7 February 2024

Prioritisation assessment results of the Candidate List substances assessed - Substances included in the Candidate List by July 2023 and not yet recommended for inclusion in Annex XIV

The table below presents the results of the priority assessment of the Candidate List substances. The table serves as a basis for the selection of substances by ECHA when preparing the recommendation for inclusion of substances in Annex XIV: substances with highest priority are recommended before substances with lower priority.

The substances assessed are all substances included in the Candidate List, except those already recommended and those added to the Candidate List in the most recent update (i.e. January 2024 - these will be considered in the next prioritisation round).

The substances are assessed against the criteria set out in Article 58(3) of REACH applying the general approach for prioritisation of SVHCs for inclusion in the Authorisation List. This approach as well as some examples how it has been applied are available on ECHA's website (recommendation page).

Registration data is the main source of information used for priority setting. In addition, relevant information from downstream user reports, PPORD and Substance-in-Articles notifications is also taken into account. Furthermore, information from Annex XV SVHC reports of the substances or information received during the consultation on the SVHC identification is also taken into account, where relevant. The substances for which no registration has been received by ECHA or that are only registered for intermediate uses (in accordance with Articles 17 and 18 of REACH) did not undergo a detailed assessment in this prioritisation round as their priority appears to be lower in comparison with the remaining substances in the Candidate List. However, the potential interchangeability with other recommended substances (in the previous or this recommendation round) in some of their uses is considered to avoid regrettable substitution. This is referred to as "grouping" in the further considerations column below.

The current version of the table is based on information provided as of 20 July 2023. The information on the substances which are included in this 12th draft recommendation will be updated after the recommendation is finalised, where relevant, based on the new information received via the consultation or updates of the registrations received by the end of the consultation, i.e. by 7 May 2024, and updates for other relevant REACH processes.

The substances are listed in a descending order according to their relative priority score which is based on the three criteria set out in Article 58(3). The conclusion column refers to ECHA's conclusion on the inclusion of the substance in the draft 12th recommendation. Substances proposed for inclusion in the 12th draft recommendation are highlighted in green colour. The substances highlighted with orange colour receive high priority based on the criteria set out in Article 58(3), however, it has been considered appropriate to postpone the recommendation of these substances based on ongoing work on other regulatory processes that are likely to impact their priority (see column on further considerations). The priority of those substances will be re-assessed in the next prioritisation round.

When recommending substances ECHA considers the substances scoring the highest. In addition, substances that can be grouped, based on potential interchangeability, with those highest scoring substances or with substances already recommended or included in Annex XIV are considered. The number of substances included in each recommendation needs to reflect the capacity of ECHA's Committees and the Commission to handle applications in the time provided for as well as the proportionality for applicants preparing their applications for authorisation.

Substance	EC no.	CAS no.	Registration status YES/INT/NO (INT=only intermediate registrations)	Scores			Verbal description			Total score (range)	Total score (middle value)	Further considerations (grouping, other)	Conclusion
				Inherent properties	Volumes	Wide-dispersive use	Inherent properties	Volumes	Wide-dispersive use				
Medium-chain chlorinated paraffins (MCCP) [UVCB substances consisting of more than or equal to 80% linear chloroalkanes with carbon chain lengths within the range from C_{14} to C_{17}]	-	-	YES	15	15 *0*	12 *0*	PBT (Article 57d); vPvB (Article 57e)	The amount of MCCP manufactured and/or imported into the EU is according to registration data >10,000 t/y. Some uses might not be in the scope of authorisation, such as uses in fuels. Based on the registration information on volumes corresponding to these uses the volume in the scope of authorisation is estimated to be > 10,000 t/y. *If the upcoming restriction is adopted with its current scope (see further considerations), there would be no remaining uses in scope of authorisation.*	Registered uses of MCCP in the scope of authorisation include uses at industrial sites (e.g. uses in the production of rubber and PVC articles and cables as well as in adhesives, sealants, paints, coatings, textile treatment and metalworking fluids) and uses by professional workers (e.g. uses in paints, coatings, adhesives and sealants). [initial score 10] Consumer uses (e.g. uses in automotive fluids) are reported in registrations at volumes below 10 t/y. Furthermore, according to registrations the substance is used in a wide variety of articles, from which releases of the substance cannot be excluded, e.g. paper, rubber and PVC articles, treated textiles, cables and conveyor belts. [refined score 12] *If the upcoming restriction on MCCP is adopted with its current scope (see further considerations). In the longer term, there will not be no remaining uses in the scope of authorisation.* *[score 0]*	42 *15*	42 *15*	<u>Grouping</u> The similar substance SCCP was recommended in ECHA's 1st Annex XIV recommendation. However, the European Commission in its amendment of Annex XIV (Commission Regulation (EU) No 143/2011) did not include the substance referring to the ongoing international work related to its status as persistent organic pollutant. In the meanwhile, SCCP has been listed in the Stockholm Convention and got subject to the POPs Regulation (Regulation (EU) 2019/1021). <u>POPs Regulation and Stockholm Convention</u> UK has submitted a proposal for listing MCCP as persistent organic pollutant in the Stockholm Convention. This may eventually lead to the listing of this substance in the POPs regulation (Regulation (EU) 2019/1021). <u>Ongoing restriction development under REACH</u> ECHA at request of the Commission has submitted an Annex XV restriction dossier to restrict the manufacture, use or placing on the market of MCCP. SEAC adopted its final opinion in September 2023. All uses of MCCP in the scope of authorisation are in scope of the proposed restriction. It is expected that only time limited derogations would be granted (e.g. for use in metal working fluid). Therefore, in the long term, no uses in the scope of authorisation would take place. To follow the status of the restriction, see https://echa.europa.eu/registry-of-restriction-intentions/-/dislist/details/0b0236e18682f8e1 *<u>Note:</u> The impact of this upcoming restriction on the priority is given in blue italics.*	Due to on-going work related to REACH restriction and POP identification, it has been considered appropriate to postpone the recommendation of MCCP for inclusion in Annex XIV. **Therefore, it is proposed <u>NOT</u> to recommend MCCP for inclusion in Annex XIV in this recommendation round.**
Melamine	203-615-4	108-78-1	YES	13	15	12	Equivalent level of concern having probable serious effects to human health (Article 57(f) - human health). Equivalent level of concern having probable serious effects to the environment (Article 57(f) - environment)	The amount of melamine manufactured and/or imported into the EU is according to registration data above 10,000 t/y. Part of the registered tonnage is related to monomer imported as part of polymers and is therefore not considered for priority assessment Some uses appear not to be in the scope of authorisation, such as uses as intermediate (including use as monomer at industrial sites). The tonnage for uses falling outside the scope of authorisation is unclear in registrations, however, according to comments from industry during the SVHC consultation these are estimated as 95 % of the total tonnage. Therefore, in conclusion, the volume in the scope of authorisation is estimated to be > 10,000 t/y.	Registered uses of melamine in the scope of authorisation include uses at industrial sites (e.g. use of resins, use as additive in foams and coatings) and uses by professional workers (use as additive in intumescent coatings). [initial score 10] Furthermore, according to registrations and substance in article notifications, the substance is used in plastic, metal, leather, textile, and wood articles. Releases of the substance from these articles cannot be excluded. The volume used in those articles is >10 t/y. [refined score 12]	40	40	<u>Ongoing court cases</u> The SVHC identification of melamine has been appealed by industry. Two court cases are currently ongoing (T-163/23 and T-167/23). The judgements are not expected before late 2024-early 2025. Melamine being currently concluded as SVHC, it is considered for possible recommendation for inclusion in Annex XIV.	On the basis of Art. 58(3) prioritisation criteria melamine gets priority for inclusion in Annex XIV among the Candidate List substances. **Therefore, it is proposed to recommend melamine for inclusion in Annex XIV.**
Bis(2-ethylhexyl) tetrabromophthalate covering any of the individual isomers and/or combinations thereof	-	-	YES	13	9	12	vPvB (Article 57e)	The amount of bis(2-ethylhexyl) tetrabromophthalate covering any of the individual isomers and/or combinations thereof 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 laboratory uses to the extent the conditions for the generic exemption for uses in scientific research and development are met. The volume corresponding to these uses is unknown. 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 bis(2-ethylhexyl) tetrabromophthalate covering any of the individual isomers and/or combinations thereof in the scope of authorisation include uses at industrial sites (e.g. use in the production of rubber articles, use of plastics, masterbatch or compound in extrusion applications; use as adhesives) and uses by professional workers (e.g. application of reactive adhesives and sealants, one component foam). [initial score 10] Furthermore, according to registration data, the substance is used in rubber and plastic articles, from which releases cannot be excluded. [refined score 12]	34	34	<u>Planned restriction under REACH</u> The Restrictions Roadmap under the Chemical Strategy for Sustainability (https://ec.europa.eu/docsroom/documents/49734) published by the Commission includes an entry for substances used as flame retardant within Pool 1 i.e. Planned restrictions not yet on the RoI for restriction. In January 2024 the Commission has mandated ECHA to draft an investigation report on flame retardants, with a particular focus on aromatic brominated flame-retardants, including bis(2-ethylhexyl) tetrabromophthalate (mandate published on ECHA's website at https://echa.europa.eu/current-activities-on-restrictions). This report will support the Commission in deciding whether to request ECHA to prepare a restriction dossier. The mandate issued is not considered as a justification for postponing the recommendation of bis(2-ethylhexyl) tetrabromophthalate. At this stage there is insufficient certainty on whether a restriction will be proposed, and on its scope and timing.	On the basis of Art. 58(3) prioritisation criteria Bis(2-ethylhexyl) tetrabromophthalate gets priority for inclusion in Annex XIV among the Candidate List substances. **Therefore, it is proposed to recommend Bis(2-ethylhexyl) tetrabromophthalate for inclusion in Annex XIV.**
S-(tricyclo[5.2.1.0 2,6]deca-3-en-8(or 9)-yl) O-(isopropyl or isobutyl or 2-ethylhexyl) O-(isopropyl or isobutyl or 2-ethylhexyl) phosphorodithioate	401-850-9	255881-94-8	YES	13	9	10	PBT (Article 57d)	The amount of S-(tricyclo[5.2.1.0 2,6]deca-3-en-8(or 9)-yl) O-(isopropyl or isobutyl or 2-ethylhexyl) O-(isopropyl or isobutyl or 2-ethylhexyl) phosphorodithioate 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. Therefore, in conclusion, the volume used in the EU in the scope of authorisation is estimated to be in the range of 100 – <1,000 t/y.	Registered uses of S-(tricyclo[5.2.1.0 2,6]deca-3-en-8(or 9)-yl) O-(isopropyl or isobutyl or 2-ethylhexyl) O-(isopropyl or isobutyl or 2-ethylhexyl) phosphorodithioate in the scope of authorisation include uses at industrial sites (e.g. use of lubricants and greases), and/or uses by professional workers (e.g. use of lubricants and greases in vehicles or machinery). [score 10]	32	32		On the basis of Art. 58(3) prioritisation criteria S-(tricyclo[5.2.1.0 2,6]deca-3-en-8(or 9)-yl) O-(isopropyl or isobutyl or 2-ethylhexyl) O-(isopropyl or isobutyl or 2-ethylhexyl) phosphorodithioate gets priority for inclusion in Annex XIV among the Candidate List substances. **Therefore, it is proposed to recommend S-(tricyclo[5.2.1.0 2,6]deca-3-en-8(or 9)-yl) O-(isopropyl or isobutyl or 2-ethylhexyl) O-(isopropyl or isobutyl or 2-ethylhexyl) phosphorodithioate for inclusion in Annex XIV.**

