scientific development and research. Taking into account the volume corresponding to those uses – up to 69 % of the total EU volume based on information from the industry (RCOM) - the volume in the scope of authorisation is estimated to be in the range of 1,000 - <10,000 t/y.	Registered uses of 1-bromopropane (n-propyl bromide) in the scope of authorisation include uses at industrial sites (formulation and use as a solvent in mixtures for vapour degreasing and surface cleaning), and uses by professional workers (use as a solvent in mixtures for vapour degreasing and surface cleaning) [score 10].	23	23	Grouping : with trichloroethylene (Annex XIV) [based on information from the industry received during the SVHC public consultation, the substance may be used to substitute it in some of its uses]	Although other substances on the Candidate List assessed in this recommendation round get higher priority based on Art. 58(3) prioritisation criteria, it is proposed to <u>recommend</u> 1- bromopropane for inclusion in Annex XIV on the basis of grouping considerations.

Dioxobis(stearato)trilead	235-702-8	12578-12-0	YES	1	15	7	Toxic for reproduction (Article 57 c)	The amount of Dioxobis(stearato)trilead manufactured and/or imported into the EU is according to registration data in the range 10,000 – 100,000 t/y. All tonnage appears to be in the scope of authorisation. The sole registered use of the substance is as stabiliser. According to information published by the industry the volumes of lead-stabilisers produced and consumed in EU have been decreasing continuously in the last years. However no substance-specific information is available. The total tonnage of Pb-stabilisers used in EU seems to remain above 10,000 t/y. Therefore, in conclusion, in the absence of additional information, the volume in the scope of authorisation is estimated to be > 10,000 t/y.	Registered uses of Dioxobis(stearato)trilead in the scope of authorisation include uses at industrial sites (use in stabilisers, PVC processing) [initial score 5]. Furthermore, according to registration data the substance is used in plastic articles in volumes > 10 t/y [refined score 7].	23	23	Potential grouping: with other lead substances (CL)	Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of dioxobis(stearato)trilead is postponed. Consequently, it is proposed <u>NOT</u> to recommend dioxobis(stearato)trilead for inclusion in Annex XIV in this recommendation round.
Fatty acids, C16-18, lead salts	292-966-7	91031-62-8	YES	1	15	7	Toxic for reproduction (Article 57 c)	The amount of Fatty acids, C16-18, lead salts manufactured and/or imported into the EU is according to registration data > 10,000 t/y. All tonnage appears to be in the scope of authorisation. The sole registered use of the substance is as stabiliser. According to information published by the industry the volumes of lead-stabilisers produced and consumed in EU have been decreasing continuously in the last years. However no substance-specific information is provided. The total tonnage of Pb-stabilisers used in EU seems to remain above 10,000 t/y. Therefore, in conclusion, in the absence of additional information, the volume in the scope of authorisation is estimated to be > 10,000 t/y.	Registered uses of Fatty acids, C16-18, lead salts in the scope of authorisation comprise uses at industrial sites (use in stabilisers and PVC processing) [initial score 5]. Furthermore, according to registration data the substance is used in plastic articles in volumes > 10t/y [refined score 7].	23	23	Potential grouping: with other lead substances (CL)	Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of Fatty acids, C16-18, lead salts is postponed. Consequently, it is proposed MOT to recommend Fatty acids, C16-18, lead salts for inclusion in Annex XIV in this recommendation round.
Hydrazine	206-114-9	302-01-2, 7803- 57-8	YES	1	12	10	Carcinogenic (article 57a)	The amount of hydrazine manufactured and/or imported into the EU is according to registration data >10,000 t/y. Some uses appear not to be in the scope of authorisation, such as the uses as monomer / intermediate, and to the extent they fall under the generic exemptions from authorisation requirement some uses as laboratory chemicals. The volume corresponding to these uses is estimated to ca. 80% of the total tonnage, based on information from the Annex XV dossier. Therefore, in conclusion, the volume in the scope of authorisation is estimated to be in the range of 1,000-<10,000 t/y.	Registered uses of hydrazine in the scope of authorisation include uses at industrial sites (use as corrosion inhibitor in steam generating and heating systems, use as reducing agent, use as stabilising reagent in aromatic amines to be further used in synthesis of dyestuffs, use as propellant in the aerospace sector), and uses by professional workers (use as corrosion inhibitor in steam generating and heating systems) [Score 10].	23	23		Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of Hydrazine is postponed. Consequently, it is proposed <u>NOT</u> to recommend Hydrazine for inclusion in Annex XIV in this recommendation round.
Pentalead tetraoxide sulphate	235-067-7	12065-90-6	YES	1	15	7	Toxic for reproduction (Article 57 c)	The amount of pentalead tetraoxide sulphate manufactured and/or imported into the EU is according to registration data is in the range of 10,000 -100,000 t/y. Tonnages for use as intermediate have been reported from the registration dossiers received. Based on available information it appears however that the use described is likely not to be an intermediate use. Therefore, in conclusion, the volume in the scope of authorisation is estimated to be > 10,000 t/y.	Registered uses of pentalead tetraoxide sulphate in the scope of authorisation include uses at industrial sites (use in stabilisers and in PVC processing, use in lead battery production) [initial score 5]. Furthermore, according to registration data the substance is used in articles in volumes > 10 t/y (e.g. plastic articles) [refined score 7].	23	23	Pentalead tetraoxide sulphate appears to be used in similar applications (batteries) as other lead substances of high priority (lead monoxide, lead tetroxide). However, it has not been assessed whether the precise function of these substances in these applications is the same and whether or under which conditions substitution could happen in practice.	Although other substances on the Candidate List assessed in this recommendation round get higher priority based on Art. 58(3) prioritisation criteria, it is proposed to <u>recommend</u> pentalead tetraoxide sulphate for inclusion in Annex XIV on the basis of grouping considerations.
Tetralead trioxide sulphate	235-380-9	12202-17-4	YES	1	15	7	Toxic for reproduction (Article 57 c)	The amount of tetralead trioxide sulphate manufactured and imported in the EU is according to registration data in the range of 1,000,000 - 10,000,000. Tonnages for use as intermediate have been reported from the registration dossiers received. Based on available information it appears however that the use described is likely not to be an intermediate use. Therefore, in conclusion, the volume in the scope of authorisation is estimated to be > 10,000 t/y.	Registered uses of tetralead trioxide sulphate in the scope of authorisation include uses at industrial sites (use in stabilisers, PVC processing (synthesis and formulation), production of coatings and inks and application of coatings and inks for mirror backing, lead battery production, use as an industrial reactant) [initial score 5]. Furthermore, according to the registration data the substance is used in articles (e.g. plastic articles, mirrors) [refined score 7].	23	23	Tetralead trioxide sulphate appears to be used in similar applications (batteries) as other lead substances of high priority (lead monoxide, lead tetroxide). However, it has not been assessed whether the precise function of these substances in these applications is the same and whether or under which conditions substitution could happen in practice.	Although other substances on the Candidate List assessed in this recommendation round get higher priority based on Art. 58(3) prioritisation criteria, it is proposed to <u>recommend</u> tetralead trioxide sulphate for inclusion in Annex XIV on the basis of grouping considerations.
Trilead dioxide phosphonate	235-252-2	12141-20-7	YES	1	15	7	Toxic for reproduction (Article 57 c)	The amount of trilead dioxyde phophonate manufactured and/or imported into the EU is according to registration data in the range of 100,000 - 1,000,000 t/y. All tonnage appears to be in the scope of authorisation. The substance seems to be for main use as stabiliser. According to information published by the industry the volumes of lead-stabilisers produced and consumed in EU have been decreasing continuously in the last years. However no substance-specific information is available. The total tonnage of Pb-stabilisers used in EU seems to remain above 10,000 t/y. Therefore, in conclusion, in the absence of additional information, the volume of trilead dioxyde phophonatein the scope of authorisation is estimated to be > 10,000 t/y.	Registered uses of trilead dioxide phosponate in the scope of authorisation comprise uses at industrial sites (use in stabilisers and in PVC processing, use in rubber production, use in the production of coatings and application of coatings for mirror backing). In addition, one comment received during the public consultation indicates a use in greases (anti-friction coating), assumed to be limited to industrial use[initial score 5]. Furthermore, according to registration data the substance is used in articles (such as plastic and rubber articles) in volumes > 10t/y [refined score 7].	23	23	Potential grouping: with other lead substances (CL)	Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of trilead dioxide phosponate is postponed. Consequently, it is proposed MOT to recommend trilead dioxide phosponate for inclusion in Annex XIV in this recommendation round.

Diboron trioxide	215-125-8	1303-86-2	YES	1	9	12	Toxic for reproduction (Article 57 c)	The amount of diboron trioxide manufactured and/or imported into the EU is according to registration data (which also report recent figures collected by EBA) in the range of 1,000 – 10,000 t/y. Some uses appear not to be in the scope of authorisation, such as uses as intermediate in manufacture of other substances (including in the glass and ceramic sectors) and uses of mixtures below the specific concentration limit for classificatior (SCL, 3.1%), as well as uses in SRD. The volume in the scope of authorisation is estimated to be in the range of 100 – 1,000 t/y.	Registered uses of diboron trioxide in the scope of authorisation include: • uses at industrial sites (e.g., formulations, uses of some mixtures, incorporation into articles, and processing aid; such uses take place in a high number of sectors; main fields of application include, e.g., refractories, metallurgy, and coatings; further registered uses include nuclear systems, soldering mixtures, flux agents for alloys and/or ceramic glazings, adhesive powders, abrasives, industrial fluids, construction materials, detergent cleaners, machinery and transport equipment,), and • uses by professional workers (relevant registered uses seem to include uses in metallurgy, uses of coatings, soldering mixtures, flux agents for alloys and/or ceramic glazings, adhesive powders, fertilisers; and to the extent they regard mixtures above the SCL also further registered uses such as in abrasives, fluids, construction materials, and detergent cleaners – according to information from the SPIN database reported during the public consultation, diboron trioxide is potentially used also in other applications, e.g. in photo-chemicals) [initial score 10]. In the above examples, where the substance is used in mixture, part of the mixtures supplied to the end use may include the substance in concentrations below the SCL. Furthermore, article service life is relevant for several of the uses listed above, e.g. refractories, coatings, abrasives, metallic equipment, etc. [refined score 12]	22	22	Grouping: with boric acid and disodium tetraborate anhydrous (CL) [it could potentially replace them ir many of their uses, based on structural similarities and almost identical pattern of registered uses]	Although other substances on the Candidate List assessed in this recommendation round get higher priority based on Art. 58(3) prioritisation criteria, it is proposed to <u>recommend</u> diboron trioxide for inclusion in Annex XIV on the basis of grouping considerations.
Cyclohexane-1,2-dicarboxylic anhydride [1], cis- cyclohexane-1,2-dicarboxylic anhydride [2], trans- cyclohexane-1,2-dicarboxylic anhydride [3] [The individual cis- [2] and trans- [3] isomer substances and all possible combinations of the cis- and trans-isomers [1] are covered by this entry]	201-604-9, 236-086-3, 238-009-9	85-42-7, 13149- 00-3, 14166-21- 3	YES	1	12	7	Equivalent level of concern having probable serious effects to human health (Article 57 f)	The amount of HHPA manufactured and/or imported into the EU according to registration data is $\ge 10,000$ t/y. Some uses appear not to be in the scope of authorisation, such as use as an intermediate including use as a monomer in the production of thermoplastics. Based on information on the volume corresponding to those uses from registrations, the volume in the scope of authorisation is estimated to be in the range of 1,000 - <10,000 t/y.	Registered uses of HHPA in the scope of authorisation include uses at industrial sites (formulation of preparations; hardener for epoxy resins; process regulator for polymer processes). [initial score 5] Furthermore, according to the RCOM from the public consultation of the Annex XV SVHC dossier, the substance is used by professional workers (use of paints) in volumes < 10t/y. [refined score 7].	20	20	Grouping: with MHHPA [it could potentially replace it in some of its uses]	Given that other substances assessed for this recommendation round have higher priority based on Art. S8(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of HHPA is postponed. Consequently, it is proposed <u>NOT</u> to recommend HHPA for inclusion in Annex XIV in this recommendation round.
4,4'-bis(dimethylamino)-4''- (methylamino)trityl alcohol [with ≥ 0.1% of Michler's ketone (EC No. 202-027-5) or Michler's base (EC No. 202- 959-2)]	209-218-2	561-41-1	YES	1	6	12	Carcinogenic (Article 57a)	The amount of 4,4'-bis(dimethylamino)-4"-(methylamino)trityl alcohol with Michler's Ketone (MK) or Michler's Base (MB) ≥0.1% manufactured and/or imported into the EU is according to registration data in the range of 10-100 t/y. All tonnage appears to be in the scope of authorisation.	Registered uses of 4,4'-bis(dimethylamino)-4"-(methylamino)trityl alcohol with MK or MB ≥0.1% in the scope of authorisation include uses at industrial sites (formulation and end use of printing inks) and by professional workers (use of printing inks). [initial score 10] The substance is also used in printed articles. [refined score 12]	19	19		Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of 4,4'- bis(dimethylamino)-4''- (methylamino)trityl alcohol with MK or MB \geq 0.1% is postponed. Consequently, it is proposed MOT to recommend 4,4'- bis(dimethylamino)-4''- (methylamino)trityl alcohol with MK or MB \geq 0.1% for inclusion in Annex XIV in this recommendation round.
1,2-dimethoxyethane; ethylene glycol dimethyl ether (EGDME)	203-794-9	110-71-4	YES	1	12	5	Toxic for reproduction (Article 57 c)	The amount of EGDME manufactured and/or imported into the EU is, according to dossiers submitted by industry in the range of 1,000 - 10,000 t/y. All tonnage appears to be in the scope of authorisation. Therefore, in conclusion, the volume in the scope of authorisation is estimated to be in the range of 1,000 - 10,000 t/y.	Registered uses of EGDME in the scope of authorisation include uses at industrial sites (as solvent/process aid in the manufacture of fine/bulk chemicals and pharmaceuticals and in the production of batteries) [score 5]. Furthermore, according to registrations, the substance is used in articles (solvent in [sealed] batteries). However, it appears that the release of the substance from these articles might be negligible.	18	18	Potential grouping: with Diglyme (4th A.XIV Recommendation) and TEGDME (CL) [there is uncertainty as to the extent to which it could replace them in some of their uses]	Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of 1,2- dimethoxyethane; ethylene glycol dimethyl ether (EGDME) is postponed. Consequently, it is proposed <u>NOT</u> to recommend 1,2-dimethoxyethane; ethylene glycol dimethyl ether (EGDME) for inclusion in Annex XIV in this recommendation round.
2-Methoxyethanol	203-713-7	109-86-4	YES	1	12	5	Toxic for reproduction (article 57c)	The amount of 2-methoxyethanol manufactured and/or imported into the EU is according to registration data above 1,000 t/y. Some uses appear not to be in the scope of authorisation, such as intermediate in manufacture of chemicals, monomer in imported polymers and use as laboratory chemical in scientific research and development. Based on the volume corresponding to those uses according to information from the industry, the volume in the scope of authorisation is estimated to be in the range of 1,000 - <10,000 t/y.	Registered uses of 2-methoxyethanol in the scope of authorisation include uses at industrial sites (formulation of mixtures, use as solvent, processing aid and extraction agent)[score 5].	18	18		Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of 2- methoxyethanol is postponed. Consequently, it is proposed NOT to recommend 2- methoxyethanol for inclusion in Annex XIV in this recommendation round.