1,4-dioxane	204-661-8	123-91-1	YES	15	12	5	Carcinogenic (Article 57 a); Equivalent level of concern having probable serious effects to the environment (Article 57(f) - environment); Equivalent level of concern having probable serious effects to human health (Article 57(f) - human health)	The amount of 1,4-dioxane manufactured and/or imported into the EU is according to registration data 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 laboratory reagent to the extent the conditions for the generic exemptions from the authorisation requirement for uses in scientific research and development are met. 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 1,4-dioxane in the scope of authorisation include uses at industrial sites (use as solvent). [score 5]	32	32	Occupational exposure limit A RAC opinion for occupational exposure limits (OELs) under the Carcinogens, Mutagens or Reprotoxic substances Directive (Directive 2004/37/EC, CMRD from 9 March 2022)/ Chemical Agents Directive (Directive 98/24/EC) has been adopted on 18/03/2022. The adoption of an OEL is however not expected to reduce significantly the uses and volume of the substance falling in the scope of authorisation. Ongoing restriction development under REACH DE CA is currently preparing a restriction on the manufacture, placing on the market and use of 1,4-dioxane in surfactants. The restriction proposal is expected to be submitted by April 2024. Uses of 1,4-dioxane in the scope of authorisation may be in scope of the proposed restriction. The impact of the restriction on the priority of the substance cannot be assessed at this stage. The progress with the restriction will be taken into account in the future work of the recommendation process. To follow the status of the restriction, see https://echa.europa.eu/registry-of-restriction-intentions/-/dislist/details/0b0236e18609e1d9	Due to on-going work related to REACH restriction, it has been considered appropriate to postpone the recommendation of 1,4-dioxane for inclusion in Annex XIV. **Therefore, it is proposed NOT to recommend 1,4-dioxane for inclusion in Annex XIV in this recommendation round.**
Bis(4-chlorophenyl) sulphone	201-247-9	80-07-9	YES	13	9	7	vPvB (Article 57e)	The amount of Bis(4-chlorophenyl) sulphone manufactured and/or imported into the EU is according to registration data in the range of 1,000 - <10,000 t/y. Part of this registered tonnage is related to monomer imported as part of polymers and is therefore not considered for priority assessment. Some uses appear not to be in the scope of authorisation, such as uses as intermediate (e.g. use as monomer in the manufacture of polymers). Information collected from registrants during the SEV and SVHC dossier preparation indicates that the substance is almost exclusively used as monomer or imported as a polymer. Only a very small amount is used as additive. However, no precise tonnages are available. Therefore, in conclusion, the volume used in the EU in the scope of authorisation is estimated to be in the range of 100 – <1,000 t/y.	Registered uses of Bis(4-chlorophenyl) sulphone in the scope of authorisation include uses at industrial sites (industrial formulation, manufacture of rubber articles). [initial score 5] Furthermore, according to registrations, the substance is used in rubber articles. [refined score 7]	29	29	-	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(4-chlorophenyl) sulphone is postponed. **Consequently, it is proposed NOT to recommend Bis(4-chlorophenyl) sulphone for inclusion in Annex XIV in this recommendation round.**
Tris(4-nonylphenyl, branched and linear) phosphite (TNPP) with ≥ 0.1% w/w of 4-nonylphenol, branched and linear (4-NP)	-	-	YES	7	12	10	Endocrine disrupting properties (Article 57(f) - environment)	The amount of Tris(4-nonylphenyl, branched and linear) phosphite (TNPP) with ≥ 0.1% w/w of 4-nonylphenol, branched and linear (4-NP) manufactured and/or imported into the EU is according to registration data above 10,000 t/y. Part of this tonnage is exported outside the EU and is therefore not considered for priority assessment. Some uses appear not to be in the scope of authorisation, such as uses as intermediate (e.g. in the manufacture of polymers) and, to the extent the conditions for the generic exemption are met, uses in scientific research and development. Therefore, in conclusion, the volume used in the EU in the scope of authorisation is estimated to be in the range of 1,000 – <10,000 t/y.	Registered uses of TNPP in the scope of authorisation include uses at industrial sites (e.g. uses as stabiliser in polymers). [initial score 5] According to registration information, TNPP is used by professional workers and by consumers (e.g. uses in adhesives and coatings). However, it is uncertain if those would contain 4-nonylphenol ≥0.1%. Furthermore, according to registrations and information in the SVHC Annex XV report, TNPP is used in polymer articles. [refined score 10]	29	29	Potential restriction under REACH The Restrictions Roadmap under the Chemical Strategy for Sustainability (https://ec.europa.eu/docsroom/documents/49734) published by the Commission includes an entry for substances containing 4-tertbutylphenol (4-TBP), 4-nonylphenol and other alkylphenols within Pool 2 i.e. Potential restriction. Restriction is being discussed by Authorities as a potential regulatory management option but no decision has yet been taken. The impact of a potential restriction on the priority of the substance cannot be assessed at this stage.	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 tris(4-nonylphenyl, branched and linear) phosphite (TNPP) with ≥ 0.1% w/w of 4-nonylphenol, branched and linear (4-NP) is postponed. **Consequently, it is proposed NOT to recommend tris(4-nonylphenyl, branched and linear) phosphite (TNPP) with ≥ 0.1% w/w of 4-nonylphenol, branched and linear (4-NP) for inclusion in Annex XIV in this recommendation round.**
4,4'-sulphonyldiphenol	201-250-5	80-09-1	YES	7	12	7	Toxic for reproduction (Article 57 c); Endocrine disrupting properties (Article 57(f) - human health); Endocrine disrupting properties (Article 57(f) - environment)	The amount of 4,4'-sulphonyldiphenol manufactured and/or imported into the EU is according to registration data above 10,000 t/y. Part of the registered tonnage is related to monomer imported as part of polymers and is therefore not considered for priority assessment. Some uses appear not to be in the scope of authorisation, such as uses as intermediate (including use as monomer at industrial sites e.g. in the production of polymeric tanning agents). The exact distribution of volume per use is unclear. Taking into account the information on the volume corresponding to those uses provided in registrations, and taking the worst case scenario, the volume in the scope of authorisation is estimated to be in the range 1,000- <10,000 t/y.	Registered uses of 4,4'-sulphonyldiphenol in the scope of authorisation include uses at industrial sites (e.g. production of thermal paper). Industrial and professional uses in leather tanning are also reported in registrations, however they appear to describe the use of the polymers made from the substance (polymeric tanning agents), not the use of the substance as such. [initial score 5] According to registrations the substance is used in paper articles. Releases of the substance from these articles cannot be excluded. [refined score 7]	26	26	Potential grouping with other bisphenols Ongoing restriction development under REACH The German Competent Authorities (DE CA) have submitted and withdrawn a proposal to restrict bisphenols with endocrine disrupting properties for the environment and their salts. They intend to re-submit an updated proposal to ECHA once they have considered the information submitted by stakeholders during the six-month consultation and reworked the scope of the restriction (ROI restriction: https://echa.europa.eu/registry-of-restriction-intentions/-/dislist/details/0b0236e1853413ea). The impact of the restriction on the priority of the substance cannot be assessed at this stage. The progress with the restriction will be taken into account in the further work of the recommendation process.	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'-sulphonyldiphenol is postponed. **Consequently, it is proposed NOT to recommend 4,4'-sulphonyldiphenol for inclusion in Annex XIV in this recommendation round.**
Reaction mass of 2,2,3,3,5,5,6,6-octafluoro-4-(1,1,1,2,3,3,3-heptafluoropropan-2-yl)morpholine and 2,2,3,3,5,5,6,6-octafluoro-4-(heptafluoropropyl)morpholine	473-390-7	1093615-61-2	YES	13	6	7	vPvB (Article 57e)	The amount of reaction mass of 2,2,3,3,5,5,6,6-octafluoro-4-(1,1,1,2,3,3,3-heptafluoropropan-2-yl)morpholine and 2,2,3,3,5,5,6,6-octafluoro-4-(heptafluoropropyl)morpholine manufactured and/or imported into the EU is according to registration data > 100 t/y. Part of this tonnage is exported outside the EU and is therefore not considered for priority assessment. All uses appear to be in the scope of authorisation. Therefore, in conclusion, the volume used in the EU in the scope of authorisation is estimated to be in the range of 10 - 100 t/y.	Registered uses of reaction mass of 2,2,3,3,5,5,6,6-octafluoro-4-(1,1,1,2,3,3,3-heptafluoropropan-2-yl)morpholine and 2,2,3,3,5,5,6,6-octafluoro-4-(heptafluoropropyl)morpholine in the scope of authorisation include uses at industrial sites (re-packaging of substances, industrial use in closed systems). [initial score 5] Furthermore, according to registrations, the substance is used by professional workers in uses in the scope of authorisation (professional use in closed system) in volume below 10 t/y and is used in articles (Article service life of filled equipment). [refined score 7]	26	26	Potential grouping with other perfluorinated substances (PFAS) not recommended yet Ongoing restriction development under REACH ECHA on request of the European Commission submitted a restriction on the use of per- and polyfluoroalkyl substances (PFAS) in fire-fighting foams. The restriction is currently under decision making by the Commission. Its status is available at https://echa.europa.eu/registry-of-restriction-intentions/-/dislist/details/0b0236e1856e8ce6. Furthermore, DE, DK, NL, NO & SE have submitted a restriction on the manufacture, placing on the market and use of PFAS. This restriction is currently under opinion development, see https://echa.europa.eu/registry-of-restriction-intentions/-/dislist/details/0b0236e18663449b. At this stage, it is not possible to assess the impact of this restriction on the priority of the substance. The progress with the restriction will be taken into account in the future work of the recommendation process.	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 reaction mass of 2,2,3,3,5,5,6,6-octafluoro-4-(1,1,1,2,3,3,3-heptafluoropropan-2-yl)morpholine and 2,2,3,3,5,5,6,6-octafluoro-4-(heptafluoropropyl)morpholine is postponed. **Consequently, it is proposed NOT to recommend reaction mass of 2,2,3,3,5,5,6,6-octafluoro-4-(1,1,1,2,3,3,3-heptafluoropropan-2-yl)morpholine and 2,2,3,3,5,5,6,6-octafluoro-4-(heptafluoropropyl)morpholine for inclusion in Annex XIV in this recommendation round.**
Perfluorobutane sulfonic acid (PFBS) and its salts	-	-	YES	13	6	7	Equivalent level of concern having probable serious effects to the environment (Article 57(f) - environment); Equivalent level of concern having probable serious effects to human health (Article 57(f) - human health)	The amount of perfluorobutane sulfonic acid (PFBS) and its salts manufactured and/or imported into the EU is according to registration data in the range of 100 - 1,000 t/y. Part of this tonnage is exported outside the EU. Some uses appear not to be in the scope of authorisation, such as uses as intermediate. Based on information from registration dossiers on the volume corresponding to those uses, the volume in the scope of authorisation is estimated to be in the range of 10 - <100 t/y.	Registered uses of PFBS and its salts in the scope of authorisation include uses at industrial sites (e.g. formulation, uses as catalyst, additive, antistatic agent or flame retardant in polymer production or processing and uses in the production of integrated circuits of semiconductors for electronics). [initial score 5] Also the professional use in the production of integrated circuits for electronics is registered, however, the volumes going to that use are below 10 t/y. The same use is also reported as consumer use, however it is assumed that this refers to the use of electronic articles. Furthermore, according to registration data, the substance is used in plastic articles, from which releases cannot be excluded. [refined score 7]	26	26	Potential grouping with other perfluorinated sulfonic acids (PFSAs) not recommended yet Ongoing restriction development under REACH ECHA on request of the European Commission submitted a restriction on the use of per- and polyfluoroalkyl substances (PFAS) in fire-fighting foams. The restriction is currently under decision making by the Commission. Its status is available at https://echa.europa.eu/registry-of-restriction-intentions/-/dislist/details/0b0236e1856e8ce6. Furthermore, DE, DK, NL, NO & SE have submitted a restriction on the manufacture, placing on the market and use of PFAS. This restriction is currently under opinion development, see https://echa.europa.eu/registry-of-restriction-intentions/-/dislist/details/0b0236e18663449b. At this stage, it is not possible to assess the impact of this restriction on the priority of the substance. The progress with the restriction will be taken into account in the future work of the recommendation process.	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 perfluorobutane sulfonic acid (PFBS) and its salts is postponed. **Consequently, it is proposed NOT to recommend reaction mass of perfluorobutane sulfonic acid (PFBS) and its salts for inclusion in Annex XIV in this recommendation round.**