Hexahydromethylphthalic anhydride [1], Hexahydro-4- methylphthalic anhydride [2], Hexahydro-1-methylphthalic anhydride [3], Hexahydro-3- methylphthalic anhydride [4] [The individual isomers [2], [3] and [4] (including their cis and trans- stereo isomeric forms) and all possible combinations of the isomers [1] are covered by this entry]	247-094-1, 243-072-0, 256-356-4, 260-566-1	25550-51-0, 19438-60-9, 48122-14-1, 57110-29-9	YES	1	12	5	Equivalent level of concern having probable serious effects to human health (Article 57 f)	The amount of MHHPA manufactured and/or imported into the EU according to registration data is in the range of 1,000 - <10,000 t/y. Some uses appear not to be in the scope of authorisation, such as use as intermediate. However, the volume corresponding to those uses is not available from the registration dossiers. Therefore, in conclusion, the volume in the scope of authorisation is estimated to be in the range of 1,000 - <10,000 t/y.	Registered uses of MHHPA in the scope of authorisation include uses at industrial sites (formulation of mixtures; hardener for epoxy resins; process regulator for polymer processes). [score 5]	18	18	Grouping: with HHPA [it could potentially replace it in some of its uses]	Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of MHHPA is postponed. Consequently, it is proposed <u>NOT</u> to recommend MHHPA for inclusion in Annex XIV in this recommendation round.
Tetraethyllead	201-075-4	78-00-2	YES	1	12	5	Toxic for reproduction (Article 57 c)	The amount of tetraethyllead manufactured and/or imported into the EU is according to registration data in the range of 1,000 - <10,000 t/y. The substance seems to be primarily used in aviation fuels. Registration information refers to motor fuels, however, there is no further information on this use. The professional and consumer use of aviation gasoline (volume as well unknown) appears to be outside the scope of authorisation because the substance is present in the gasoline at a concentration below the specific concentration limit. Therefore, in the absence of additional information, the volume in the scope of authorisation is estimated to be in the range of 1,000 - <10,000 t/y.	Registered uses of tetraethyllead in the scope of authorisation include uses at industrial sites (formulation and use of fuel additives and fuel blends in aviation gasoline) [score 5].	18	18	Potential grouping: with other lead substances (CL)	Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of tetraethyllead is postponed. Consequently, it is proposed <u>NOT</u> to recommend tetraethyllead for inclusion in Annex XIV in this recommendation round.
Lead styphnate	239-290-0	15245-44-0	YES	1	6	7-12	Toxic for reproduction (article 57 c)	The amount of lead styphnate manufactured into the EU is according to registration data in the range of 10 – 100 t/y. All tonnage appears to be in the scope of authorisation.	Registered uses of lead styphnate in the scope of authorisation include uses at industrial sites (formulation as component of primer mixtures (explosives) [initial score 5]. Furthermore, according to information from the registration dossier, the substance is also used by professional workers in primer ammunition and pyrotechnic articles. According to the Annex XV dossier, based on the available information, it is estimated that firearm ammunitions accounts for ca. 90% of total EU consumption (with sport/hunting ammunition representing the significant majority). Among the rest of the uses, the following tonnages/share of the tonnage are assumed (i) detonator and pyrotechnics: ca. 7% of overall EU production (military detonators and injuher tonnage share compared to civilian detonators) (ii) Powder Actuated Cartridges for Power Tools: ca 4% of the total tonnage manufactured in the EU. Other identified uses (e.g. Automotive Igniters, Cartridge Actuated Devices (CAD) Performance Arts Pyrotechnics, use in Shuttles and Satellites) are assumed to be low or very low. [refined score 7-12].	14-19	17	Potential grouping: with other lead substances (CL)	Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of lead styphnate is postponed. Consequently, it is proposed <u>NOT</u> to recommend lead styphnate for inclusion in Annex XIV in this recommendation round.
[Phthalato(2-)]dioxotrilead	273-688-5	69011-06-9	YES	1	9	7	Toxic for reproduction (Article 57 c)	The amount of [phthalato(2-)]dioxotrilead manufactured and/or imported into the EU is according to registration data in the range of 100 - 1000 t/y. All tonnage appears to be in the scope of authorisation.	Registered uses of [phthalato(2-)]dioxotrilead in the scope of authorisation include uses at industrial sites (use in stabilisers, PVC processing) [initial score 5]. Furthermore, according to registration data, the substance is used in plastic articles [refined score 7].	17	17	Potential grouping: with other lead substances (CL)	Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of [phthalato(2-)]dioxotrilead is postponed. Consequently, it is proposed NOT to recommend [phthalato(2-)]dioxotrilead for inclusion in Annex XIV in this recommendation round.
Cadmium	231-152-8	7440-43-9	YES	1	9	7	Carcinogenic (Article 57a); Equivalent level of concern having probable serious effects to human health (Article 57 f)	The amount of cadmium manufactured and/or imported into the EU according to registration data is in the range of 1,000 - <10,000 t/y. Some uses appear not to be in the scope of authorisation, such as the use as laboratory reagent, and the use as an intermediate. A detailed breakdown of tonnage per use has been provided in the registrations therefore it appears that the majority of the tonnage is for use as intermediate. Therefore, in conclusion, the volume in the scope of authorisation is estimated to be in the range of 100 - <1,000 t/y.	Registered uses of cadmium in the scope of authorisation include uses at industrial sites: production of "targets" by (EB) PVD; PVD / coating; formulation and end use of active material for industrial batteries; manufacture of brazing products; cadmium rolling, wire, rods manufacturing; cadmium (alloyed) powder manufacturing; use of cadmium containing-alloys; cadmium casting and rolling; component for brazing products; use of fine powders for mechanical plating; electroplating; component for soldering products. [initial score 5]. Furthermore, registration data indicates uses by professional workers (downstream use of cadmium-based brazing fillers; cadmium-based soldering products; PVD / coating) Uses of cadmium based brazing and soldering products and PVD/CVD coating in EU seems to be limited to low volume. It is noted that some uses claimed as article service life have instead the potential to be considered as use of substance/mixture (potentially by professional workers). The downstream uses of Cadmium-based brazing fillers is assumed to be in compliance with the existing restriction under Annex XVII and its derogations. Due to the existing restriction of cadmium is qual to or greater than 0,01 % by weight. However derogations apply to brazing fillers used in defence and aerospace applications and to brazing fillers used for safety reasons. No restriction appears to apply to the use of Cadmium based soldering products. Furthermore, the substance is used in articles produced during several of the uses listed above e.g. alloying; cadmium rolling, wire, rods manufacturing; production of "targets" by (EB) PVD. [refined score 7].	17	17	Potential grouping: with cadmium oxide [it could potentially replace it in some of its uses]	Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of cadmium is postponed. Consequently, it is proposed <u>NOT</u> to recommend cadmium for inclusion in Annex XIV in this recommendation round.

Pyrochlore, antimony lead yellow	232-382-1	8012-00-8	YES	1	6	10	Toxic for reproduction (Article 57 c)	The amount of pyrochlore, antimony lead yellow manufactured and/or imported into the EU is according to registration data in the range of $10 - <100$ t/y. All tonnage appears to be in the scope of authorisation. Therefore, in conclusion, the volume in the scope of authorisation is estimated to be in the range of 10 - <100 t/y.	Registered uses of pyrochlore, antimony lead yellow in the scope of authorisation include uses at industrial sites (formulation and use as colouring agent/ pigment in inks and glazings for decoration of ceramic articles), and uses by professional workers (use as colouring agent/ pigment in inks and glazings for decoration of ceramic articles). [initial score 10] Furthermore, according to registrations the substance is used in articles (colouring agent and pigment in ceramic articles). However, it appears that the release of the substance from these articles might be negligible.	17	1
Sulfurous acid, lead salt, dibasic	263-467-1	62229-08-7	YES	1	9	7	Toxic for reproduction (Article 57 c)	The amount of sulfurous acid, lead salt, dibasic manufactured and/or imported in the EU is according to registration data in the range of 100 – 1,000 t/y. All tonnage appears to be in the scope of authorisation. Therefore, in conclusion, the volume in the scope of authorisation is estimated to be in the range of 100 – 1,000 t/y.	Registered uses of sulfurous acid, lead salt, dibasic in the scope of authorisation include uses at industrial sites (as a stabiliser in PVC production). In addition, based on registration information, the substance may also be used in coatings/inks for mirror backing. [initial score 5] Furthermore, according to the registrations the substance is used in articles (plastic articles, mirrors). [refined score7]	17	
2-Ethoxyethanol	203-804-1	110-80-5	YES	1	6-9	7	Toxic for reproduction (article 57c)	Most of the amount of 2-ethoxyethanol manufactured and/or imported into the EU seems to be used as intermediate and therefore outside the scope of authorisation. Uses as laboratory chemical in scientific research and development appear also to be outside the scope of authorisation. Taking into account the volume corresponding to the above uses as reflected in registrations and the Annex XV dossier, the volume in the scope of authorisation is estimated to be in the range of 10 - 1,000 t/y.	Registered uses of 2-ethoxyethanol in the scope of authorisation include uses at industrial sites (formulation of mixtures, use as a solvent in manufacture of chemicals). [initial score 5] Furthermore, according to registrations the substance is used by professional workers in uses that may also be in the scope of authorisation (use as solvent) in volumes <10t/y. [refined score 7]	14-17	1
Cadmium oxide	215-146-2	1306-19-0	YES	1	9	5-(7)	Carcinogenic (Article 57a); Equivalent level of concern having probable serious effects to human health (Article 57 f)	The amount of cadmium oxide manufactured and/or imported into the EU according to registration data is in the range of 1,000 - <10,000 t/y. However part of this volume is directly exported, meaning the volume used in the EU is at the lower end of this tonnage band. Some uses appear not to be in the scope of authorisation, such as use as an intermediate. Based on information on the volume corresponding to those uses from the registration dossier, the volume in the scope of authorisation is estimated to be in the range of 100 - <1,000 t/y.	Registered uses of cadmium oxide in the scope of authorisation include uses at industrial sites: production of inorganic pigments; additive for production of glass/frits; CdO-containing catalysts;; the manufacture of electronic components; electrogalvanizing; electroplating; electrotechnical contact material; batteries/fuel cells). Some dossiers indicate the use as a component for polymer-matrices, plastics and related preparations. However, during the work on the restriction, no information on this use has been found. In some dossiers there appears to be uncertainty regarding the interpretation of article service life and how it relates to professional workers. However, a review of these uses indicates that they would fall under article service life. [initial score 5] Furthermore, the substance is used in articles produced during several of the uses listed above, e.g. electrotechnical contact material; use of CdO-containing polymers for molded articles; use of CdO-containing polymers for tube &sheet articles; use CdO- containing polymers for cable protecting & isolating coatings. As this use is in reported in the registration dossiers, CdO can be supplied for that use even if currently there is no information that this would happen in reality. Consequently a refined score due to service-life stage would be justified. [refined score 5-(7)]	15-17	:
[4-[4,4'-bis(dimethylamino) benzhydrylidene]cyclohexa- 2,5-dien-1- ylidene]dimethylammonium chloride (C.I. Basic Violet 3) [with ≥ 0.1% of Michler's ketone (EC No. 202-027-5) or Michler's base (EC No. 202- 959-2)]	208-953-6	548-62-9	YES	1	3	11	Carcinogenic (Article 57a)	The amount of C.I. Basic Violet 3 (BV3) with Michler's Ketone (MK) or Michler's Base (MB) $\geq 0.1\%$ manufactured and/or imported into the EU is according to registration data in the range of 1-10 t/y. All tonnage appears to be in the scope of authorisation, with uses outside the scope of authorisation being uses in SRD down the supply chain.	Registered uses of BV3 with MK or MB $\geq 0.1\%$ in the scope of authorisation include uses at industrial sites (formulation of inks, production of printing cartridges and ball pens). Consumer uses of the above products have been registered, however uses of inks with BV3 (with the impurity profile specified above) $\geq 0.1\%$ are considered to be banned for consumer use. Such uses are however considered to regard also professional workers. [initial score 10] The substance is also assumed to be used in printed articles in volumes <10t/y [refined score 11].	15	1
Dinoseb (6-sec-butyl-2,4- dinitrophenol)	201-861-7	88-85-7	YES	1	9	5	Toxic for reproduction (Article 57 c)	The amount of dinoseb manufactured and/or imported into the EU is according to registration data in the range of 1,000-10,000 t/y. According to information provided during the public consultation (RCOM, 2012) and confirmed in the registration dossier the total volume manufactured is around 2,000 t/y among which 30% (600 t/y) are for use within the EU, the remainder (1,400t/y) is exported to non-EU countries. All tonnage used in the EU appears to be in the scope of authorisation. Therefore, in conclusion, the volume in the scope of authorisation is estimated to be in the range of 100 - <1,000 t/y.	Registered uses of dinoseb in the scope of authorisation include uses at industrial sites (use as a polymerisation inhibitor in the production of polystyrene and poly divinyl benzene). [score 5]	15	1

.7	Pyrochlore, antimony lead yellow appears to be used in similar applications (pigments) as other lead substances of high priority (lead monoxide, lead tetroxide). However, it has not been assessed whether the precise function of these substances in these applications is the same and whether or under which conditions substitution could happen in practice.	On the basis of Art 58(3) prioritisation criteria pyrochlore, antimony lead yellow did not get high priority for this round among the Candidate List substances. However, on the basis of grouping considerations it is proposed to <u>recommend</u> pyrochlore, antimony lead yellow for inclusion in Annex XIV.
.7	Potential grouping: with other lead substances (CL)	Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of sulfurous acid, lead salt, dibasic is postponed. Consequently, it is proposed NOT to recommend sulfurous acid, lead salt, dibasic for inclusion in Annex XIV in this recommendation round.
.6		Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of 2- ethoxyethanol is postponed. Consequently, it is proposed <u>NOT</u> to recommend 2- ethoxyethanol for inclusion in Annex XIV in this recommendation round.
6	Potential grouping: with cadmium [it could potentially replace it in some of its uses]	Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of cadmium oxide is postponed. Consequently, it is proposed <u>NOT</u> to recommend cadmium oxide for inclusion in Annex XIV in this recommendation round.
5		Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of C.I. Basic Violet 3 with Michler's Ketone or Michler's Base ≥0.1% is postponed. Consequently, it is proposed NOT to recommend C.I. Basic Violet 3 (BV3) with Michler's Ketone or Michler's Base ≥0.1% for inclusion in Annex XIV in this recommendation round.
.5		Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of dinoseb is postponed. Consequently, it is proposed <u>NOT</u> to recommend dinoseb for inclusion in Annex XIV in this recommendation round.

											_
Lead titanium zirconium oxide	235-727-4	12626-81-2	YES	1	9	5	Toxic for reproduction (Article 57 c)	The amount of lead titanium zirconium oxide manufactured and/or imported into the EU is according to registration data in the range of 100- <1,000 t/y. All tonnage appears to be in the scope of authorisation.	The sole registered use of lead titanium zirconium oxide in the scope of authorisation is a use at industrial sites (production of electro-ceramic components) [score 5]. Furthermore, according to registrations the substance is used in articles (piezo-electric components in many electrical / electronic applications). However, it appears that the release of the substance from these articles might be negligible.	15	1
Silicic acid, lead salt	234-363-3	11120-22-2	YES	1	9	5	Toxic for reproduction (Article 57 c)	The amount of silicic acid, lead salt manufactured and/or imported into the EU is according to registration data in the range of 100 - <1,000 t/y. There is no available information indicating that the use of the substance in glass production would be intermediate use. Therefore, all tonnage appears to be in the scope of authorisation.	Registered uses of silicic acid, lead salt in the scope of authorisation appear to include use at industrial sites (production of lead crystalware) [score 5]. Furthermore, according to registrations the substance is used in articles (lead crystalware). However, it appears that the release of the substance from these articles might be negligible.	15	t
4-Nonylphenol, branched and linear [substances with a linear and/or branched alkyl chain with a carbon number of 9 covalently bound in position 4 to phenol, covering also UVCB- and well-defined substances which include any of the individual isomers or a c	-	-	YES	7	0-9	0-5	Equivalent level of concern having probable serious effects to the environment (Article 57 f)	The amount of 4-Nonylphenol manufactured and/or imported into the EU is according to registration data in the range of 10,000 – 100,000 t/y. This tonnage has to be seen as minimum as there might be more registrations falling under the Candidate List entry. Based on registration information it appears that 4- nonylphenol is mostly used as an intermediate in the manufacture of epoxy resins (i.e. further reaction of phenol formaldehyde resins in the production of coatings/inks/adhesives etc.). It is not clear whether some of i is used as a non-intermediate, e.g. as a hardening accelerator in amine based epoxy resins used in adhesives. The available information suggests that if uses in the scope of authorisation occur in the EU, they are minor in relation to other uses. Therefore, the volume in the scope of authorisatior is roughly estimated to be in the range of 0-1,000 t/y.	Based on the description of the uses provided in registrations of 4-Nonylphenol, they all seem to be outside the scope of authorisation. [initial score 0] However, for one of those uses (use in adhesives), there are some indications that there may be industrial or professional applications occurring in the EU which may be in the scope of authorisation. [refined score 0-5]	7-21	1
Dibutyltin dichloride (DBTC)	211-670-0	683-18-1	YES	1	6	7	Toxic for reproduction (Article 57 c)	The amount of dibutyltin dichloride (DBTC) manufactured and/or imported into the EU is according to registration data in the range of 1,000 - <10,000. Some uses appear not to be in the scope of authorisation, such as use as an intermediate in manufacture of chemicals. Most of the total volume correspond to those uses based on information from registrations. Therefore, in conclusion, the volume in the scope of authorisation is estimated to be in the range of 10-<100 t/y.	Registered uses of dibutyltin dichloride (DBTC) in the scope of authorisation include uses at industrial sites (formulation in materials, additive in the production of rubber tyres). In addition, the substance might be used in adhesives at industrial sites based on information from the industry (RCOM), but it is not clear whether the concentration of the substance in these mixtures is above the generic concentration limit. Based on information from industry outside the EU (RCOM) the substance might also be used in catalyst applications, but as there was no further information on this use in the EU, it was not considered in the prioritisation. [initial score 5]. Furthermore, according to registrations the substance is used in articles (rubber tyres) [refined score 7].	14	1
Diisopentylphthalate	210-088-4	605-50-5	YES	1	6	7	Toxic for reproduction (Article 57 c)	The amount of diisopentylphthalate manufactured and/or imported into the EU is according to registration data at the lower end of the band of 10 - 100 t/y. All tonnage appears to be in the scope of authorisation.	Registered use of disopentylphthalate in the scope of authorisation include uses at industrial sites (use in the production of propellants and explosives and to coat them to regulate the rate of burn) [initial score 5]. Uses of DIPP by consumers to coat the propellant and regulate rate of burn is also reported but is expected to be limited to applications where the concentration is below the concentration limit specified in the generic restriction on the use of CMRs by the general public and therefore appear not to be in the scope of authorisation. The use reported as consumer use might however also apply to professionals, based on information from the Annex XV dossier. The tonnage for that use is expected to be very low. Furthermore, according to the Annex XV dossier propellant containing DIPP is used in articles (ammunition) [refined score 7].	14	1
Formamide	200-842-0	75-12-7	YES	1	6	7	Toxic for reproduction (Article 57 c)	Most of the amount of formamide manufactured and imported into the EU. Some further uses appear not to be in the scope of authorisation, such as certain uses as laboratory chemicals (to the extent they fall under the generic exemptions from authorisation requirement). The remaining volume is in the range of 10 - 100 t/y. The exact part of this volume allocated to uses in the scope of authorisation is unclear. Therefore, in conclusion, the volume in the scope of authorisation is estimated to be in the range of 10 - 100 t/y.	Registered uses of formamide in the scope of authorisation include uses at industrial sites (use as solvent) (Registrations & RCOM (2012)). However, industrial uses as solvent for analytical/quality purposes could fall under the exemption for scientific research and development. [initial score 5]. Furthermore, according to registrations the substance is used by professional workers in uses that fall under the scope of authorisation (as reagent chemicals) in volumes < 10 t/y (3 t/y). [refined score 7].	14	1

15	Potential grouping: with other lead substances (CL)	Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of lead titanium zirconium oxide is postponed. Consequently, it is proposed <u>NOT</u> to recommend lead titanium zirconium oxide for inclusion in Annex XIV in this recommendation round.
15	Silicic acid, lead salt appears to be used in similar applications (glass) as other lead substances of high priority (lead monoxide, lead tetroxide). However, it has not been assessed whether the precise function of these substances in these applications is the same and whether or under which conditions substitution could happen in practice.	On the basis of Art 58(3) prioritisation criteria silicic acid, lead salt did not get high priority for this round among the Candidate List substances. However, on the basis of grouping considerations it is proposed to <u>recommend</u> silicic acid, lead salt for inclusion in Annex XIV.
14		Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of 4-Nonylphenol, branched and linear is postponed. Consequently, it is proposed <u>NOT</u> to recommend 4- Nonylphenol, branched and linear for inclusion in Annex XIV in this recommendation round.
4		Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of dibutyltin dichloride (DBTC) is postponed. Consequently, it is proposed NOT to recommend dibutyltin dichloride (DBTC) for inclusion in Annex XIV in this recommendation round.
4	Grouping with phthalate(s) already on Annex XIV [Due to similar structure and physical-chemical properties as other low molecular weight phthalates of carbon backbone lengths of C4-C6 (e.g. DBP) DIPP can be used in similar applications. Examples include use in propellants in manufacture of ammunition (registered use of DIPP) and use as plasticiser for PVC products and other polymers (non registered use but confirmed as potential application of DIPP).]	On the basis of Art 58(3) prioritisation criteria diisopentylphthalate did not get high priority for this round among the Candidate List substances. However, on the basis of grouping considerations it is proposed to recommend diisopentylphthalate for inclusion in Annex XIV.
.4		Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of formamide is postponed. Consequently, it is proposed <u>NOI</u> to recommend formamide for inclusion in Annex XIV in this recommendation round.

		-											
Lead diazide, Lead azide	236-542-1	13424-46-9	YES	1	6	7	Toxic for reproduction (article 57 c),	The amount of lead diazide manufactured and imported into the EU is according to registration data in the range of 10 - <100 t/y. All tonnage appears to be in the scope of authorisation. Therefore, in conclusion, the volume in the scope of authorisation is estimated to be in the range of 10 - <100 t/y.	Registered uses of lead diazide in the scope of authorisation include uses at industrial sites (formulation and industrial use of primary explosives for use in detonators) [initial score 5]. Furthermore, the detonators containing the primary explosives might potentially be used by professional workers [refined score 7].	14	14	Potential grouping: with other lead substances (CL)	Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of lead diazide, lead azide is postponed. Consequently, it is proposed MOT to recommend lead diazide, lead azide for inclusion in Annex XIV in this recommendation round.
Lead(II) bis(methanesulfonate)	401-750-5	17570-76-2	YES	1	6-9	5	Toxic for reproduction (Article 57 c)	The amount of lead (II) bis(methanesulfonate) manufactured and/or imported into the EU is according to registration data in the range of 10-1,000 t/y]; it is noted that the latest year reported in the notifications is more than 10 years ago.) All tonnage appears to be in the scope of authorisation. According to a registrant (who has updated his NONS notification), the demand has fallen the last years due to the Restriction of Hazardous Substances Directive (RoHS) (RCOM).	Registered uses of lead (II) bis(methanesulfonate) in the scope of authorisation include uses at industrial sites (as additive for electroplating solutions mainly by electronics industry) [score 5].	12-15	14	Potential grouping: with other lead substances (CL)	Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of lead (II) bis(methanesulfonate) is postponed. Consequently, it is proposed <u>NOT</u> to recommend lead (II) bis(methanesulfonate) for inclusion in Annex XIV in this recommendation round.
N-methylacetamide	201-182-6	79-16-3	YES	1	6-9	5	Toxic for reproduction (Article 57 c)	The amount of N-methylacetamide manufactured and/or imported into the EU is according to registration data in the range of 10 - <1,000 t/y. Some uses appear not to be in the scope of authorisation, such as use as intermediate in manufacture of chemicals and use as laboratory chemical in scientific research and development. The volume corresponding to those uses is unknown. Therefore, in conclusion, the volume in the scope of authorisation is estimated to be in the range of 10 - 1,000 t/y.	Registered uses of N-methylacetamide in the scope of authorisation appear to include formulation of mixtures at industrial sites. However, it is not clear from the registration information what type of mixtures are formulated and where they are used. [score 5].	12-15	14		Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of N- methylacetamide is postponed. Consequently, it is proposed <u>NOT</u> to recommend N- methylacetamide for inclusion in Annex XIV in this recommendation round.
1,2-bis(2- methoxyethoxy)ethane (TEGDME; triglyme)	203-977-3	112-49-2	YES	1	6	5	Toxic for reproduction (Article 57 c)	The amount of triglyme manufactured and/or imported into the EU is according to registration data in the range of 10–100 t/y. All tonnage appears to be in the scope of authorisation.	Registered uses of triglyme in the scope of authorisation include uses at industrial sites (as solvent or process chemical; according to the A.XV report, used mainly in the fine chemicals sector, and also in absorbing liquids in the industrial cleaning of gases etc.) [score 5].	12	12	Potential grouping: with Diglyme (4th A.XIV Recommendation) and EGDME (CL) [there is uncertainty as to the extent to which it could replace them in some of their uses]	Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of 1,2-bis(2- methoxyethoxy)ethane (TEGDME; triglyme) is postponed. Consequently, it is proposed <u>NOI</u> to recommend 1,2-bis(2- methoxyethoxy)ethane (TEGDME; triglyme) for inclusion in Annex XIV in this recommendation round.
1,3,5-Tris(oxiran-2-ylmethyl)- 1,3,5-triazinane-2,4,6-trione (TGIC)	219-514-3	2451-62-9	YES	1	6	5	Mutagenic (Article 57b)	The amount of 1,3,5-tris(oxiran-2-ylmethyl)-1,3,5-triazinane- 2,4,6-trione (TGIC) manufactured and/or imported into the EU is, according to registration data, in the range of 100 - 1,000 t/y. Some uses appear not to be in the scope of authorisation, such as the uses as intermediate. The volume corresponding to those uses is based on information from registrations. Therefore, in conclusion, the volume in the scope of authorisation is estimated to be in the range of 10 - 100 t/y.	Registered uses of 1,3,5-tris(oxiran-2-ylmethyl)-1,3,5-triazinane-2,4,6-trione (TGIC) in the scope of authorisation include uses at industrial sites (curing agent in the formulation of powder coatings, solder mask inks, molding resins; production & application of electronic adhesive tape) [score: 5]. The substance may also be used in articles (e.g. electronic adhesive tapes), however it appears that the release of the substance from these articles might be negligible.	12	12	Grouping: with β-TGIC [it could potentially replace it in some of its uses]	Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of 1,3,5- tris(oxiran-2-ylmethyl)-1,3,5- triszinane-2,4,6-trione (TGIC) is postponed. Consequently, it is proposed <u>NOI</u> to recommend 1,3,5-triazinane-2,4,6-trione (TGIC) for inclusion in Annex XIV in this recommendation round.