6,6'-di-tert-butyl-2,2'-methylenedi-p-cresol	204-327-1	119-47-1	YES	1	12	12	Toxic for reproduction (article 57c)	The amount of 6,6'-di-tert-butyl-2,2'-methylenedi-p-cresol manufactured and/or imported into the EU is according to registration data in the range of 1,000 - <10,000 t/y. Part of this tonnage is exported outside the EU and is therefore not considered for priority assessment. Some uses appear not to be in the scope of authorisation, such as industrial uses as laboratory chemicals to the extent the conditions for the generic exemption are met (uses in scientific research and development) or use as fuel. Based on information from the registration dossiers, the volume corresponding to those uses is unknown. Therefore, in conclusion, the volume used in the EU in the scope of authorisation is estimated to be in the range of 1,000 – <10,000.	Registered uses of 6,6'-di-tert-butyl-2,2'-methylenedi-p-cresol in the scope of authorisation include uses at industrial sites (e.g. use in lubricants, adhesives and inks, for tyre production and for production of rubber (non-tyre) and non-rubber articles), and uses by professional workers (e.g. use in lubricants, adhesives and inks). Some registration dossiers also include consumer uses (use in adhesives, lubricants and similar products containing the substance). However, the lead registrant advised againt these uses and supply to the general public is restricted pursuant to REACH Annex XVII entry 30. Therefore, consumer uses above the specified concentration limits should not take place and are not considered for the priority assessment. [Initial score 10] According to registrations the substance is used in plastic and rubber articles. Releases of the substance from these articles cannot be excluded. The volume used in those articles is >10 t/y. [refined score 12]	25	25	-	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 6,6'-di-tert-butyl-2,2'-methylenedi-p-cresol is postponed. **Consequently, it is proposed <u>NOT</u> to recommend reaction mass of 6,6'-di-tert-butyl-2,2'-methylenedi-p-cresol for inclusion in Annex XIV in this recommendation round.**
2,3,3,3-tetrafluoro-2-(heptafluoropropoxy)propionic acid, its salts and its acyl halides (HFPO-DA)	-	-	YES	13	6	5	Equivalent level of concern having probable serious effects to human health (Article 57(f) - human health); Equivalent level of concern having probable serious effects to the environment (Article 57(f) - environment)	The amount of 2,3,3,3-tetrafluoro-2-(heptafluoropropoxy)propionic acid, its salts and its acyl halides (HFPO-DA) 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 HFPO-DA in the scope of authorisation include uses at industrial sites (processing aid for polymerisation). [score 5]	24	24	Potential grouping with other perfluorinated substances (PFAS) not recommended yet <u>Ongoing restriction development under REACH</u> ECHA on request of the European Commission submitted a restriction on the use of per- and polyfluoroalkyl substances (PFAS) in fire-fighting foams. The restriction is currently under decision making by the Commission. Its status is available at https://echa.europa.eu/registry-of-restriction-intentions/-/dislist/details/0b0236e1856e8ce6. Furthermore, DE, DK, NL, NO & SE have submitted a restriction on the manufacture, placing on the market and use of PFAS. This restriction is currently under opinion development, see https://echa.europa.eu/registry-of-restriction-intentions/-/dislist/details/0b0236e18663449b. At this stage, it is not possible to assess the impact of this restriction on the priority of the substance. The progress with the restriction will be taken into account in the future work of the recommendation process.	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 2,3,3,3-tetrafluoro-2-(heptafluoropropoxy)propionic acid, its salts and its acyl halides (HFPO-DA) is postponed. **Consequently, it is proposed <u>NOT</u> to recommend reaction mass of 2,3,3,3-tetrafluoro-2-(heptafluoropropoxy)propionic acid, its salts and its acyl halides (HFPO-DA) for inclusion in Annex XIV in this recommendation round.**
Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide	278-355-8	75980-60-8	YES	1	12	10	Toxic for reproduction (Article 57 c)	The amount of diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide manufactured and/or imported into the EU is according to registration data in the range 1,000 -< 10,000 t/y. All tonnage used in EU appear 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 diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide in the scope of authorisation include uses at industrial sites (such as formulation of inks, toners, coatings and adhesives, use as photoinitiator in UV-curable inks, coatings and adhesives, as process regulator for polymerisation processes in production of resins, rubbers, polymers) and uses by professional workers (application of inks, coatings and adhesives). [Initial score 10] Consumer uses e.g. in ink bottles are also registered. The substance was recently included in the Annex VI, part 3, Table 3 of Regulation (EC) No 1272/2008 with a harmonised classification as Repr. 1B. Once the substance is included in the appendix to entry 30 of REACH Annex XVII, the generic restriction on Reprotoxic substances sold to the general public will apply. Consumer uses of the substance above the specific concentration limit should not take place anymore and are therefore not considered for the priority assessment. According to registrations, the subtance is used in 3D printed articles, ink-printed paper articles or textiles. Release from articles is not expected as substance is assumed to have reacted.	23	23	Grouping with EC 400-600-6 (2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one) and EC 404-360-3 (2-benzyl-2-dimethylamino-4'-morpholinobutyrophenone) already recommended (11th Recommendation).	On the basis of Art. 58(3) prioritisation criteria further strenghtenend by grouping considerations, diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide gets priority for inclusion in Annex XIV among the Candidate List substances. **Therefore, it is proposed to recommend diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide for inclusion in Annex XIV.**
tris(2-methoxyethoxy)vinylsilane	213-934-0	1067-53-4		1	12	10	Toxic for reproduction (Article 57c)	The amount of tris(2-methoxyethoxy)vinylsilane manufactured and/or imported into the EU is according to registration data 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 (e.g. as a monomer in the production of silicone polymers or resins) and, to the extent the conditions for the generic exemption are met, uses in scientific research and development. The volume corresponding to those uses is unknown. Therefore, in conclusion, the volume used in the EU in the scope of authorisation is estimated to be in the range of 1,000 - <10,000 t/y.	Registered uses of tris(2-methoxyethoxy)vinylsilane in the scope of authorisation include uses at industrial sites (e.g. uses in non-metal surface treatment or in adhesives and sealants), and uses by professional workers (e.g. uses in sealants). [initial score 10] Furthermore, according to registrations and substance in article notifications the substance is used in articles as adhesives and sealants. However, releases from these articles seem to be negligible.	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 tris(2-methoxyethoxy)vinylsilane is postponed. **Consequently, it is proposed <u>NOT</u> to recommend reaction mass of tris(2-methoxyethoxy)vinylsilane for inclusion in Annex XIV in this recommendation round.**
Barium diboron tetraoxide	237-222-4	13701-59-2	YES	1	9	12	Toxic for reproduction (Article 57c)	The amount of barium diboron tetraoxide 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. Therefore, in conclusion, the volume used in the EU in the scope of authorisation is estimated to be in the range of 100 - <1,000 t/y.	Registered uses of barium diboron tetraoxide in the scope of authorisation include uses at industrial sites (e.g. use in coatings and paints, thinners, paint removers) and uses by professional workers (e.g. in paints and coatings). Registration dossiers also include consumer uses. However, supply to the general public is restricted pursuant to REACH Annex XVII entry 30. Therefore, consumer uses above the specified concentration limits should not take place and are not considered for the priority assessment. [initial score 10] According to registrations and substance in article notifications the substance is used in coated and painted articles. Release of the substance from these articles cannot be excluded. [refined score 12]	22	22	Grouping with other boron compounds already recommended in previous recommendations. <u>Potential restriction under REACH</u> The Restrictions Roadmap under the Chemical Strategy for Sustainability (https://ec.europa.eu/docsroom/documents/49734) published by the Commission includes an entry for Borates within Pool 2 i.e. Potential restriction. Restriction is being discussed by Authorities as a potential regulatory management option but no decision has yet been taken. The impact of a potential restriction on the priority of the substance cannot be assessed at this stage. <u>Occupational exposure limit</u> ECHA at the request of the Commission is currently assessing the option of setting an EU occupational exposure limit (OEL) under the Carcinogens and Mutagens Directive (Directive 2004/37/EC) for Boron and its compounds. The adoption of an OEL is however not expected to have a major impact on the uses and volume of the substance in scope of authorisation.	On the basis of Art. 58(3) prioritisation criteria further strenghtenend by grouping considerations, barium diboron tetraoxide gets priority for inclusion in Annex XIV among the Candidate List substances. **Therefore, it is proposed to recommend barium diboron tetraoxide for inclusion in Annex XIV.**