Lead bis(tetrafluoroborate)	237-486-0	13814-96-5	YES	1	6	5	Toxic for reproduction (Article 57 c)	The amount of lead bis(tetrafluoroborate) manufactured and/or imported into the EU is, according to registration data, in the range of 10 - <100t/y. All the tonnage appears to be in the scope of authorisation.	Registered uses of lead bis(tetrafluoroborate) in the scope of authorisation include uses at industrial sites (formulation and use for automated and manual electrolytic lead plating). [score: 5]	12	12	Potential grouping: with other lead substances (CL)	Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of Lead bis(tetrafluoroborate) is postponed. Consequently, it is proposed NOT to recommend Lead bis(tetrafluoroborate) for inclusion in Annex XIV in this recommendation round.
Lead cyanamidate	244-073-9	20837-86-9	YES	1	6	5	Toxic for reproduction (Article 57 c)	The amount of lead cyanamidate manufactured and/or imported into the EU is according to registration data in the range of $10 - <100 t/y$. All tonnage appears to be in the scope of authorisation. Therefore, in conclusion, the volume in the scope of authorisation is estimated to be in the range of $10 - <100 t/y$.	According to the available information from consultation with industry, uses of lead cyanamidate in the scope of authorisation include uses at industrial sites [score 5]. Furthermore, according to the available information, the substance is used in articles. However, it appears that the release of the substance from these articles might be negligible.	12	12	Potential grouping: with other lead substances (CL)	Given that other substances assessed for this recommendation round have higher priority based on Art. S8(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of lead cyanamidate is postponed. Consequently, it is proposed NOT to recommend lead cyanamidate for inclusion in Annex XIV in this recommendation round.
Lead dinitrate	233-245-9	10099-74-8	YES	1	3-6	6	Toxic for reproduction (Article 57 c)	The amount of lead dinitrate manufactured/imported into the EU is according to registration data in the range of >10 t/y. Some uses appear not to be in the scope of authorisation, such as use as an intermediate in manufacture of chemicals including for the purpose of production of pigments and explosives and use a laboratory chemical in scientific research and development. Taking into account the volume corresponding to those uses based on information from registrations, the volume in the scope of authorisation is estimated to be in the range of 1 - <100 t/y.	Registered uses of lead dinitrate in the scope of authorisation include uses at industrial sites (formulation and use in coatings, paints, thinners, paint removers, fillers, putties, plasters, modelling clay). Additionally, according to the information provided by industry, the substance may be used in precious metal recovery [initial score 5]. Furthermore, based on information in registrations, the substance may be used by professional workers in production of explosives as a non-intermediate in volumes < 10 t/y. Finally, the substance may be used in articles produced during the uses listed above (e.g. use in coatings) [refined score 6].	10-13	12	Potential grouping: with other lead substances (CL)	Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of lead dinitrate is postponed. Consequently, it is proposed <u>NOT</u> to recommend lead dinitrate for inclusion in Annex XIV in this recommendation round.
Lead titanium trioxide	235-038-9	12060-00-3	YES	1	6	5	Toxic for reproduction (Article 57 c)	The amount of lead titanium trioxide manufactured and/or imported into the EU is according to registration data in the range of $10 - <100 \text{ t/y}$ (12 t/y). All tonnage appears to be in the scope of authorisation.	Registered uses of lead titanium trioxide in the scope of authorisation include uses at industrial sites (production of electrical ceramic parts and materials) [score 5]. Furthermore, according to registrations the substance is used in articles (electrical ceramic parts and materials in machinery, mechanical appliances, electrical/electronic articles). However, it appears that the release of the substance from these articles might be negligible.	12	12	Potential grouping: with other lead substances (CL)	Given that other substances assessed for this recommendation round have higher priority based on Art. S8(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of lead titanium trioxide is postponed. Consequently, it is proposed <u>NOT</u> to recommend lead titanium trioxide for inclusion in Annex XIV in this recommendation round.
Silicic acid (H2Si2O5), barium salt (1:1), lead-doped [with lead (Pb) content above the applicable generic concentration limit for 'toxicity for reproduction' Repr. 1A (CLP) or category 1 (DSD); the substance is a member of the group entry of lead compounds, with index number 082-001-00-6 in Regulation (EC) No 1272/2008]	272-271-5	68784-75-8	YES	1	6	5	Toxic for reproduction (Article 57 c)	The amount of silicic acid, barium salt, lead doped manufactured and/or imported into the EU is according to registration data in the range of 10 - <100 t/y. All tonnage appears to be in the scope of authorisation. Therefore, in conclusion, the volume in the scope of authorisation is estimated to be in the range of 10 - <100 t/y.	Registered uses of silicic acid, barium salt, lead doped in the scope of authorisation include uses at industrial sites (formulation of paints and coatings, use of coatings for glass lamps) [score 5]. Furthermore, according to registrations the substance is used in articles (coating in fluorescent lamps). However, it appears that the release of the substance from these articles might be negligible.	12	12	Potential grouping: with other lead substances (CL)	Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of silicic acid, barium salt, lead doped is postponed. Consequently, it is proposed <u>NOT</u> to recommend silicic acid, barium salt, lead doped for inclusion in Annex XIV in this recommendation round.

1,3,5-tris[(2S and 2R)-2,3- epoxypropy]-1,3,5-triazine- 2,4,6-(1H,3H,5H)-trione (β- TGIC)	423-400-0	59653-74-6	YES	1	3-6	5	Mutagenic (Article 57b)	The amount of 1,3,5-tris[(2S and 2R)-2,3-epoxypropyl]-1,3,5- triazine-2,4,6-(1H,3H,5H)-trione (β -TGIC) manufactured and/or imported into the EU is, according to registration data, <100 t/y. All tonnage appears to be in the scope of authorisation. Therefore, in conclusion, the volume in the scope of authorisation is estimated to be in the range of <100 t/y.	Registered uses of β-TGIC in the scope of authorisation include uses at industrial sites (solder-resist inks) [score: 5].	9-12	:
3-ethyl-2-methyl-2-(3- methylbutyl)-1,3-oxazolidine	421-150-7		YES	1	3-6	5	Toxic for reproduction (Article 57 c)	The amount of 3-ethyl-2-methyl-2-(3-methylbutyl)-1,3- oxazolidine manufactured and/or imported into the EU is, according to registration data, <100t/. All tonnage appears to be in the scope of authorisation. Therefore, in conclusion, the volume in the scope of authorisation is estimated to be <100t/y.	Registered uses of 3-ethyl-2-methyl-2-(3-methylbutyl)-1,3-oxazolidine in the scope of authorisation comprise uses at industrial sites. [score 5].	9-12	
Acetic acid, lead salt, basic	257-175-3	51404-69-4	YES	1	3	7	Toxic for reproduction (Article 57 c)	The amount of acetic acid, lead salt, basic manufactured and/or imported into the EU is according to registration data >1 t/y. Some uses appear not to be in the scope of authorisation, such as use as intermediate in manufacture of chemicals and use as laboratory chemical in scientific research and development. Taking into account the volume corresponding to those uses, based on information from registrations, the volume in the scope of authorisation is estimated to be in the range of $1 - <10 \text{ t/y}$.	Registered uses of acetic acid, lead salt, basic in the scope of authorisation include uses at industrial sites (formulation and use in coatings and paints, thinners, paint removers, fillers, putties, plasters, modelling clay, ph-regulators, flocculants, precipitants and neutralisation agents). [initial score 5]. Furthermore, according to information from the public consultation, the substance is also used in the production of primary explosives and in explosive detonators for defence applications. Therefore, professional use of the substance in explosive detonators could be assumed. The substance might also be used in articles resulting from the uses of paints, coatings, fillers, putties etc. [refined score 7].	11	:
Methyloxirane (Propylene oxide)	200-879-2	75-56-9	YES	1	3	5	Carcinogenic (Article 57a); Mutagenic (Article 57b)	The amount of methyloxirane (propylene oxide) manufactured and/or imported into the EU is according to registration data > 1,000,000 t/y. Part of the registered tonnage is related to monomer imported as part of a polymer matrix. Based on registration information it appears that methyloxirane is mostly used as an intermediate in manufacture of other substances and as monomer for polymer production. These uses are not in the scope of authorisation. However, according to information from industry, the substance is also used as a processing aid in the manufacture of chemicals in very low volumes (<5 t/y). Therefore, in conclusion, the volume in the scope of authorisation is estimated to be < 10 t/y.	Based on the information provided in registrations of methyloxirane (propylene oxide), all uses seem to be outside the scope of authorisation. However, information provided by industry indicates that the substance is also used as a processing aid in the manufacture of chemicals.[score 5]	9	
Phenolphthalein	201-004-7	77-09-8	YES	1	3	5	Carcinogenic (article 57 a)	The amount of phenolphtalein manufactured and/or imported into the EU is according to registration data in the range of 10 – 100 t/y, however consultation with industry resulted in a total tonnage of 1-10 t/y. As the consultation (2011) was carried out after the registrations were submitted (2010) and includes all registrants as well as further companies importing/exporting phenolphthalein, the latter tonnage might be considered as relevant for prioritisation. Therefore, in conclusion, the volume in the scope of authorisation is estimated to be <10 t/y.	Registered uses of phenolphtalein in the scope of authorisation include uses at industrial sites (formulation of mixtures such as pH indicator and use as processing aid) [Score 5].	9	

1	Grouping: with TGIC [it could potentially replace it in some of its uses]	Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of 1,3,5-tris[(2S and 2R)-2,3-epoxypropy]]-1,3,5- trizaine-2,4,6-(1H,3H,5H)-trione (β -TGIC) is postponed. Consequently, it is proposed MOI to recommend 1,3,5- tris[(2S and 2R)-2,3- epoxypropy]]-1,3,5-triazine- 2,4,6-(1H,3H,5H)-trione (β - TGIC) for inclusion in Annex XIV in this recommendation round.
1		Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of 3-ethyl-2- methyl-2-(3-methylbutyl)-1,3- oxazolidine is postponed. Consequently, it is proposed NOT to recommend 3-ethyl-2- methyl-2-(3-methylbutyl)-1,3- oxazolidine for inclusion in Annex XIV in this recommendation round.
1	Acetic acid, lead salt, basic appears to be used in similar applications (paints) as other lead substances of high priority (lead monoxide, lead tetroxide). However, it has not been assessed whether the precise function of these substances in these applications is the same and whether or under which conditions substitution could happen in practice.	On the basis of Art 58(3) prioritisation criteria acetic acid, lead salt, basic did not get high priority for this round among the Candidate List substances. However, on the basis of grouping considerations it is proposed to <u>recommend</u> acetic acid, lead salt, basic for inclusion in Annex XIV.
)		Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of methyloxirane (propylene oxide) is postponed. Consequently, it is proposed <u>NOI</u> to recommend methyloxirane (propylene oxide) for inclusion in Annex XIV in this recommendation round.
9		Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of phenolphtalein is postponed. Consequently, it is proposed NOI to recommend phenolphtalein for inclusion in Annex XIV in this recommendation round.

		-							-		_
Triethyl arsenate	427-700-2	15606-95-8	NO	1	3	5	Carcinogenic (article 57a)	The amount of triethyl arsenate manufactured and/or imported into the EU is according to registration data (notifications under NONS) is <10t/y. Based on available information on use, part of its volume may be used as intermediate, but whether this is the case and the corresponding volume is unknown. Therefore, in conclusion, the volume in the scope of authorisation is estimated to be in the range of 0-<10t/y.	According to available information, triethyl arsenate is used at industrial sites in specialised doping applications in semi-conductors. [score: 5]	9	
Trilead bis(carbonate)dihydroxide	215-290-6	1319-46-6	YES	1	3	5	Toxic for reproduction (Article 57 c)	The amount of trilead bis(carbonate)dihydroxide manufactured and/or imported into the EU is, according to registration data, in the range of 10-100t/y. All tonnage registered is used to in the preparation of PTC Ceramic Materials. This use appears to be an intermediate use and therefore not to be in the scope of authorisation. However, information from other sources indicates that there may be some minor uses in the scope of authorisation. Therefore, in conclusion, the volume in the scope of authorisation is estimated to be in the range of 0-<10t/y.	There is no registered use of trilead bis(carbonate)dihydroxide appearing to be in the scope of authorisation. [initial score: 0] However, information arising from the SVHC public consultation indicates that the substance may be used as a lead stabiliser and in the manufacture of primary explosives. In addition, further information provided by industry indicates that this substance is used in artists paints. This use is derogated from the generic restriction on CMR substances in products sold to the general public. However, there is a specific restriction on the use of this particular substance in paints. Member States may permit the use of this substance in paints (only for use in restoration and maintenance of works of art and historic buildings and their interiors) but given the nature of the restriction it is likely that this would be for professional use only. [refined score 5]	9	
4-(1,1,3,3- tetramethylbutyl)phenol	205-426-2	140-66-9	YES	7	0	0	Equivalent level of concern having probable serious effects to the environment (article 57 f)	The amount of 4-(1,1,3,3-tetramethylbutyl)phenol manufactured and/or imported into the EU is according to registration data > 10,000 t/y. Part of the registered tonnage is related to monomer imported as part of a polymer matrix. The registered uses appear not to be in the scope of authorisation (uses as intermediate in manufacture of other substances, use as monomer for polymer production). Therefore, in conclusion, it is estimated that there is no volume in the scope of authorisation.	There appears to be no registered uses of 4-(1,1,3,3-tetramethylbutyl)phenol falling in the scope of authorisation [score 0].	7	
Lead oxide sulfate	234-853-7	12036-76-9	YES	1	0-3	0-5	Toxic for reproduction (Article 57 c)	According to recently updated registration information, lead oxide sulphate is no longer manufactured and/or imported into the EU. Furthermore, the industry has communicated to ECHA that the substance is practically in the phase out. However, the registration status of the substance is still active, and uses in the scope of authorisation are still registered. Therefore, some use of the substance may remain in the EU. In conclusion, the volume in the scope of authorisation is estimated to be in the range of 0 - <10 t/y.	The industry has informed ECHA that the substance is practically in the phase out. However, uses of the substance at industrial sites in the scope of authorisation (in the production of coatings and inks and application of coatings and inks for mirror backing) are still registered. [score 0- 5]. Furthermore, according to registration data the substance is used in articles (mirrors) However, it appears that the release of the substance from these articles might be negligible.	1-9	
1,2,3-Trichloropropane	202-486-1	96-18-4	YES	1	0	0	Carcinogenic and toxic for reproduction (articles 57 a and 57 c)	The amount of 1,2,3-trichloropropane manufactured and/or imported into the EU is according to registration data in the range of >10,000 t/y. The registered uses, which cover approx. 95% of the total volume manufactured/imported, appear not to be in the scope of authorisation (uses as intermediate in manufacture of other substances, use as monomer for polymer production). The remaining part of the total volume manufactured (~ 5%) is incinerated on site without being used. Therefore, in conclusion, it is estimated that there is no volume in the scope of authorisation.	There appears to be no registered uses of 1,2,3-trichloropropane falling in the scope of authorisation [score: 0].	1	
4,4'-oxydianiline and its salts	202-977-0	101-80-4	YES	1	0	0	Carcinogenic (Article 57a); Mutagenic (Article 57b)	The amount of 4,4'-oxydianiline and its salts manufactured and/or imported into the EU is, according to registration data, above 10 t/y. Part of the tonnage registered is related to import of monomer as part of a polymer matrix. The registered uses of the substance appear not to be in the scope of authorisation (uses as intermediate), based on information from registrations. Therefore, in conclusion, there seems to be no volume in the scope of authorisation.	There appear to be no registered uses of 4,4'-oxydianiline and its salts falling in the scope of authorisation. [score 0].	1	

9		Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of triethyl arsenate is postponed. Consequently, it is proposed <u>NOT</u> to recommend triethyl arsenate for inclusion in Annex XIV in this recommendation round.
9	Potential grouping: with other lead substances (CL)	Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of trilead bis(carbonate)dihydroxide is proposed <u>NOT</u> to recommend trilead bis(carbonate)dihydroxide for inclusion in Annex XIV in this recommendation round.
7		Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of 4-(1,1,3,3- tetramethylbutyl)phenol is postponed. Consequently, it is proposed <u>NOT</u> to recommend 4- (1,1,3,3- tetramethylbutyl)phenol for inclusion in Annex XIV in this recommendation round.
5	Potential grouping: with other lead substances (CL)	Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of lead oxide sulphate is postponed. Consequently, it is proposed NOT to recommend lead oxide sulphate for inclusion in Annex XIV in this recommendation round.
1		Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of 1,2,3- trichloropropane is postponed. Consequently, it is proposed <u>NOT</u> to recommend 1,2,3- trichloropropane for inclusion in Annex XIV in this recommendation round.
1		Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of 4,4'- oxydianiline is postponed. Consequently, it is proposed <u>NOI</u> to recommend 4,4'- oxydianiline for inclusion in Annex XIV in this recommendation round.

	1	1			-			-	•				Ĩ.
Acrylamide	201-173-7	79-06-1	YES	1	0	0	Carcinogenic and mutagenic (articles 57 a and 57 b)	The amount of acrylamide manufactured and/or imported into the EU is according to registration data > 10,000 t/y. Part of the registered tonnage is related to monomer imported as part of a polymer matrix. The registered uses appear not to be in the scope of authorisation (uses as intermediate, use as monomer for polymerisation process at industrial sites, to the extent it falls under the generic exemptions from authorisation requirement uses as laboratory reagent, and professional use as monomer in polymerisation process for grouting application). Due to the existing restriction under Annex XVII, this last use should be limited to use in concentration below 0.1%, which is exempted from authorisation requirement. Therefore, in conclusion, it is estimated that there is no volume in the scope of authorisation.	There appears to be no registered uses of acrylamide falling in the scope of authorisation. [score 0]	1	1		Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of acrylamide is postponed. Consequently, it is proposed NOT to recommend acrylamide for inclusion in Annex XIV in this recommendation round.
o-Toluidine	202-429-0	95-53-4	YES	1	0	0	Carcinogenic (Article 57a)	The amount of o-toluidine manufactured and/or imported into the EU is according to registration data above 10,000 t/y. All uses appear not to be in the scope of authorisation (uses as intermediate in the manufacture of fine and bulk chemicals and use as laboratory reagent in scientific research and development). Therefore, in conclusion, it is estimated that there is no volume in the scope of authorisation.	There appears to be no registered uses of o-toluidine falling in the scope of authorisation [score 0].	1	1		Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of o-toluidine is posposed <u>NOT</u> to recommend o- toluidine for inclusion in Annex XIV in this recommendation round.
[4-[[4-anilino-1-naphthyl]][4- (dimethylamino)phenyl]meth ylene]cyclohexa-2,5-dien-1- ylidene] dimethylammonium chloride (C.I. Basic Blue 26) [with ≥ 0.1% of Michler's ketone (EC No. 202-027-5) or Michler's base (EC No. 202- 959-2)]	219-943-6	2580-56-5	NO	1	-	-	Carcinogenic (Article 57a)			-	-		Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of [[4-anilino-1- naphthyl][4- (dimethylamino)phenyl]methylene] cyclohexa-2,5-dien-1-ylidene] dimethylammonium chloride is postponed. Consequently, it is proposed <u>NOT</u> to recommend [[4-anilino-1- naphthyl][4- (dimethylamino)phenyl]methyl ene]cyclohexa-2,5-dien-1- ylidene] dimethylammonium chloride for inclusion in Annex XIV in this recommendation round.
1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich	276-158-1	71888-89-6	NO	1	-	-	Toxic for reproduction (article 57c)			-	-	Grouping with phthalate(s) already on Annex XIV [DIHP has not been registered however, for some of its confirmed past applications it could be used as a complete or partial replacement for phthalates already on Annex XIV (e.g. use as plasticiser in PVC: complete or partial replacement of DEHP/BBP blends)]	Although other substances on the Candidate List assessed in this recommendation round get higher priority based on Art. 58(3) prioritisation criteria, it is proposed to <u>recommend</u> 1,2- Benzenedicarboxylic acid, di-C6 8-branched alkyl esters, C7- rich for inclusion in Annex XIV on the basis of grouping considerations.
1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters	271-084-6	68515-42-4	NO	1	-	-	Toxic for reproduction (article 57c)	-	-	-	-	Grouping with phthalate(s) already on Annex XIV [DHNUP has not been registered. However, in the past it has been used in similar applications as other phthalates already on Annex XIV (e.g. use as plasticiser in the production of certain cable types, use in adhesives, paints and lacquers (same types of application as e.g. DEHP)).]	Although other substances on the Candidate List assessed in this recommendation round get higher priority based on Art. 58(3) prioritisation criteria, it is proposed to <u>recommend</u> 1,2- Benzenedicarboxylic acid, di-C7 11-branched and linear alkyl esters for inclusion in Annex XIV on the basis of grouping considerations.
1,2-Benzenedicarboxylic acid, dipentylester, branched and linear	284-032-2	84777-06-0	NO	1	-	-	Toxic for reproduction (Article 57 c)			-	-	Grouping with phthalate(s) already on Annex XIV. [1,2-Benzenedicarboxylic acid, dipentylester, branched and linear has not been registered. However it has similar physico-chemical properties to other transitional phthalates of carbon backbone lengths of C4-C6 (e.g. similar density with di-n-butylphthalate (DBP)) and can be used in similar applications (e.g. plasticisers in plastic material).]	Although other substances on the Candidate List assessed in this recommendation round get higher priority based on Art. 58(3) prioritisation criteria, it is proposed to <u>recommend</u> 1,2- Benzenedicarboxylic acid, dipentylester, branched and linear for inclusion in Annex XIV on the basis of grouping considerations.

1,2-Diethoxyethane	211-076-1	629-14-1	NO	1	-	-	Toxic for reproduction (Article 57 c)		-
2-Ethoxyethyl acetate	203-839-2	111-15-9	NO	1	-	-	Toxic for reproduction (article 57c)		-
2-Methoxyaniline; o-Anisidine	201-963-1	90-04-0	INT	1	-	-	Carcinogenic (article 57 a)		-
4,4'- bis(dimethylamino)benzophen one (Michler's ketone)	202-027-5	90-94-8	NO	1	-	-	Carcinogenic (Article 57a)		-
4,4'-methylenedi-o-toluidine	212-658-8	838-88-0	INT	1	-	-	Carcinogenic (Article 57a)		-
4-Aminoazobenzene	200-453-6	60-09-3	INT	1	-	-	Carcinogenic (Article 57a)		-

-	Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of 1,2- Diethoxyethane is postponed. Consequently, it is proposed <u>NOT</u> to recommend 1,2- Diethoxyethane for inclusion in Annex XIV in this recommendation round.
-	Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of 2-Ethoxyethyl acetate is postponed. Consequently, it is proposed NOI to recommend 2- Ethoxyethyl acetate for inclusion in Annex XIV in this recommendation round.
-	Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of 2- Methoxyaniline; o-Anisidine is postponed. Consequently, it is porposed NOI to recommend 2- Methoxyaniline; o-Anisidine for inclusion in Annex XIV in this recommendation round.
-	Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of 4,4'- bis(dimethylamino)benzophenone (Michler's ketone) is postponed. Consequently, it is proposed <u>NOT</u> to recommend 4,4'- bis(dimethylamino)benzophen one (Michler's ketone) for inclusion in Annex XIV in this recommendation round.
-	Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of 4,4'- methylenedi-o-toluidine is postponed. Consequently, it is proposed <u>NOI</u> to recommend 4,4'-methylenedi-o-toluidine for inclusion in Annex XIV in this recommendation round.
-	Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of 4- Aminoazobenzene is postponed. Consequently, it is proposed NOI to recommend 4- Aminoazobenzene for inclusion in Annex XIV in this recommendation round.

4-methyl-m- phenylenediamine (toluene- 2,4-diamine)	202-453-1	95-80-7	INT	1	-	-	Carcinogenic (Article 57a)		-	-
6-methoxy-m-toluidine (p- cresidine)	204-419-1	120-71-8	INT	1	-	-	Carcinogenic (Article 57a)		-	-
Ammonium pentadecafluorooctanoate (APFO)	223-320-4	3825-26-1	NO	15	-	-	Toxic for reproduction (Article 57 c); PBT (Article 57 d)		-	-
Anthracene	204-371-1	120-12-7	INT	13	-	-	PBT (article 57d)			-
Anthracene oil, anthracene paste	292-603-2	90640-81-6	INT	15	-	-	Carcinogenic ² , mutagenic ³ , PBT and vPvB (articles 57a, 57b, 57d and 57e)		-	-

-		Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of 4-methyl-m- phenylenediamine (toluene-2,4- diamine) is postponed. Consequently, it is proposed <u>NOT</u> to recommend 4-methyl-m- phenylenediamine (toluene-2,4- diamine) for inclusion in Annex XIV in this recommendation round.
-		Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of 6-methoxy-m- toluidine (p-cresidine) is postponed. Consequently, it is proposed NOT to recommend 6- methoxy-m-toluidine (p- cresidine) for inclusion in Annex XIV in this recommendation round.
-		Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of ammonium pentadecafluorooctanoate (APFO) is postponed. Consequently, it is proposed <u>NOT</u> to recommend ammonium pentadecafluorooctanoate (APFO) for inclusion in Annex XIV in this recommendation round.
-	Potential grouping: There is uncertainty as to whether and to which extent it could substitute further coal-stream-substances in the Candidate List in some of their uses	Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of anthracene is postponed. Consequently, it is proposed NOT to recommend anthracene for inclusion in Annex XIV in this recommendation round.
-	Potential grouping: There is uncertainty as to whether and to which extent it could substitute further coal-stream-substances in the Candidate List in some of their uses	Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of anthracene oil, anthracene paste is postponed. Consequently, it is proposed <u>NOT</u> to recommend anthracene oil, anthracene paste for inclusion in Annex XIV in this recommendation round.

Anthracene oil, anthracene paste, anthracene fraction	295-275-9	91995-15-2	NO	15	-	-	Carcinogenic ² , mutagenic ³ , PBT and vPvB (articles 57a, 57b, 57d and 57e)		-
Anthracene oil, anthracene paste,distn. lights	295-278-5	91995-17-4	INT	15	-	-	Carcinogenic ² , mutagenic ² , PBT and vPvB (articles 57a, 57b, 57d and 57e)		-
Anthracene oil, anthracene- low	292-604-8	90640-82-7	INT	15	-	-	Carcinogenic ² , mutagenic ³ , PBT and vPvB (articles 57a, 57b, 57d and 57e)		-
Biphenyl-4-ylamine	202-177-1	92-67-1	NO	1	-	-	Carcinogenic (Article 57a)		-
Bis(2-methoxyethyl) phthalate	204-212-6	117-82-8	NO	1	-	-	Toxic for reproduction (article 57 c)		-
Bis(tributyltin)oxide (TBTO)	200-268-0	56-35-9	INT	13	-	-	PBT (article 57d)		-

Potential grouping: There is uncertainty as to whether and to which extent it could substitute further coal-stream-substances in the Candidate List in some of their uses	Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of anthracene oil, anthracene paste, anthracene fraction is postponed. Consequently, it is proposed NOT to recommend anthracene
	oil, anthracene paste, anthracene fraction for inclusion in Annex XIV in this recommendation round.
Potential grouping: There is uncertainty as to whether and to which extent it could substitute further coal-stream-substances in the Candidate List in some of their uses	Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of anthracene oil, anthracene paste, distn. lights is postponed. Consequently, it is proposed <u>NOI</u> to recommend anthracene oil, anthracene paste, distn. lights for inclusion in Annex XIV in this recommendation round.
Potential grouping: There is uncertainty as to whether and to which extent it could substitute further coal-stream-substances in the Candidate List in some of their uses	Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of anthracene oil, anthracene-low is postponed. Consequently, it is proposed <u>NOT to recommend anthracene</u> oil, anthracene-low for inclusion in Annex XIV in this recommendation round.
	Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of biphenyl-4- ylamine is postponed. Consequently, it is proposed <u>NOT</u> to recommend biphenyl-4- ylamine for inclusion in Annex XIV in this recommendation round.
Grouping with phthalate(s) already on Annex XIV [DMEP has not been registered. However, its general global applications have included many uses similar to uses of e.g. DBP (plasticisers in PVC products, use in paints, lacquers, varnishes, adhesives, printer inks, film coatings).]	Although other substances on the Candidate List assessed in this recommendation round get higher priority based on Art. 58(3) prioritisation criteria, it is proposed to <u>recommend</u> Bis(2- methoxyethyl) phthalate for inclusion in Annex XIV on the basis of grouping considerations.
	Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of bis(tributyltin)oxide (TBTO) is postponed. Consequently, it is proposed NOI to recommend bis(tributyltin)oxide (TBTO) for inclusion in Annex XIV in this recommendation round.

Annex 1
Priority assessment results: substances included in the Candidate List by June 2013 and not yet recommended for inclusion in Annex XIV

Calcium arsenate	231-904-5	7778-44-1	INT	1	-	-	Carcinogenic (article 57 a)		-	-	
Diethyl sulphate	200-589-6	64-67-5	INT	1	-	-	Carcinogenic (Article 57a); Mutagenic (Article 57b)		-	-	
Dimethyl sulphate	201-058-1	77-78-1	INT	1	-	-	Carcinogenic (Article 57a)		-	-	
Dipentyl phthalate (DPP)	205-017-9	131-18-0	NO	1	-	-	Toxic for reproduction (Article 57 c);		-	-	Grouping with phthalate(s) already on Annex XIV [Dipentyl phthalate (DPP) has not been registered. However, it has structural similarities with other phthalates and can be used in similar applications (plasticiser in PVC, potential use in paints, lacquers, varnishes, adhesives, printer inks, film coatings)]
Furan	203-727-3	110-00-9	INT	1	-	-	Carcinogenic (Article 57a)		-	-	
Henicosafluoroundecanoic acid	218-165-4	2058-94-8	NO	13	-	-	vPvB (Article 57 e)		-	-	

	Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of calcium arsenate is postponed. Consequently, it is proposed <u>NOT</u> to recommend calcium arsenate for inclusion in Annex XIV in this recommendation round.
	Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of diethyl sulphate is postponed. Consequently, it is proposed NOI to recommend diethyl sulphate for inclusion in Annex XIV in this recommendation round.
	Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of dimethyl sulphate is postponed. Consequently, it is proposed <u>NOT</u> to recommend dimethyl sulphate for inclusion in Annex XIV in this recommendation round.
Grouping with phthalate(s) already on Annex XIV [Dipentyl phthalate (DPP) has not been registered. However, it has structural similarities with other phthalates and can be used in similar applications (plasticiser in PVC, potential use in paints, lacquers, varnishes, adhesives, printer inks, film coatings)]	Although other substances on the Candidate List assessed in this recommendation round get higher priority based on Art. 58(3) prioritisation criteria, it is proposed to <u>recommend</u> Dipentyl phthalate (DPP) for inclusion in Annex XIV on the basis of grouping considerations.
	Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of furan is postponed. Consequently, it is proposed <u>NOT</u> to recommend furan for inclusion in Annex XIV in this recommendation round.
	Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of henicosafluoroundecanoic acid is postponed. Consequently, it is porposed <u>NOT</u> to recommend henicosafluoroundecanoic acid for inclusion in Annex XIV in this recommendation round.