Dioctyltin dilaurate, stannane, dioctyl-, bis(coco acyloxy) derivs., and any other stannane, dioctyl-, bis(fatty acyloxy) derivs. wherein C12 is the predominant carbon number of the fatty acyloxy moiety	-	-	YES	1	9	12	Toxic for reproduction (Article 57 c)	The amount of dioctyltin dilaurate, stannane, dioctyl-, bis(coco acyloxy) derivs., and any other stannane, dioctyl-, bis(fatty acyloxy) derivs. wherein C12 is the predominant carbon number of the fatty acyloxy moiety manufactured and/or imported into the EU is according to registration data in the range 100 - 1,000 t/y. Some uses appear not to be in the scope of authorisation, such as uses as intermediate and uses in mixtures below the concentration limit of 0.3% (tonnage for those uses unknown). However, upstream uses (e.g. formulation) of such end-uses below the concentration limit are in the scope. Therefore, in conclusion, the volume in the scope of authorisation is estimated to be in the range 100 - <1,000 t/y.	Registered uses of dioctyltin dilaurate, stannane, dioctyl-, bis(coco acyloxy) derivs., and any other stannane, dioctyl-, bis(fatty acyloxy) derivs. wherein C12 is the predominant carbon number of the fatty acyloxy moiety in the scope of authorisation include uses at industrial sites (e.g. use as catalyst process regulator, as additive in the production of polymers and rubber tyres, electrical wire enameling and coating) and uses by professional workers (e.g. catalyst process regulator, applications of coatings and inks). Registration dossiers also include consumer uses. However, the restriction on the supply of CMR substances to the general public applies (REACH annex XVII entry 30). Therefore, consumer uses above the concentation limit should not take place and are not considered for the priority assessment. [initial score 10] Furthermore, according to registration data, the substance is used in articles (plastic, textile and leather articles), some being reported to be used by workers. Those article uses do not seem to be covered by the restriction of the use of dioctyltin compounds in certain article categories supplied to the general public (REACH Annex XVII entry 20:6). [refined score 12]	22	22	<u>Potential grouping</u> The substance may potentially be used as part of alternative solutions to some other tin-containing substances on the Candidate List, in some of their uses (DOTE and reaction mass of DOTE and MOTE (recommended in 9th Annex XIV recommendation); Dibutylbis(pentane-2,4-dionato-O,O')tin; Dibutyltin dichloride (DBTC); Bis(tributyltin)oxide (TBTO)). Taking into account the differences in chemical structure (e.g. type of ligands) and uses, we currently do not consider grouping these substances. An in-depth assessment has however not been performed at this stage.	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 dioctyltin dilaurate, stannane, dioctyl-, bis(coco acyloxy) derivs., and any other stannane, dioctyl-, bis(fatty acyloxy) derivs. wherein C12 is the predominant carbon number of the fatty acyloxy moiety is postponed. **Consequently, it is proposed <u>NOT</u> to recommend dioctyltin dilaurate, stannane, dioctyl-, bis(coco acyloxy) derivs., and any other stannane, dioctyl-, bis(fatty acyloxy) derivs. wherein C12 is the predominant carbon number of the fatty acyloxy moiety for inclusion in Annex XIV in this recommendation round.**
Dibutylbis(pentane-2,4-dionato-O,O')tin	245-152-0	22673-19-4	YES	1	9	12	Toxic for reproduction (Article 57 c)	The amount of dibutylbis(pentane-2,4-dionato-O,O')tin 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 uses as intermediate, to the extent the conditions for the generic exemption are met, uses in research and development, and end-uses in mixtures below the concentration limit of 0.3%. However, upstream uses (e.g. formulation) of such end-uses below the concentration limit are in the scope. The volume corresponding to the uses falling outside the scope of authorisation is unknown. 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 dibutylbis(pentane-2,4-dionato-O,O')tin in the scope of authorisation include uses at industrial sites (uses as catalyst and process regulator) and uses by professional workers (catalyst, process regulator). Registration dossiers also include consumer uses. However, supply to the general public is restricted pursuant to REACH Annex XVII entries 20:5 and 30. Therefore, consumer uses above the specified concentration limits should not take place and are not considered for the priority assessment. [initial score 10] Furthermore, according to registration information, the substance is used in articles (e.g. textile and leather articles, vehicles and machinery). Those article uses do not seem to be covered by the restriction of the use of dibutyltin compounds in articles supplied to the general public (REACH Annex XVII entry 20:5) [refined score 12]	22	22	<u>Potential grouping</u> The substance may potentially be used as part of alternative solutions to some other tin-containing substances on the Candidate List, in some of their uses (DOTE and reaction mass of DOTE and MOTE (recommended in 9th Annex XIV recommendation); Dioctyltin dilaurate, stannane, dioctyl-, bis(coco acyloxy) derivs., and any other stannane, dioctyl-, bis(fatty acyloxy) derivs. wherein C12 is the predominant carbon number of the fatty acyloxy moiety; Dibutyltin dichloride (DBTC); Bis(tributyltin)oxide (TBTO)). Taking into account the differences in chemical structure (e.g. type of ligands) and uses, we currently do not consider grouping these substances. An in-depth assessment has however not been performed at this stage.	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 dibutylbis(pentane-2,4-dionato-O,O')tin is postponed. **Consequently, it is proposed <u>NOT</u> to recommend dibutylbis(pentane-2,4-dionato-O,O')tin for inclusion in Annex XIV in this recommendation round.**
2,2-bis(bromomethyl)propane1,3-diol (BMP); 2,2-dimethylpropan-1-ol, tribromo derivative/3-bromo-2,2-bis(bromomethyl)-1-propanol (TBNPA); 2,3-dibromo-1-propanol (2,3-DBPA)	221-967-7, 253-057-0, 202-480-9	3296-90-0, 36483-57-5, 1522-92-5, 96-13-9	YES	1	9	12	Carcinogenic (Article 57 a)	The amount of BMP, TBNPA and 2,3-DBPA manufactured and/or imported into the EU is according to registration data >100 t/y. Some uses appear not to be in the scope of authorisation, such as uses as intermediate. Based on information from registration dossiers on the volume corresponding to those uses, the volume in the scope of authorisation is estimated to be in the range of 100 - <1,000 t/y.	Registered uses of BMP, TBNPA and 2,3-DBPA in the scope of authorisation include uses at industrial sites (e.g. formulation and use as flame retardants in the production of polymers). [initial score 5] According to registration information, the substances are used by professional workers in uses that may also be in the scope of authorisation (use in one component foams in building and construction), however, the volumes going to that use are below 10 t/y. Furthermore, according to registration data, the substances are used in plastic articles. Releases of the substances from these articles cannot be excluded. [refined score 7]	22	22	<u>Planned restriction under REACH</u> The Restrictions Roadmap under the Chemical Strategy for Sustainability (https://ec.europa.eu/docsroom/documents/49734) published by the Commission includes an entry for substances used as flame retardant within Pool 1 i.e. Planned restrictions not yet on the RoI for restriction. The impact of the planned restriction on the priority of the substance cannot be assessed at this stage.	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 BMP, TBNPA and 2,3-DBPA is postponed. **Consequently, it is proposed <u>NOT</u> to recommend BMP, TBNPA and 2,3-DBPA for inclusion in Annex XIV in this recommendation round.**
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]	-	-	YES	7	6-9	5-7	Endocrine disrupting properties (Article 57(f) - environment)	The amount of 4-nonylphenol manufactured and/or imported into the EU is according to registration data above 10,000 t/y. Part of the registered tonnage is related to monomer imported as part of a polymer and is therefore not considered for priority assessment. 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 in uses falling outside the scope of authorisation, e.g. 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.) or in fuels. The volume falling outside the scope of authorisation is uncertain. However, based on information from registration dossiers, the volume in the scope of authorisation is estimated to be in the range of 10 - 1,000 t/y.	Registered uses of 4-nonylphenol in the scope of authorisation include uses at industrial sites (e.g. in water treatment or oil fields). [initial score 5] There are some indications that there may be industrial or professional use in adhesives occurring in the EU which may be in the scope of authorisation. However, there is uncertainty if these uses indeed take place and if they are uses of the substance 4-nonylphenol. [refined score 5-7]	18-23	21	Potential grouping with other 4-alkylphenols not yet recommended. <u>Potential restriction under REACH</u> The Restrictions Roadmap under the Chemical Strategy for Sustainability (https://ec.europa.eu/docsroom/documents/49734) published by the Commission includes an entry for substances containing 4-tert butylphenol (4-TBP), 4-nonylphenol and other alkylphenols within Pool 2 i.e. Potential restriction. Restriction is being discussed by Authorities as a potential regulatory management option but no decision has yet been taken. The impact of a potential restriction on the priority of the substance cannot be assessed at this stage.	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 [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] is postponed. **Consequently, it is proposed <u>NOT</u> to recommend the substance for inclusion in Annex XIV in this recommendation round.**
Bis(2-(2-methoxyethoxy)ethyl)ether	205-594-7	143-24-8	YES	1	9	11	Toxic for reproduction (Article 57 c)	The amount of bis(2-(2-methoxyethoxy)ethyl)ether 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.	Registered uses of bis(2-(2-methoxyethoxy)ethyl)ether in the scope of authorisation include uses at industrial sites (uses as solvent, extracting agent and gas absorption liquid, and in welding and soldering products) and uses by professional workers (uses in inks and toners and in printing of recorded media). [score 10] Furthermore, according to registrations the substance is used in printed paper articles, likely at volumes <10 t/y. [refined score 11]	21	21	Potential grouping with other ethylene glycol ethers (including Diglyme, included in Annex XIV in August 2014)	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(2-(2-methoxyethoxy)ethyl)ether is postponed. **Consequently, it is proposed <u>NOT</u> to recommend bis(2-(2-methoxyethoxy)ethyl)ether for inclusion in Annex XIV in this recommendation round.**
2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol	201-236-9	79-94-7	YES	1	12	7	Carcinogenic (Article 57a)	The amount of 2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol manufactured and/or imported into the EU is according to registration data above 10,000 t/y. Part of this registered tonnage is related to monomer imported as part of polymers and is therefore not considered for priority assessment. Some uses appear not to be in the scope of authorisation, such as uses as intermediate (e.g. in the manufacture of polymer resins). Therefore, in conclusion, the volume used in the EU in the scope of authorisation is estimated to be in the range of 1,000 - <10,000 t/y.	Registered uses of 2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol in the scope of authorisation include uses at industrial sites (uses as additives in the manufacture of polymer resins, manufacture of articles from polymer resins containing additive flame retardants). [initial score 5] Furthermore, according to registrations the substance is used in flame retardant polymer articles in volumes > 10t/y. [refined score 7]	20	20	Potential grouping with other bisphenols <u>Planned restriction under REACH</u> The Restrictions Roadmap under the Chemical Strategy for Sustainability (https://ec.europa.eu/docsroom/documents/49734) published by the Commission includes an entry for substances used as flame retardant within Pool 1 i.e. Planned restrictions not yet on the RoI for restriction. The impact of the planned restriction on the priority of the substance cannot be assessed at this stage.	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 2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol is postponed. **Consequently, it is proposed <u>NOT</u> to recommend 2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol for inclusion in Annex XIV in this recommendation round.**