				Anr	ex 1				
Pr	iority as	sessmen	t results: sul	bstances included in the Candidate Li	st by June 2	013 and not yet recommend	led for inclusion in Annex	XIV	
					1				
									4

Heptacosafluorotetradecanoic acid	206-803-4	376-06-7	NO	13	-	-	vPvB (Article 57 e)		-	-		Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of heptacosafluorotetradecanoic acid is postponed. Consequently, it is proposed <u>NOT</u> to recommend heptacosafluorotetradecanoic acid for inclusion in Annex XIV in this recommendation round.
Lead dipicrate	229-335-2	6477-64-1	NO	1	-	-	Toxic for reproduction (article 57 c)		-	-	Potential grouping: with other lead substances (CL)	Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of lead dipicrate is postponed. Consequently, it is proposed <u>NOT</u> to recommend lead dipicrate for inclusion in Annex XIV in this recommendation round.
Lead hydrogen arsenate	232-064-2	7784-40-9	NO	1	-	-	Carcinogenic and toxic for reproduction (articles 57 a and 57 c)		-	-	Potential grouping: with other lead substances (CL)	Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of lead hydrogen arsenate is postponed. Consequently, it is proposed NOT to recommend lead hydrogen arsenate for inclusion in Annex XIV in this recommendation round.
Methoxyacetic acid	210-894-6	625-45-6	INT	1	-	-	Toxic for reproduction (Article 57 c)		-	-		Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of methoxyacetic acid is postponed. Consequently, it is proposed <u>NOT</u> to recommend methoxyacetic acid for inclusion in Annex XIV in this recommendation round.
N,N,N',N'-tetramethyl-4,4'- methylenedianiline (Michler's base)	202-959-2	101-61-1	NO	1	-	-	Carcinogenic (Article 57a)		-	-		Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of N,N,N',N'- tetramethyl-4,4'- methylenedianiline (Michler's base) is postponed. Consequently, it is proposed NOI to recommend N,N,N',N'-tetramethyl-4,4'- methylenedianiline (Michler's base) for inclusion in Annex XIV in this recommendation round.
N-pentyl-isopentylphthalate	-	776297-69-9	NO	1	-	-	Toxic for reproduction (Article 57 c)		-	-	Grouping with phthalate(s) already on Annex XIV. [n-Pentyl-isopentyl phthalate has not been registered. However, it has similarities in terms of structure and physico-chemical properties with other transitional phthalates of carbon backbone lengths of C4-C6, and there are indications on the potential for using the substances in the same types of application (e.g. plasticisers in plastic material)]	Although other substances on the Candidate List assessed in this recommendation round get higher priority based on Art. 58(3) prioritisation criteria, it is proposed to recommend n- Pentyl-isopentyl phthalate for inclusion in Annex XIV on the basis of grouping considerations.

	Annex 1
Prior	ity assessment results: substances included in the Candidate List by June 2013 and not yet recommended for inclusion in Annex XIV

o-aminoazotoluene	202-591-2	97-56-3	NO	1	_	-	Carcinogenic (Article 57a)		-	-		Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of o- aminoazotoluene is postponed. Consequently, it is proposed <u>NOT</u> to recommend o- aminoazotoluene for inclusion in Annex XIV in this recommendation round.
Pentacosafluorotridecanoic acid	276-745-2	72629-94-8	NO	13	-	-	vPvB (Article 57 e)		-	-		Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of pentacosafluorotridecanoic acid is postponed. Consequently, it is proposed <u>NOT</u> to recommend pentacosafluorotridecanoic acid for inclusion in Annex XIV in this recommendation round.
Pentadecafluorooctanoic acid (PFOA)	206-397-9	335-67-1	NO	15	-	-	Toxic for reproduction (Article 57 c); PBT (Article 57 d)		-	-		Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of pentadecafluorooctanoic acid (PFOA) is postponed. Consequently, it is proposed NOT to recommend pentadecafluorooctanoic acid (PFOA) for inclusion in Annex XIV in this recommendation round.
Tetraboron disodium heptaoxide, hydrate	235-541-3	12267-73-1	NO	1	-	-	Toxic for reproduction (article 57 c)		-	-	Grouping: with boric acid, disodiun tetraborate anhydrous, and diboron trioxide (CL) [it could potentially replace them in many of their uses, based on structural similarities]	Although other substances on the Candidate List assessed in this recommendation round get higher priority based on Art. 58(3) prioritisation criteria, it is proposed to <u>recommend</u> tetraboron disodium heptaoxide, hydrate for inclusion in Annex XIV on the basis of grouping considerations.
Tricosafluorododecanoic acid	206-203-2	307-55-1	NO	13	-	-	vPvB (Article 57 e)		-	-		Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of tricosafluorododecanoic acid is postponed. Consequently, it is proposed <u>NOT</u> to recommend tricosafluorododecanoic acid for inclusion in Annex XIV in this recommendation round.
Trilead diarsenate	222-979-5	3687-31-8	INT	1	-	-	Carcinogenic and toxic for reproduction (articles 57 a and 57 c)		-	-	Potential grouping: with other lead substances (CL)	Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of trilead diarsenate is postponed. Consequently, it is proposed <u>NOT</u> to recommend trilead diarsenate for inclusion in Annex XIV in this recommendation round.

a,a-Bis[4- (dimethylamino)phenyl]-4 (phenylamino)naphthalene-1- methanol (C.I. Solvent Blue 4) [with \geq 0.1% of Michler's ketone (EC No. 202-027-5) or Michler's base (EC No. 202- 959-2)]	229-851-8	6786-83-0	NO	1	-	-	Carcinogenic (Article 57a)			-	-		Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, and taking into account ECHA's capacity to handle the applications for authorisation, the recommendation of α , α -Bis[4- (dimethylamino)phenyl]-4 (phenylamino)phenyl]-4 (phenylamino)phenyl]-4 (imethylamino)phenyl]-4 (dimethylamino)phenyl]-4 (ghenylamino)phenyl]-4 (phenylamino)phenyl]-4 (phenylamino)phenyl]-4 (phenylamino)phenyl]-4 for inclusion in Annex XIV in this recommendation round.
---	-----------	-----------	----	---	---	---	-------------------------------	--	--	---	---	--	---

Does not meet the criteria for identification as a carcinogen if it contains < 0.005 % (w/w) benzo[a]pyrene (EINECS No 200-028-5).
Does not meet the criteria for identification as a carcinogen if it contains < 0.005 % (w/w) benzo[a]pyrene (EINECS No 200-028-5) and < 0.1 % w/w benzene (EINECS No 200-753-7).
Does not meet the criteria for identification as a mutagen if it contains < 0.1 % w/w benzene (EINECS No 200-753-7).

Annex 2

Prioritisation approach: practical implementation examples

The approach used to assess the priority of substances is available at: http://echa.europa.eu/documents/10162/13640/gen approach sync prior in recommendations en.pdf.

In the paragraphs below, some examples are provided to indicate how certain aspects of that approach were implemented in practice.

Wide-dispersiveness of uses (WDU) score: assignment in cases of unconfirmed uses, minor uses, or article service life

According to the revised prioritisation approach, the WDU score is assessed considering three use/actor types (industrial (IND), professional (PROF) and consumer (CONS)) that determine the score (5, 10, or 15 accordingly); with the highest applicable score assigned¹. The WDU score is refined if volume per use information allows this.

In addition, if registration data or other relevant information demonstrates that the substance ends up in articles and that there is no reliable information that releases are unlikely during article service life and waste phase, the approach states that the presence in articles can as well be taken into account to refine the WDU score.

In practice, the following two-step approach has been used to assign scores for WDU.

First, an initial WDU score has been derived taking into account the actors (IND / PROF / CONS) for which there is sufficiently reliable information that uses by the respective actors in the scope of authorisation occur in the EU (considered as 'confirmed'). However, the higher categories (PROF and CONS) were assigned in this first step only when the 'confirmed' use in this category was $\geq 10 \text{ t/y}^2$ or where the volumes used by different types of actors were unknown.

At the second step, the score has been refined, where relevant, to take into consideration tonnage information indicating minor use, article service-life, and uncertain uses as follows³:

Minor uses:

of the prioritisation approach)

In case a substance would be assigned to a certain category (actor) because of CONS or PROF use(s) and it is known that the respective use(s) corresponds to a very low volume⁴ (i.e. < 10 t/y) and that most of the volume is used in a lower-score category, a score half-way between the two categories (and rounding down to the nearest whole number) has been assigned.

³ In case more than one refinement scenarios were relevant, only that refinement was applied which would lead to the highest score, i.e. no more than one refinements were applied to increase the WDU score ⁴ The description 'very low volume' (<10 t/y) is the same as used when categorising volumes (see section 5.2

¹ The highest applicable WDU score is assigned, e.g. score is 15 if the substance has a consumer use(s); the score is 5, if the substance has industrial use(s) but no professional or consumer uses. The WDU score is 0 if no uses in scope of authorisation seem to occur in the EU

 $^{^{2}}$ Or \geq 1t/y if the total volume in the scope of authorisation was <10t/y

For example, for a substance with both IND and PROF uses, but PROF corresponding to a very low tonnage (< 10 t/y):

```
Initial score=5 (IND); Refined score= 7 (IND+minor PROF)
```

Article service-life (ASL)

If a substance without consumer uses in the scope of authorisation ends up in articles and there is no reliable information that releases are unlikely during article service life and waste phase, the WDU score has been added with 1 or 2 points depending on the total volume of the substance that can be assumed to be present in articles produced in the EU. If the total tonnage in articles is > 10 t/y or unknown, 2 points were added to the initial WDU score. If the tonnage was < 10 t/y, only one point was added.

For example, a substance with both IND and PROF uses, which is in addition used in articles in volumes >10 t/y (and assuming that the release from those articles is not considered negligible):

Initial score=10 (PROF); Refined score=10+2 =12 (PROF+article service-

life)

Uncertain uses

If there were indications that a substance may be used by certain type of actors (IND/PROF/CONS) in uses in the scope of authorisation but it was not possible to conclude it from the available information with high enough certainty, then a score half-way between the confirmed actor and the unconfirmed actor (and rounding down to the nearest whole number) has been assigned. The same approach of half-way score has been applied for uncertain article service-life; i.e. if there were some indications that a substance is used in articles but it was not possible to confirm it with high enough certainty, only one point (instead of two) was added to the initial WDU score.

For example, a substance registered only for IND uses for which there are indications that it might (based on contradictory information in registration or further use information from other reliable⁵ source) also be used by professional workers in uses that are in the scope of authorisation but it was not possible to conclude it with high certainty:

Initial score=5 (IND); Refined score= 7 (IND+uncertain PROF)

Interpretation of registration data in cases of contradicting or unclear information

Unless there was justified reason to doubt the validity of the registration information, e.g. due to contradicting information, the registration data was used as the basis for the priority assessment.

The main uncertainties for the priority assessment resulting from the contradicting or unclear information were related to i) is the use in the scope of authorisation, ii) which is the actual actor / life cycle stage (IND/PROF/CONS/ASL) relevant for an identified use,

⁵ See section 4. of the current prioritisation approach for information on reliability criteria applied for information not coming from registration dossiers

or iii) which is the actual break down of volume to uses in/outside the scope of authorisation. In such cases, a weight of evidence approach was followed for assigning the score.

For example, if based on the available description in the registration dossier a use appeared not to be use as intermediate although claimed as such, it was counted (for assigning volume and WDU score) as a use in the scope of authorisation. Accordingly, if no article service life was reported in registration despite the fact that the use of the substance clearly results in inclusion on an article, then the article service life was taken into account for scoring.

Similarly, uses reported in the registration dossiers which are banned in accordance with Annex XVII entries were not considered when assigning priority scores. For example, the use of a CMR Cat 1A/B substance on their own or in mixtures in consumer product reported in a registration dossier has not been considered as a justification of WDU score 15. In some cases it could be assumed that the use in mixtures supplied to consumers is below the relevant concentration limit and, therefore, not restricted and not in the scope of authorisation (as the same concentration limits apply). Even if the use was in breach with a restriction, it would not be taken into account for prioritisation as such a case should be subject to enforcement.

Annex 3

Candidate List of Substances of Very High Concern for Authorisation (as updated on 16 June 2014)

Light grey background highlights substances already prioritised and included in previous Recommendations, which therefore were not considered anymore in the current prioritisation exercise. **White** (i.e. no) background highlights the substances that were assessed for priority in the context of the 5th and previous recommendations but were not recommended for inclusion in Annex XIV yet. **Light blue** background highlights substances included in the Candidate List during 2012-June 2013, which are assessed for the first time in the present prioritisation exercise. Not yet assessed substances are highlighted in **orange** (included in the Candidate list in December 2013 and June 2014).