Imidazolidine-2-thione; (2-imidazoline-2-thiol)	202-506-9	96-45-7	YES	1	12	6	Toxic for reproduction (Article 57 c)	The amount of imidazolidine-2-thione (2-imidazoline-2-thiol) manufactured and/or imported into the EU is according to registration data in the range of 1,000 - 10,000 t/y. Part of this tonnage is exported outside the EU. 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 imidazolidine-2-thione (2-imidazoline-2-thiol) in the scope of authorisation include uses at industrial sites (e.g. formulation of masterbatches and use in the production of rubber goods and tyres). In addition, according to information from the industry submitted during the SVHC public consultation the substance may be used in electroplating. [initial score 5] Furthermore, the article service-life might be relevant (rubber articles and tyres). [refined score 6]	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 imidazolidine-2-thione; (2-imidazoline-2-thiol) is postponed. **Consequently, it is proposed <u>NOT</u> to recommend imidazolidine-2-thione; (2-imidazoline-2-thiol) for inclusion in Annex XIV in this recommendation round.**
Cadmium hydroxide	244-168-5	21041-95-2	YES	1	12	5	Carcinogenic (Article 57 a); Mutagenic (Article 57 b); Specific target organ toxicity after repeated exposure (Article 57(f) - human health)	The amont of cadmium hydroxide manufactured and/or imported into the EU is according to registration data 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 intermediate in the manufacture of other cadmium compounds. Based on the registration information on volumes corresponding to these uses the volume in the scope of authorisation is estimated to be in the range of 1,000 - <10,000 t/y.	Registered uses of cadmium hydroxide in the scope of authorisation include uses at industrial sites (production of industrial batteries) [score 5] Furthermore, the substance is used in articles (use in industrial batteries). However, releases of the substance from these articles are considered negligible.	18	18	Potential grouping with some other cadmium compounds not yet recommended <u>Occupational exposure limit</u> A RAC opinion for a revised binding occupational exposure limits (OELs) under the Carcinogens, Mutagens or Reprotoxic substances Directive (Directive 2004/37/EC, CMRD from 9 March 2022) for Cadmium and its inorganic compounds has been adopted on 18/03/2021. The revision of the binding OEL is however not expected to significantly reduce the uses and volume of the substance falling in the scope of authorisation.	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 hydroxide is postponed. **Consequently, it is proposed <u>NOT</u> to recommend cadmium hydroxide for inclusion in Annex XIV in this recommendation round.**
Hydrazine	206-114-9	302-01-2, 7803-57-8	YES	1	12	5	Carcinogenic (Article 57a)	The amount of hydrazine manufactured and/or imported into the EU is according to registration data >10,000 t/y. However part of this volume is directly exported, meaning the volume for uses in the EU is above 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 in scientific research and development (use as laboratory chemical, use for hot firing tests in the aerospace industry). End-uses in mixtures below the concentration limit of 0.1% are reported and appear not to be in scope of authorisation. However their upstream uses (formulation) are considered in the scope. Based on information on the volume corresponding to those uses from the registration dossiers, the volume in the scope of authorisation is estimated to be in the tonnage band 1,000 - 10,000 t/y.	Registered uses of hydrazine in the scope of authorisation include uses at industrial sites such as formulation and repacking of substances or mixtures or use as reducing agent. The substance is also registered for uses in the aerospace industry (fuel for hot firing in space crafts/satellite propellant). [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 hydrazine is postponed. **Consequently, it is proposed <u>NOT</u> to recommend hydrazine for inclusion in Annex XIV in this recommendation round.**
Dinoseb (6-sec-butyl-2,4-dinitrophenol)	201-861-7	88-85-7	YES	1	12	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. 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 1,000 - <10,000 t/y.	Registered uses of dinoseb in the scope of authorisation include uses at industrial sites (use as polymerisation retarder). [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 Dinoseb (6-sec-butyl-2,4-dinitrophenol) is postponed. **Consequently, it is proposed <u>NOT</u> to recommend Dinoseb (6-sec-butyl-2,4-dinitrophenol) 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 registration data 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. The volume corresponding to the uses falling outside the scope of authorisation is unknown. Therefore, in conclusion, the volume used in the EU 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, releases of the substance from these articles are considered negligible.	18	18	Potential grouping with other ethylene glycol ethers (including Diglyme, included in Annex XIV in August 2014)	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.**
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 SVHC dossier, based on the available information, it is estimated that firearm ammunition 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 igniters having a higher 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 concern low or very low percentages. [refined score 7-12]	14-19	17	Potential grouping with some other lead substances not yet recommended <u>Adopted restriction and ongoing restriction development under REACH</u> A restriction for the uses of Lead and its compounds in lead shots over wetlands has recently been adopted (REACH Annex XVII entry 63 (11)). Furthermore, ECHA submitted in March 2021 a proposal to restrict uses of Lead and its compounds in outdoor shooting and fishing. For current status, see https://echa.europa.eu/en/registry-of-restriction-intentions/-/dislist/details/0b0236e1840159e6. Only a minority of the registered uses of the substance appears to be covered by the recently adopted and upcoming restrictions.	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.**

Cadmium	231-152-8	7440-43-9	YES	1	9	6	Carcinogenic (Article 57a); Specific target organ toxicity after repeated exposure (Article 57(f) - human health)	The amount of cadmium manufactured and/or imported into the EU is according to registration data in the range of 1,000 - <10,000 t/y. Part of this tonnage is exported outside the EU and is therefore not considered for priority assessment. Some uses appear not to be in the scope of authorisation, such as the use as laboratory reagent and use as an intermediate in the production of other Cd compounds. 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 (manufacture of brazing products, use of cadmium containing coatings, manufacture of soldering products, use of active powders for industrial batteries, use of cadmium based targets for PVD coating, use of Cd, Ag containing alloys for moderator bars). Dossier updates were received in 2015-2016. Professional uses of cadmium based brazing products and cadmium-based soldering products have been removed from the majority of the registrations. The lead registrant's CSR no longer supports these uses. The professional use of brazing products, if still happening in the EU, is expected to be limited to applications derogated from the existing restriction under Annex XVII (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 and PVD/coating. Considering the above, it is assumed that there is no professional use of cadmium in the EU. [Initial score: 5] The substance is used in articles (e.g. cadmium based brazing products, cadmium plated articles exempted from the restriction, cadmium-based soldering products, PVD/CVD coated articles). The assumed tonnage for the use in articles for which release cannot be excluded is according to registration information below 10 t/y. [refined score: 6]	16	16	Potential grouping with some other cadmium compounds not yet recommended <u>Occupational exposure limit</u> A RAC opinion for a revised binding occupational exposure limits (OELs) under the Carcinogens, Mutagens or Reprotoxic substances Directive (Directive 2004/37/EC, CMRD from 9 March 2022) for Cadmium and its inorganic compounds has been adopted on 18/03/2021. The revision of the binding OEL is however not expected to significantly reduce the uses and volume of the substance falling in the scope of authorisation.	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.**
Cadmium oxide	215-146-2	1306-19-0	YES	1	9	5	Carcinogenic (Article 57a); Specific target organ toxicity after repeated exposure (Article 57(f) - human health)	The amount of cadmium oxide manufactured and/or imported into the EU is according to registration data in the range of 1,000 - 10,000 t/y. Part of this tonnage is exported outside the EU. Some uses appear not to be in the scope of authorisation, such as uses as intermediate and to the extent they fall under the generic exemptions from authorisation requirement uses as laboratory reagent. Based on information from registration dossiers on the volume corresponding to those uses, 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 (use as electrotechnical contact material and use as active material for industrial batteries). [score 5] Furthermore, the substance is used in articles, e.g. use in industrial batteries and in electrotechnical contact materials. However, releases of the substance from these articles are considered negligible.	15	15	Potential grouping with some other cadmium compounds not yet recommended <u>Occupational exposure limit</u> A RAC opinion for a revised binding occupational exposure limits (OELs) under the Carcinogens, Mutagens or Reprotoxic substances Directive (Directive 2004/37/EC, CMRD from 9 March 2022) for Cadmium and its inorganic compounds has been adopted on 18/03/2021. The revision of the binding OEL is however not expected to significantly reduce the uses and volume of the substance falling in the scope of authorisation.	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.**
2-methylimidazole	211-765-7	693-98-1	YES	1	9	5	Toxic for reproduction (Article 57 c)	The amount of 2-methylimidazole manufactured and/or imported into the EU is according to registration data above 100 t/y. Some uses appear not to be in the scope of authorisation, such as uses as intermediate and to the extent they fall under the generic exemptions from authorisation requirement uses in laboratories. Based on information from registration dossiers on the volume corresponding to those uses, the volume in the scope of authorisation is estimated to be in the range of 100 - <1,000 t/y.	Registered uses of 2-methylimidazole in the scope of authorisation include uses at industrial sites (formulation, uses as catalyst in polymerisation reactions and as processing aid in industrial chemical processes). [score 5] The substance has been reported for use in consumer products in the Nordic Product Registers (SPIN database) in the last years (last year disseminated: 2019). Tonnage indications in the SPIN database point towards very low tonnage (<1 t/y). The use in consumer products is however not included in registration dossiers. Furthermore, such uses at concentrations ≥0.3% will fall under the generic restriction on reprotoxic substances used as such or in mixtures sold to the general public (REACH Annex XVII, entry 30, once the substance has been included in the relevant appendix). Therefore, consumer uses of the substance should not take place and are not considered for the priority assessment.	15	15		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-methylimidazole is postponed. **Consequently, it is proposed <u>NOT</u> to recommend 2-methylimidazole 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.	Registered uses of lead titanium zirconium oxide in the scope of authorisation include 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	15	Potential grouping with some other lead substances not yet recommended	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.**
1,3-propanesultone	214-317-9	1120-71-4	YES	1	9	5	Carcinogenic (Article 57 a)	The amount of 1,3-propanesultone manufactured and/or imported into the EU is according to registration data above 100 t/y. The majority of the volume appears not to be used in the scope of authorisation, such as use as an intermediate in manufacture of other substances and use as a laboratory chemical in scientific research and development. Taking into account the volume corresponding to those uses the volume in the scope of authorisation is estimated to be in the range of 100 - 1,000 t/y.	Registered uses of 1,3-propanesultone in the scope of authorisation include uses at industrial sites (formulation of mixtures and use as additive for electrolysis). [score 5] Furthermore, according to registrations the substance is used in lithium-ion batteries (registered as professional use and consumer use of batteries), however these uses are considered use of an article (not a use of the substance). The article service life for use in batteries is also registered, however, releases of the substance from these articles are considered negligible.	15	15	-	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-propanesultone is postponed. **Consequently, it is proposed <u>NOT</u> to recommend 1,3-propanesultone for inclusion in Annex XIV in this recommendation round.**
Bis(pentabromophenyl) ether (decabromodiphenyl ether; DecaBDE)	214-604-9	1163-19-5	YES	15	0	0	PBT (Article 5 d); vPvB (Article 57e)	According to registration data, there is currently no volume of DecaBDE manufactured/imported in the EU.	There seems to be no remaining uses of DecaBDE in the EU.	15	15	<u>POPs Regulation and Stockholm Convention</u> DecaBDE is restricted under Regulation (EU) 2019/1021 with some specific exemptions. It is listed as persistent organic pollutant in the Stockholm Convention.	Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, the recommendation of decaBDE is postponed. **Consequently, it is proposed <u>NOT</u> to recommend decaBDE for inclusion in Annex XIV in this recommendation round.**
1-vinylimidazole	214-012-0	1072-63-5	YES	1	6	7	Toxic for reproduction (Article 57 c)	The amount of 1-vinylimidazole manufactured and/or imported into the EU is according to registration data above 10 t/y. Some uses appear not to be in the scope of authorisation, such as uses as monomer in production of polymers, use as intermediate, and to the extent the conditions for the generic exemption for uses in scientific resarch and development are met, use in laboratories. Taking into account the information on the volume corresponding to those uses provided in registrations, the volume in the scope of authorisation is estimated to be in the range of 10-<100 t/y.	Registered uses of 1-vinylimidazole in the scope of authorisation include uses at industrial sites (e.g. formulation of preparations, industrial use of products such as textile dyes and impregnating products). [Initial score 5] Furthermore, according to registrations the substance is used in articles (e.g. fabrics, textiles and apparels). [refined score 7]	14	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 1-vinylimidazole is postponed. **Consequently, it is proposed <u>NOT</u> to recommend 1-vinylimidazole 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. Based on information from industry, the demand has fallen the last years due to the Restriction of Hazardous Substances Directive (RoHS) (SVHC public consultation).	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 some other lead substances not yet recommended	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 NOT to recommend lead (II) bis(methanesulfonate) 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/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 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 some other lead substances not yet recommended	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 NOT to recommend lead diazide, lead azide for inclusion in Annex XIV in this recommendation round.**
Lead dinitrate	233-245-9	10099-74-8	YES	1	6	7	Toxic for reproduction (Article 57 c)	The amount of lead dinitrate manufactured and/or imported into the EU is according to registration data above 1,000 t/y. Part of this tonnage is exported outside the EU. Some uses appear not to be in the scope of authorisation, such as use as an intermediate in manufacture of chemicals and explosives and to the extent the conditions for the generic exemption are met, uses 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 10 - <100 t/y.	Registered uses of lead dinitrate in the scope of authorisation include uses at industrial sites (formulation and industrial use of processing aids; use as a non-intermediate in production of explosives, weapons and ammunition). 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 e.g. as processing aid in volumes < 10 t/y. In addition, the substance is used in shotgun cartridges in volumes >10 t/y and may be used in articles produced during the uses listed above (e.g. use in coatings). [refined score 7]	14	14	Potential grouping with some other lead substances not yet recommended <u>Adopted restriction and ongoing restriction development under REACH</u> A restriction for the uses of Lead and its compounds in lead shots over wetlands has recently been adopted (REACH Annex XVII entry 63 (11)). Furthermore, ECHA submitted in March 2021 a proposal to restrict uses of Lead and its compounds in outdoor shooting and fishing. For current status, see https://echa.europa.eu/en/registry-of-restriction-intentions/-/dislist/details/0b0236e1840159e6. The registered uses of lead dinitrate seem not to be covered by the adopted and upcoming restrictions.	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 NOT to recommend lead dinitrate for inclusion in Annex XIV in this recommendation round.**