No.	Name	EC Number	CAS Number	Date of inclusion	Reason for inclusion	Decision number
1	1,2,3-Trichloropropane	202-486-1	96-18-4	20/06/2011	Carcinogenic and toxic for reproduction (articles 57 a and 57 c)	ED/31/2011
2	1,2-Benzenedicarboxylic acid, di-C6-8- branched alkyl esters, C7-rich	276-158-1	71888-89-6	20/06/2011	Toxic for reproduction (article 57c)	ED/31/2011
3	1,2-Benzenedicarboxylic acid, di-C7-11- branched and linear alkyl esters	271-084-6	68515-42-4	20/06/2011	Toxic for reproduction (article 57c)	ED/31/2011
4	1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear	271-093-5	68515-50-4	16/06/2014	Toxic for reproduction (Article 57 c)	ED/49/2014
5	1,2-Benzenedicarboxylic acid, dipentylester, branched and linear	284-032-2	84777-06-0	19/12/2012	Toxic for reproduction (Article 57 c)	ED/169/2012
6	1,2-bis(2-methoxyethoxy)ethane (TEGDME; triglyme)	203-977-3	112-49-2	18/06/2012	Toxic for reproduction (Article 57 c)	ED/87/2012
7	1,2-dichloroethane	203-458-1	107-06-2	19/12/2011	Carcinogenic (article 57 a)	ED/77/2011
8	1,2-Diethoxyethane	211-076-1	629-14-1	19/12/2012	Toxic for reproduction (Article 57 c)	ED/169/2012

No.	Name	EC Number	CAS Number	Date of inclusion	Reason for inclusion	Decision number
9	1,2-dimethoxyethane; ethylene glycol dimethyl ether (EGDME)	203-794-9	110-71-4	18/06/2012	Toxic for reproduction (Article 57 c)	ED/87/2012
10	1,3,5-Tris(oxiran-2-ylmethyl)-1,3,5- triazinane-2,4,6-trione (TGIC)	219-514-3	2451-62-9	18/06/2012	Mutagenic (Article 57b)	ED/87/2012
11	1,3,5-tris[(2S and 2R)-2,3-epoxypropyl]- 1,3,5-triazine-2,4,6-(1H,3H,5H)-trione (β- TGIC)	423-400-0	59653-74-6	18/06/2012	Mutagenic (Article 57b)	ED/87/2012
12	1-bromopropane (n-propyl bromide)	203-445-0	106-94-5	19/12/2012	Toxic for reproduction (Article 57 c)	ED/169/2012
13	1-Methyl-2-pyrrolidone	212-828-1	872-50-4	20/06/2011	Toxic for reproduction (article 57c)	ED/31/2011
14	2,2'-dichloro-4,4'-methylenedianiline	202-918-9	101-14-4	19/12/2011	Carcinogenic (article 57 a)	ED/77/2011
15	2,4-Dinitrotoluene	204-450-0	121-14-2	13/01/2010	Carcinogenic (article 57a)	ED/68/2009
16	2-Ethoxyethanol	203-804-1	110-80-5	15/12/2010	Toxic for reproduction (article 57c)	ED/95/2010
17	2-Ethoxyethyl acetate	203-839-2	111-15-9	20/06/2011	Toxic for reproduction (article 57c)	ED/31/2011
18	2-Methoxyaniline; o-Anisidine	201-963-1	90-04-0	19/12/2011	Carcinogenic (article 57 a)	ED/77/2011
19	2-Methoxyethanol	203-713-7	109-86-4	15/12/2010	Toxic for reproduction (article 57c)	ED/95/2010
20	3-ethyl-2-methyl-2-(3-methylbutyl)-1,3- oxazolidine	421-150-7	143860-04-2	19/12/2012	Toxic for reproduction (Article 57 c)	ED/169/2012
21	4-(1,1,3,3-tetramethylbutyl)phenol	205-426-2	140-66-9	19/12/2011	Equivalent level of concern having probable serious effects to the environment (article 57 f)	ED/77/2011

No.	Name	EC Number	CAS Number	Date of inclusion	Reason for inclusion	Decision number
22	4-(1,1,3,3-tetramethylbutyl)phenol, ethoxylated [covering well-defined substances and UVCB substances, polymers and homologues]	-	-	19/12/2012	Equivalent level of concern having probable serious effects to the environment (Article 57 f)	ED/169/2012
23	4,4'- Diaminodiphenylmethane (MDA)	202-974-4	101-77-9	28/10/2008	Carcinogenic (article 57a)	ED/67/2008
24	4,4'-bis(dimethylamino)-4''- (methylamino)trityl alcohol [with \ge 0.1% of Michler's ketone (EC No. 202-027-5) or Michler's base (EC No. 202-959-2)]	209-218-2	561-41-1	18/06/2012	Carcinogenic (Article 57a)	ED/87/2012
25	4,4'-bis(dimethylamino)benzophenone (Michler's ketone)	202-027-5	90-94-8	18/06/2012	Carcinogenic (Article 57a)	ED/87/2012
26	4,4'-methylenedi-o-toluidine	212-658-8	838-88-0	19/12/2012	Carcinogenic (Article 57a)	ED/169/2012
27	4,4'-oxydianiline and its salts	202-977-0	101-80-4	19/12/2012	Carcinogenic (Article 57a); Mutagenic (Article 57b)	ED/169/2012
28	4-Aminoazobenzene	200-453-6	60-09-3	19/12/2012	Carcinogenic (Article 57a)	ED/169/2012
29	4-methyl-m-phenylenediamine (toluene- 2,4-diamine)	202-453-1	95-80-7	19/12/2012	Carcinogenic (Article 57a)	ED/169/2012
30	4-Nonylphenol, branched and linear [substances with a linear and/or branched alkyl chain with a carbon number of 9 covalently bound in position 4 to phenol, covering also UVCB- and well-defined substances which include any of the individual isomers or a combination thereof]	-	-	19/12/2012	Equivalent level of concern having probable serious effects to the environment (Article 57 f)	ED/169/2012

No.	Name	EC Number	CAS Number	Date of inclusion	Reason for inclusion	Decision number
31	4-Nonylphenol, branched and linear, ethoxylated [substances with a linear and/or branched alkyl chain with a carbon number of 9 covalently bound in position 4 to phenol, ethoxylated covering UVCB- and well-defined substances, polymers and homologues, which include any of the individual isomers and/or combinations thereof]	_	_	20/06/2013	Equivalent level of concern having probable serious effects to the environment (Article 57 f)	ED/69/2013
32	5-tert-butyl-2,4,6-trinitro-m-xylene (musk xylene)	201-329-4	81-15-2	28/10/2008	vPvB (article 57e)	ED/67/2008
33	6-methoxy-m-toluidine (p-cresidine)	204-419-1	120-71-8	19/12/2012	Carcinogenic (Article 57a)	ED/169/2012
34	[4-[[4-anilino-1-naphthyl]][4- (dimethylamino)phenyl]methylene]cyclohe xa-2,5-dien-1-ylidene] dimethylammonium chloride (C.I. Basic Blue 26) [with \geq 0.1% of Michler's ketone (EC No. 202-027-5) or Michler's base (EC No. 202-959-2)]	219-943-6	2580-56-5	18/06/2012	Carcinogenic (Article 57a)	ED/87/2012
35	[4-[4,4'-bis(dimethylamino) benzhydrylidene]cyclohexa-2,5-dien-1- ylidene]dimethylammonium chloride (C.I. Basic Violet 3) [with \geq 0.1% of Michler's ketone (EC No. 202-027-5) or Michler's base (EC No. 202-959-2)]	208-953-6	548-62-9	18/06/2012	Carcinogenic (Article 57a)	ED/87/2012
36	[Phthalato(2-)]dioxotrilead	273-688-5	69011-06-9	19/12/2012	Toxic for reproduction (Article 57 c)	ED/169/2012
37	Acetic acid, lead salt, basic	257-175-3	51404-69-4	19/12/2012	Toxic for reproduction (Article 57 c)	ED/169/2012

No.	Name	EC Number	CAS Number	Date of inclusion	Reason for inclusion	Decision number
38	Acids generated from chromium trioxide and their oligomers. Names of the acids and their oligomers: Chromic acid, Dichromic acid, Oligomers of chromic acid and dichromic acid.	231-801-5, 236-881-5	7738-94-5, 13530-68-2	15/12/2010	Carcinogenic (article 57a)	ED/95/2010
39	Acrylamide	201-173-7	79-06-1	30/03/2010	Carcinogenic and mutagenic (articles 57 a and 57 b)	ED/68/2009
40	Alkanes, C10-13, chloro (Short Chain Chlorinated Paraffins)	287-476-5	85535-84-8	28/10/2008	PBT and vPvB (articles 57 d and 57 e)	ED/67/2008
41	Aluminosilicate Refractory Ceramic Fibres are fibres covered by index number 650- 017-00-8 in Annex VI, part 3, table 3.1 of Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, and fulfil the three following conditions: a) oxides of aluminium and silicon are the main components present (in the fibres) within variable concentration ranges b) fibres have a length weighted geometric mean diameter less two standard geometric errors of 6 or less micrometres (μ m) c) alkaline oxide and alkali earth oxide (Na2O+K2O+CaO+MgO+BaO) content less or equal to 18% by weight			19/12/2011	Carcinogenic (article 57 a)	ED/77/2011
42	Ammonium dichromate	232-143-1	7789-09-5	18/06/2010	Carcinogenic, mutagenic and toxic for reproduction (articles 57 a, 57 b and 57 c)	/
43	Ammonium pentadecafluorooctanoate (APFO)	223-320-4	3825-26-1	20/06/2013	Toxic for reproduction (Article 57 c); PBT (Article 57 d)	ED/69/2013

No.	Name	EC Number	CAS Number	Date of inclusion	Reason for inclusion	Decision number
44	Anthracene	204-371-1	120-12-7	28/10/2008	PBT (article 57d)	ED/95/2012
45	Anthracene oil	292-602-7	90640-80-5	13/01/2010	Carcinogenic ¹ , PBT and vPvB (articles 57a, 57d and 57e)	ED/30/2010
46	Anthracene oil, anthracene paste	292-603-2	90640-81-6	13/01/2010	Carcinogenic ² , mutagenic ³ , PBT and vPvB (articles 57a, 57b, 57d and 57e)	ED/67/2008
47	Anthracene oil, anthracene paste, anthracene fraction	295-275-9	91995-15-2	13/01/2010	Carcinogenic ² , mutagenic ³ , PBT and vPvB (articles 57a, 57b, 57d and 57e)	ED/68/2009
48	Anthracene oil, anthracene paste, distn. lights	295-278-5	91995-17-4	13/01/2010	Carcinogenic ² , mutagenic ³ , PBT and vPvB (articles 57a, 57b, 57d and 57e)	ED/68/2009
49	Anthracene oil, anthracene-low	292-604-8	90640-82-7	13/01/2010	Carcinogenic ² , mutagenic ³ , PBT and vPvB (articles 57a, 57b, 57d and 57e)	ED/68/2009
50	Arsenic acid	231-901-9	7778-39-4	19/12/2011	Carcinogenic (article 57 a)	ED/68/2009
51	Benzyl butyl phthalate (BBP)	201-622-7	85-68-7	28/10/2008	Toxic for reproduction (article 57c)	ED/68/2009
52	Biphenyl-4-ylamine	202-177-1	92-67-1	19/12/2012	Carcinogenic (Article 57a)	ED/77/2011
53	Bis (2-ethylhexyl)phthalate (DEHP)	204-211-0	117-81-7	28/10/2008	Toxic for reproduction (article 57c)	ED/67/2008
54	Bis(2-methoxyethyl) ether	203-924-4	111-96-6	19/12/2011	Toxic for reproduction (article 57 c)	ED/169/2012
55	Bis(2-methoxyethyl) phthalate	204-212-6	117-82-8	19/12/2011	Toxic for reproduction (article 57 c)	ED/67/2008

No.	Name	EC Number	CAS Number	Date of inclusion	Reason for inclusion	Decision number
56	Bis(pentabromophenyl) ether (decabromodiphenyl ether; DecaBDE)	214-604-9	1163-19-5	19/12/2012	PBT (Article 57 d); vPvB (Article 57 e)	ED/77/2011
57	Bis(tributyltin)oxide (TBTO)	200-268-0	56-35-9	28/10/2008	PBT (article 57d)	ED/77/2011
58	Boric acid	233-139-2, 234-343-4	10043-35-3, 11113-50-1	18/06/2010	Toxic for reproduction (article 57 c)	ED/169/2012
59	Cadmium	231-152-8	7440-43-9	20/06/2013	Carcinogenic (Article 57a); Equivalent level of concern having probable serious effects to human health (Article 57 f)	ED/69/2013
60	Cadmium chloride	233-296-7	10108-64-2	16/06/2014	Carcinogenic (Article 57a); Mutagenic (Article 57b); Toxic for reproduction (Article 57c); Equivalent level of concern having probable serious effects to human health (Article 57 f)	ED/49/2014
61	Cadmium oxide	215-146-2	1306-19-0	20/06/2013	Carcinogenic (Article 57a); Equivalent level of concern having probable serious effects to human health (Article 57 f)	ED/69/2013
62	Cadmium sulphide	215-147-8	1306-23-6	16/12/2013	Carcinogenic (Article 57a); Equivalent level of concern having probable serious effects to human health (Article 57 f)	ED/121/2013
63	Calcium arsenate	231-904-5	7778-44-1	19/12/2011	Carcinogenic (article 57 a)	ED/67/2008
64	Chromium trioxide	215-607-8	1333-82-0	15/12/2010	Carcinogenic and mutagenic (articles 57 a and 57 b)	ED/30/2010

No.	Name	EC Number	CAS Number	Date of inclusion	Reason for inclusion	Decision number
65	Cobalt dichloride	231-589-4	7646-79-9	2011/06/20 - 2008/10/28	Carcinogenic and toxic for reproduction (articles 57 a and 57 c)	ED/77/2011
66	Cobalt(II) carbonate	208-169-4	513-79-1	15/12/2010	Carcinogenic and toxic for reproduction (articles 57 a and 57 c)	ED/95/2010
67	Cobalt(II) diacetate	200-755-8	71-48-7	15/12/2010	Carcinogenic and toxic for reproduction (articles 57 a and 57 c)	ED/31/2011 / ED/67/2008
68	Cobalt(II) dinitrate	233-402-1	10141-05-6	15/12/2010	Carcinogenic and toxic for reproduction (articles 57 a and 57 c)	ED/95/2010
69	Cobalt(II) sulphate	233-334-2	10124-43-3	15/12/2010	Carcinogenic and toxic for reproduction (articles 57 a and 57 c)	ED/95/2010
70	Cyclohexane-1,2-dicarboxylic anhydride [1], cis-cyclohexane-1,2-dicarboxylic anhydride [2], trans-cyclohexane-1,2- dicarboxylic anhydride [3] [The individual cis- [2] and trans- [3] isomer substances and all possible combinations of the cis- and trans-isomers [1] are covered by this entry]	201-604-9, 236-086-3, 238-009-9	85-42-7, 13149-00-3, 14166-21-3	19/12/2012	Equivalent level of concern having probable serious effects to human health (Article 57 f)	ED/95/2010
71	Diarsenic pentaoxide	215-116-9	1303-28-2	28/10/2008	Carcinogenic (article 57a)	ED/95/2010
72	Diarsenic trioxide	215-481-4	1327-53-3	28/10/2008	Carcinogenic (article 57a)	ED/169/2012
73	Diazene-1,2-dicarboxamide (C,C'- azodi(formamide))	204-650-8	123-77-3	19/12/2012	Equivalent level of concern having probable serious effects to human health (Article 57 f)	ED/67/2008