Acetic acid, lead salt, basic	257-175-3	51404-69-4	YES	1	6	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 above 10 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 10 - <100 t/y.	Registered uses of acetic acid, lead salt, basic in the scope of authorisation include uses at industrial sites (purification processes, e.g. removing sulfur compounds of extraction solution). [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. [refined score 7]	14	14	Potential grouping: with some other lead substances (CL) Grouping with orange lead based on indication that both substances can be used in paints has been explored during the 6th recommendation round. Information provided during the public consultation on the functions of these substances in paints and on their water solubilities led to the conclusion that there may not be sufficient reasons to group these substances on that basis.	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 acetic acid, lead salt, basic is postponed. **Consequently, it is proposed NOT to recommend acetic acid, lead salt, basic for inclusion in Annex XIV in this recommendation round.**
Lead di(acetate)	206-104-4	301-04-2	YES	1	6	6	Toxic for reproduction (Article 57 c)	The amount of lead(di)acetate manufactured and/or imported into the EU is according to registration data above 10 t/y. Some uses appear not to be in the scope of authorisation, such as use as an intermediate in manufacture of other substances and, to the extent the conditions for the generic exemption for the use in Scientific Research and Development are met, some uses as a laboratory chemical. Taking into account the volume corresponding to those uses, the volume in the scope of authorisation is estimated to be in the range 10 - 100 t/y.	Registered uses of lead(di)acetate in the scope of authorisation include uses at industrial sites (e.g. formulation and use in products belonging to the following categories: paints, coatings, thinners, paint removers / fillers, putties, plasters, modelling clay). In addition, according to the information from industry submitted during the SVHC public consultation (2013), the substance can also be used in the production of semiconductors. [initial score 5] Finally, some of the uses reported above may result in the substance ending up in articles in volumes < 10 t/y (painted articles etc). [refined score 6]	13	13	Potential grouping with some other lead substances not yet recommended	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 di(acetate) is postponed. **Consequently, it is proposed NOT to recommend lead di(acetate) for inclusion in Annex XIV in this recommendation round.**
Formamide	200-842-0	75-12-7	YES	1	6	6	Toxic for reproduction (Article 57 c)	The amount of formamide manufactured and/or imported into the EU is according to registration data above 10,000 t/y. Some uses appear not to be in the scope of authorisation, such as use as an intermediate and, to the extent the conditions for the generic exemption for the use in Scientific Research and Development are met, some uses as a laboratory chemical. Taking into account the information on the volume corresponding to those uses provided in registrations, 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). However, industrial uses as solvent for analytical/quality purposes could fall under the exemption for scientific research and development. [initial score 5] According to the substance in article notification the substance is used in vehicles and the release of the substance from these articles cannot be excluded. The volume used in those articles is below 10 t/y. [refined score 6]	13	13	-	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 NOT to recommend formamide 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 other ethylene glycol ethers (including Diglyme, included in Annex XIV in August 2014)	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 NOT 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 uses as intermediate. 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 comprise uses at industrial sites (curing agent in the formulation of powder coatings, solder mask inks, molding resins; manufacture and 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 subsance from these articles might be negligible.	12	12	Potential grouping with β-TGIC not yet recommended	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-triazinane-2,4,6-trione (TGIC) is postponed. **Consequently, it is proposed NOT to recommend 1,3,5-tris(oxiran-2-ylmethyl)-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 some other lead substances not yet recommended	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 <u>NOT</u> to recommend lead bis(tetrafluoroborate) 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 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 some other lead substances not yet recommended	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 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.	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 some other lead substances not yet recommended	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.**
Cadmium sulphide	215-147-8	1306-23-6	YES	1	3-6	5	Carcinogenic (Article 57a); Specific target organ toxicity after repeated exposure (Article 57(f) - human health)	The amount of cadmium sulphide manufactured and/or imported into the EU is according to registration data >10 t/y. Some uses appear not to be in the scope of authorisation, such as use as an intermediate in the manufacture of other cadmium compounds, the use in medical devices, use as laboratory chemical in scientific research and development (to the extent the conditions for the generic exemption are met) and the uses in the production of frits, glass and ceramics to the extent they fulfil the intermediate use criteria. Based on the information available, ECHA is not in a position to assess whether the criteria are met for all the uses and/or for which part of the tonnage. It is recognized that the intermediate/non-intermediate status of these uses is a complex issue, and it is also 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). Therefore, the volume in the scope of authorisation is estimated to be in the range of 1-100 t/y.	Registered uses of cadmium sulphide in the scope of authorisation include uses at industrial sites (e.g. use in production of photovoltaic modules). [score 5] Furthermore, the substance is used in articles (electronic components, opto-electronic equipment, photovoltaic modules). However it seems that the release from these articles might be negligible.	9-12	11	Potential grouping with some other cadmium compounds not yet recommended <u>Occupational exposure limit</u> A RAC opinion for a revised binding occupational exposure limits (OELs) under the Carcinogens, Mutagens or Reprotoxic substances Directive (Directive 2004/37/EC, CMRD from 9 March 2022) for Cadmium and its inorganic compounds has been adopted on 18/03/2021. The revision of the binding OEL is however not expected to significantly reduce the uses and volume of the substance falling in the scope of authorisation.	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 sulphide is postponed. **Consequently, it is proposed <u>NOT</u> to recommend cadmium sulphide for inclusion in Annex XIV in this recommendation round.**
[4-[4,4'-bis(dimethylamino) benzhydrylidene]cyclohexa-2,5-dien-1-ylidene]dimethylammonium chloride [with ≥ 0.1% of Michler's ketone (EC No. 202-027-5) or Michler's base (EC No. 202-959-2)] (C.I. Basic Violet 3) [BV3]	208-953-6	548-62-9	YES	1	3	7	Carcinogenic (Article 57a)	The amount of C.I. Basic Violet 3 (BV3) 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 100 - 1,000 t/y. Part of this tonnage is exported outside the EU. Some uses appear not to be in the scope of authorisation, such as uses as intermediate. Therefore, in conclusion, the volume in the scope of authorisation is estimated to be below 10 t/y.	Registered uses of BV3 with MK or MB ≥0.1% in the scope of authorisation include uses at industrial sites (formulation of inks, production of printing cartridges and ball pens). [initial score 5] There may be uses by professional workers, however it is uncertain if those would contain MK or MB ≥0.1%. Professional uses are not registered and stated as being not applicable for professionals. On the other hand consumer uses of the above products have been registered, however consumer uses of inks with BV3 (with the impurity profile specified above) ≥0.1% fall under a generic restriction on CMR substances used as substances or in mixtures sold to the general public (REACH Annex XVII, entry 28). Therefore, consumer uses of the substance should not take place and are not considered for the priority assessment. Furthermore, the substance is assumed to be used in printed articles in volumes <10t/y. [refined score 7]	11	11		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 (BV3) with Michler's Ketone (MK) or Michler's Base (MB) ≥0.1% is postponed. **Consequently, it is proposed <u>NOT</u> to recommend C.I. Basic Violet 3 (BV3) with Michler's Ketone (MK) or Michler's Base (MB) ≥0.1% for inclusion in Annex XIV in this recommendation round.**
Pyrochlore, antimony lead yellow	232-382-1	8012-00-8	YES	1	3	7	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 1 - <10 t/y. All tonnage appears to be in the scope of authorisation.	Registered uses of pyrochlore, antimony lead yellow in the scope of authorisation include uses at industrial sites (formulation of mixtures and use as pigment in inks and glazings for decoration of ceramic articles). [initial score 5] Furthermore, according to registrations the substance is used by professional workers (use as pigment in inks and glazings for decoration of ceramic articles) in volumes below 10 t/y as well as in articles (pigment in ceramic articles). However, it appears that the release of the substance from these articles might be negligible. [refined score 7]	11	11	Potential grouping with some other lead substances not yet recommended Grouping with orange lead based on indication that both substances can be used as pigment has been explored during the 6th Recommendation round. Information provided on the physico-chemical properties and respective types of applications of these substances during the public consultation led to the conclusion that there may not be sufficient reasons to group these substances on that basis.	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 pyrochlore, antimony lead yellow is postponed. **Consequently, it is proposed <u>NOT</u> to recommend pyrochlore, antimony lead yellow for inclusion in Annex XIV in this recommendation round.**