No.	Name	EC Number	CAS Number	Date of inclusion	Reason for inclusion	Decision number
74	Diboron trioxide	215-125-8	1303-86-2	18/06/2012	Toxic for reproduction (Article 57 c)	ED/67/2008
75	Dibutyl phthalate (DBP)	201-557-4	84-74-2	28/10/2008	Toxic for reproduction (article 57c)	ED/169/2012
76	Dibutyltin dichloride (DBTC)	211-670-0	683-18-1	19/12/2012	Toxic for reproduction (Article 57 c)	ED/87/2012
77	Dichromium tris(chromate)	246-356-2	24613-89-6	19/12/2011	Carcinogenic (article 57 a)	ED/67/2008
78	Diethyl sulphate	200-589-6	64-67-5	19/12/2012	Carcinogenic (Article 57a); Mutagenic (Article 57b)	ED/169/2012
79	Dihexyl phthalate	201-559-5	84-75-3	16/12/2013	Toxic for reproduction (Article 57 c)	ED/121/2013
80	Diisobutyl phthalate	201-553-2	84-69-5	13/01/2010	Toxic for reproduction (article 57c)	ED/77/2011
81	Diisopentylphthalate	210-088-4	605-50-5	19/12/2012	Toxic for reproduction (Article 57 c)	ED/169/2012
82	Dimethyl sulphate	201-058-1	77-78-1	19/12/2012	Carcinogenic (Article 57a)	ED/68/2009
83	Dinoseb (6-sec-butyl-2,4-dinitrophenol)	201-861-7	88-85-7	19/12/2012	Toxic for reproduction (Article 57 c)	ED/169/2012
84	Dioxobis(stearato)trilead	235-702-8	12578-12-0	19/12/2012	Toxic for reproduction (Article 57 c)	ED/169/2012
85	Dipentyl phthalate (DPP)	205-017-9	131-18-0	20/06/2013	Toxic for reproduction (Article 57 c)	ED/69/2013
86	Disodium 3,3'-[[1,1'-biphenyl]-4,4'- diylbis(azo)]bis(4-aminonaphthalene-1- sulphonate) (C.I. Direct Red 28)	209-358-4	573-58-0	16/12/2013	Carcinogenic (Article 57a)	ED/121/2013
87	Disodium 4-amino-3-[[4'-[(2,4- diaminophenyl)azo][1,1'-biphenyl]-4- yl]azo] -5-hydroxy-6- (phenylazo)naphthalene-2,7-disulphonate (C.I. Direct Black 38)	217-710-3	1937-37-7	16/12/2013	Carcinogenic (Article 57a)	ED/121/2013

No.	Name	EC Number	CAS Number	Date of inclusion	Reason for inclusion	Decision number
88	Disodium tetraborate, anhydrous	215-540-4	1303-96-4, 1330-43-4, 12179-04-3	18/06/2010	Toxic for reproduction (article 57 c)	ED/169/2012
89	Fatty acids, C16-18, lead salts	292-966-7	91031-62-8	19/12/2012	Toxic for reproduction (Article 57 c)	ED/169/2012
90	Formaldehyde, oligomeric reaction products with aniline	500-036-1	25214-70-4	19/12/2011	Carcinogenic (article 57 a)	ED/30/2010
91	Formamide	200-842-0	75-12-7	18/06/2012	Toxic for reproduction (Article 57 c)	ED/169/2012
92	Furan	203-727-3	110-00-9	19/12/2012	Carcinogenic (Article 57a)	ED/77/2011
93	Henicosafluoroundecanoic acid	218-165-4	2058-94-8	19/12/2012	vPvB (Article 57 e)	ED/87/2012
94	Heptacosafluorotetradecanoic acid	206-803-4	376-06-7	19/12/2012	vPvB (Article 57 e)	ED/169/2012
95	Hexabromocyclododecane (HBCDD) and all major diastereoisomers identified: Alpha- hexabromocyclododecane Beta- hexabromocyclododecane Gamma- hexabromocyclododecane	247-148-4 and 221- 695-9	25637-99-4, 3194-55-6 (134237-50- 6) (134237- 51-7) (134237-52- 8)	28/10/2008	PBT (article 57d)	ED/169/2012
96	Hexahydromethylphthalic anhydride [1], Hexahydro-4-methylphthalic anhydride [2], Hexahydro-1-methylphthalic anhydride [3], Hexahydro-3-methylphthalic anhydride [4] [The individual isomers [2], [3] and [4] (including their cis- and trans- stereo isomeric forms) and all possible combinations of the isomers [1] are covered by this entry]	247-094-1, 243-072-0, 256-356-4, 260-566-1	25550-51-0, 19438-60-9, 48122-14-1, 57110-29-9	19/12/2012	Equivalent level of concern having probable serious effects to human health (Article 57 f)	ED/169/2012
97	Hydrazine	206-114-9	302-01-2, 7803-57-8	20/06/2011	Carcinogenic (article 57a)	ED/67/2008

No.	Name	EC Number	CAS Number	Date of inclusion	Reason for inclusion	Decision number
98	Imidazolidine-2-thione; (2-imidazoline-2- thiol)	202-506-9	96-45-7	16/12/2013	Toxic for reproduction (Article 57 c)	ED/121/2013
99	Lead bis(tetrafluoroborate)	237-486-0	13814-96-5	19/12/2012	Toxic for reproduction (Article 57 c)	ED/169/2012
100	Lead chromate	231-846-0	7758-97-6	13/01/2010	Carcinogenic and toxic for reproduction (articles 57 a and 57 c)	ED/31/2011
101	Lead chromate molybdate sulphate red (C.I. Pigment Red 104)	235-759-9	12656-85-8	13/01/2010	Carcinogenic and toxic for reproduction (articles 57 a and 57 c)	ED/169/2012
102	Lead cyanamidate	244-073-9	20837-86-9	19/12/2012	Toxic for reproduction (Article 57 c)	ED/68/2009
103	Lead di(acetate)	206-104-4	301-04-2	16/12/2013	Toxic for reproduction (Article 57 c)	ED/121/2013
104	Lead diazide, Lead azide	236-542-1	13424-46-9	19/12/2011	Toxic for reproduction (article 57 c),	ED/68/2009
105	Lead dinitrate	233-245-9	10099-74-8	19/12/2012	Toxic for reproduction (Article 57 c)	ED/169/2012
106	Lead dipicrate	229-335-2	6477-64-1	19/12/2011	Toxic for reproduction (article 57 c)	ED/77/2011
107	Lead hydrogen arsenate	232-064-2	7784-40-9	28/10/2008	Carcinogenic and toxic for reproduction (articles 57 a and 57 c)	ED/169/2012
108	Lead monoxide (lead oxide)	215-267-0	1317-36-8	19/12/2012	Toxic for reproduction (Article 57 c)	ED/77/2011
109	Lead oxide sulfate	234-853-7	12036-76-9	19/12/2012	Toxic for reproduction (Article 57 c)	ED/67/2008
110	Lead styphnate	239-290-0	15245-44-0	19/12/2011	Toxic for reproduction (article 57 c)	ED/169/2012
111	Lead sulfochromate yellow (C.I. Pigment Yellow 34)	215-693-7	1344-37-2	13/01/2010	Carcinogenic and toxic for reproduction (articles 57 a and 57 c))	ED/169/2012

No.	Name	EC Number	CAS Number	Date of inclusion	Reason for inclusion	Decision number
112	Lead titanium trioxide	235-038-9	12060-00-3	19/12/2012	Toxic for reproduction (Article 57 c)	ED/77/2011
113	Lead titanium zirconium oxide	235-727-4	12626-81-2	19/12/2012	Toxic for reproduction (Article 57 c)	ED/68/2009
114	Lead(II) bis(methanesulfonate)	401-750-5	17570-76-2	18/06/2012	Toxic for reproduction (Article 57 c)	ED/169/2012
115	Methoxyacetic acid	210-894-6	625-45-6	19/12/2012	Toxic for reproduction (Article 57 c)	ED/169/2012
116	Methyloxirane (Propylene oxide)	200-879-2	75-56-9	19/12/2012	Carcinogenic (Article 57a); Mutagenic (Article 57b)	ED/87/2012
117	N,N,N',N'-tetramethyl-4,4'- methylenedianiline (Michler's base)	202-959-2	101-61-1	18/06/2012	Carcinogenic (Article 57a)	ED/169/2012
118	N,N-dimethylacetamide	204-826-4	127-19-5	19/12/2011	Toxic for reproduction (article 57 c)	ED/169/2012
119	N,N-dimethylformamide	200-679-5	68-12-2	19/12/2012	Toxic for reproduction (Article 57 c)	ED/87/2012
120	N-methylacetamide	201-182-6	79-16-3	19/12/2012	Toxic for reproduction (Article 57 c)	ED/77/2011
121	N-pentyl-isopentylphthalate	-	776297-69-9	19/12/2012	Toxic for reproduction (Article 57 c)	ED/169/2012
122	o-aminoazotoluene	202-591-2	97-56-3	19/12/2012	Carcinogenic (Article 57a)	ED/169/2012
123	Orange lead (lead tetroxide)	215-235-6	1314-41-6	19/12/2012	Toxic for reproduction (Article 57 c)	ED/169/2012
124	o-Toluidine	202-429-0	95-53-4	19/12/2012	Carcinogenic (Article 57a)	ED/169/2012
125	Pentacosafluorotridecanoic acid	276-745-2	72629-94-8	19/12/2012	vPvB (Article 57 e)	ED/169/2012
126	Pentadecafluorooctanoic acid (PFOA)	206-397-9	335-67-1	20/06/2013	Toxic for reproduction (Article 57 c); PBT (Article 57 d)	ED/69/2013

No.	Name	EC Number	CAS Number	Date of inclusion	Reason for inclusion	Decision number
127	Pentalead tetraoxide sulphate	235-067-7	12065-90-6	19/12/2012	Toxic for reproduction (Article 57 c)	ED/169/2012
128	Pentazinc chromate octahydroxide	256-418-0	49663-84-5	19/12/2011	Carcinogenic (article 57 a)	ED/169/2012
129	Phenolphthalein	201-004-7	77-09-8	19/12/2011	Carcinogenic (article 57 a)	ED/169/2012
130	Pitch, coal tar, high temp.	266-028-2	65996-93-2	13/01/2010	Carcinogenic, PBT and vPvB (articles 57a, 57d and 57e)	ED/77/2011
131	Potassium chromate	232-140-5	7789-00-6	18/06/2010	Carcinogenic and mutagenic (articles 57 a and 57 b).	ED/77/2011
132	Potassium dichromate	231-906-6	7778-50-9	18/06/2010	Carcinogenic, mutagenic and toxic for reproduction (articles 57 a, 57 b and 57 c)	ED/68/2009
133	Potassium hydroxyoctaoxodizincatedichromate	234-329-8	11103-86-9	19/12/2011	Carcinogenic (article 57 a)	ED/30/2010
134	Pyrochlore, antimony lead yellow	232-382-1	8012-00-8	19/12/2012	Toxic for reproduction (Article 57 c)	ED/30/2010
135	Silicic acid (H2Si2O5), barium salt (1:1), lead-doped [with lead (Pb) content above the applicable generic concentration limit for 'toxicity for reproduction' Repr. 1A (CLP) or category 1 (DSD); the substance is a member of the group entry of lead compounds, with index number 082-001- 00-6 in Regulation (EC) No 1272/2008]	272-271-5	68784-75-8	19/12/2012	Toxic for reproduction (Article 57 c)	ED/77/2011
136	Silicic acid, lead salt	234-363-3	11120-22-2	19/12/2012	Toxic for reproduction (Article 57 c)	ED/169/2012

No.	Name	EC Number	CAS Number	Date of inclusion	Reason for inclusion	Decision number
137	Sodium chromate	231-889-5	7775-11-3	18/06/2010	Carcinogenic, mutagenic and toxic for reproduction (articles 57 a, 57 b and 57 c)	ED/169/2012
138	Sodium dichromate	234-190-3	7789-12-0, 10588-01-9	28/10/2008	Carcinogenic, mutagenic and toxic for reproduction (articles 57a, 57b and 57c)	ED/169/2012
139	Sodium perborate; perboric acid, sodium salt	239-172-9; 234-390-0		16/06/2014	Toxic for reproduction (Article 57 c)	ED/49/2014
140	Sodium peroxometaborate	231-556-4	7632-04-4	16/06/2014	Toxic for reproduction (Article 57 c)	ED/49/2014
141	Strontium chromate	232-142-6	7789-06-2	20/06/2011	Carcinogenic (article 57a)	ED/30/2010
142	Sulfurous acid, lead salt, dibasic	263-467-1	62229-08-7	19/12/2012	Toxic for reproduction (Article 57 c)	ED/67/2008
143	Tetraboron disodium heptaoxide, hydrate	235-541-3	12267-73-1	18/06/2010	Toxic for reproduction (article 57 c)	ED/31/2011
144	Tetraethyllead	201-075-4	78-00-2	19/12/2012	Toxic for reproduction (Article 57 c)	ED/169/2012
145	Tetralead trioxide sulphate	235-380-9	12202-17-4	19/12/2012	Toxic for reproduction (Article 57 c)	ED/30/2010
146	Trichloroethylene	201-167-4	79-01-6	18/06/2010	Carcinogenic (article 57 a)	ED/169/2012
147	Tricosafluorododecanoic acid	206-203-2	307-55-1	19/12/2012	vPvB (Article 57 e)	ED/169/2012
148	Triethyl arsenate	427-700-2	15606-95-8	28/10/2008	Carcinogenic (article 57a)	ED/30/2010
149	Trilead bis(carbonate)dihydroxide	215-290-6	1319-46-6	19/12/2012	Toxic for reproduction (Article 57 c)	ED/169/2012

No.	Name	EC Number	CAS Number	Date of inclusion	Reason for inclusion	Decision number
150	Trilead diarsenate	222-979-5	3687-31-8	19/12/2011	Carcinogenic and toxic for reproduction (articles 57 a and 57 c)	ED/67/2008
151	Trilead dioxide phosphonate	235-252-2	12141-20-7	19/12/2012	Toxic for reproduction (Article 57 c)	ED/169/2012
152	Tris(2-chloroethyl)phosphate	204-118-5	115-96-8	13/01/2010	Toxic for reproduction (article 57c)	ED/77/2011
153	Trixylyl phosphate	246-677-8	25155-23-1	16/12/2013	Toxic for reproduction (Article 57 c)	ED/121/2013
154	Zirconia Aluminosilicate Refractory Ceramic Fibres are fibres covered by index number 650- 017-00-8 in Annex VI, part 3, table 3.1 of Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, and fulfil the three following conditions: a) oxides of aluminium, silicon and zirconium are the main components present (in the fibres) within variable concentration ranges b) fibres have a length weighted geometric mean diameter less two standard geometric errors of 6 or less micrometres (μ m). c) alkaline oxide and alkali earth oxide (Na2O+K2O+CaO+MgO+BaO) content less or equal to 18% by weight			19/12/2011	Carcinogenic (article 57 a)	ED/169/2012
155	a,a-Bis[4-(dimethylamino)phenyl]-4 (phenylamino)naphthalene-1-methanol (C.I. Solvent Blue 4) [with \geq 0.1% of Michler's ketone (EC No. 202-027-5) or Michler's base (EC No. 202-959-2)]	229-851-8	6786-83-0	18/06/2012	Carcinogenic (Article 57a)	ED/68/2009

Notes:

Authentic version: Only the Candidate List published on ECHA's website is deemed authentic. Companies may have immediate legal obligations following the inclusion of a substance in the Candidate List on this website.

EC number, CAS number: The EC number includes both anhydrous and hydrated forms of a substance and consequently the entries cover both these forms. The CAS number included may be for the anhydrous form only, and therefore the CAS number shown does not always describe the entry accurately.

Reason for Inclusion: Superscript figures denote information on conditions applicable to the classification of the substance. This information can be accessed through the "Details" button at the Candidate List on ECHA's website and is available in the sub-menu "Substance Details" in field "Other remarks".