Dibutyltin dichloride (DBTC)	211-670-0	683-18-1	YES	1	3	6	Toxic for reproduction (Article 57 c)	The amount of dibutyltin dichloride (DBTC) manufactured and/or imported into the EU is according to registration data above 1 t/y. Some uses appear not to be in the scope of authorisation, such as uses 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 < 10 t/y.	Registered uses of dibutyltin dichloride (DBTC) in the scope of authorisation include uses at industrial sites (additive for the production of rubber tyres). In addition, the substance might be used in adhesives at industrial sites based on information from industry provided during the SVHC public consultation, but it is not clear whether the concentration of the substance in these mixtures is above the generic concentration limit. [initial score 5]. Furthermore, according to registrations the substance is used in articles in volumes < 10 t/y (rubber tyres). Those article uses should be limited to applications not covered by the restriction of the use of dibutyltin compounds in articles supplied to the general public (REACH Annex XVII entry 20:5) [refined score 6]	10	10	<u>Potential grouping</u> The substance may potentially be used as part of alternative solutions to some other tin-containing substances on the Candidate List, in some of their uses (DOTE and reaction mass of DOTE and MOTE (recommended in 9th Annex XIV recommendation); Dioctyltin dilaurate, stannane, dioctyl-, bis(coco acyloxy) derivs., and any other stannane, dioctyl-, bis(fatty acyloxy) derivs. wherein C12 is the predominant carbon number of the fatty acyloxy moiety; Dibutylbis(pentane-2,4-dionato-O,O')tin; Bis(tributyltin)oxide (TBTO))). Taking into account the differences in chemical structure (e.g. type of ligands) and uses, we currently do not consider grouping these substances. An in-depth assessment has however not been performed at this stage.	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 <u>NOT</u> to recommend dibutyltin dichloride (DBTC) for inclusion in Annex XIV in this recommendation round.**
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	YES	1	3	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, <10 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 t/y.	Registered uses of 1,3,5-tris[(2S and 2R)-2,3-epoxypropyl]-1,3,5-triazine-2,4,6-(1H,3H,5H)-trione (β-TGIC) in the scope of authorisation comprise uses at industrial sites (application of solder-resist inks). [score: 5]	9	9	Potential grouping with TGIC not yet recommended	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 epoxypropyl]-1,3,5-triazine-2,4,6-(1H,3H,5H)-trione (β -TGIC) is postponed. **Consequently, it is proposed <u>NOT</u> to recommend 1,3,5-tris[(2S and 2R)-2,3-epoxypropyl]-1,3,5-triazine-2,4,6-(1H,3H,5H)-trione (β -TGIC) for inclusion in Annex XIV in this recommendation round.**
Methyloxirane (Propylene oxide)	200-879-2	75-56-9	YES	1	3	5	Carcinogenic (Article 57a); Mutagenic (Article 57b)	The amount of methyloxirane 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 or exported outside the EU and is therefore not considered for priority assessment. Based on registration information, it appears that the substance is mostly/only used for uses falling out of the scope of authorisation (use as intermediate in manufacturing of other substances, use as monomer in the manufacturing of polymers and, to the extent the conditions for the generic exemption for the use in Scientific Research and Development are met, use in laboratory). However, according to information from industry submitted during the SVHC public consultation, the substance is used as a processing aid in the manufacture of chemicals in very low volumes (<5 t/y). Based on information on volumes corresponding to those uses from registrations and the SVHC public consultation, the volume in the scope of authorisation is estimated to be below 10 t/y.	Registered uses of methyloxirane appear to fall outside the scope of authorisation. Information provided by industry during the SVHC public consultation indicates that the substance is used at industrial sites as a processing aid in the manufacture of chemicals and as a processing aid in mining and offshore industries. [score 5]	9	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 methyloxirane (propylene oxide) is postponed. **Consequently, it is proposed <u>NOT</u> to recommend methyloxirane (propylene oxide) for inclusion in Annex XIV in this recommendation round.**
4,4'-oxydianiline and its salts	202-977-0	101-80-4	YES	1	3	5	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. The majority of the tonnage registered is related to import of monomer as part of polymers and is therefore not considered for priority assessment. A reported use as monomer is considered as use as intermediate. Therefore, in conclusion, the tonnage in the scope of authorisation is < 10 t/y.	Registered uses of 4,4'-oxydianiline and its salts in the scope of authorisation include uses at industrial sites (enamelling, production of computer, electronic and optical products and electronical equipment). [score: 5]	9	9	-	Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, the recommendation of 4,4'-oxydianiline is postponed. **Consequently, it is proposed <u>NOT</u> to recommend 4,4'-oxydianiline for inclusion in Annex XIV in this recommendation round.**
Phenolphthalein	201-004-7	77-09-8	YES	1	3	5	Carcinogenic (Article 57 a)	The amount of phenolphthalein manufactured and/or imported into the EU is according to registration data in the range of 10 – 100 t/y. Some uses appear not to be in the scope of authorisation such as the uses as laboratory chemical, to the extent they fall under the generic exemptions from authorisation requirement. Therefore, in conclusion, the volume in the scope of authorisation is estimated to be <10t/y.	Registered uses of phenolphthalein in the scope of authorisation include uses at industrial sites (use as processing aid in industrial manufacturing processes). [score 5]	9	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 <u>NOT</u> to recommend phenolphtalein for inclusion in Annex XIV in this recommendation round.**
Isobutyl 4-hydroxybenzoate	224-208-8	4247-02-3	YES	7	0	0	Endocrine disrupting properties (Article 57(f) – human health)	There are currently no active registrations for isobutyl 4-hydroxybenzoate under Regulation (EC) No 1907/2006 (REACH).	There are currently no active registrations for isobutyl 4-hydroxybenzoate under Regulation (EC) No 1907/2006 (REACH).	7	7	Grouping with butyl 4-hydroxybenzoate (EC 202-318-7), not yet recommended.	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 isobutyl 4-hydroxybenzoate is postponed. **Consequently, it is proposed <u>NOT</u> to recommend isobutyl 4-hydroxybenzoate for inclusion in Annex XIV in this recommendation round.**
Phenol, alkylation products (mainly in para position) with C12-rich branched alkyl chains from oligomerisation, covering any individual isomers and/ or combinations thereof (PDDP)	-	-	YES	7	0	0	Toxic for reproduction (Article 57 c); Endocrine disrupting properties (Article 57(f) - human health); Endocrine disrupting properties (Article 57(f) - environment)	The amount of PDDP 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 and is therefore not considered for priority assessment. All uses appear not to be in the scope of authorisation (uses as intermediate in the manufacture of other substances and 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 PDDP falling in the scope of authorisation.	7	7	Potential grouping with 4-alkylphenols not yet recommended <u>Potential restriction under REACH</u> The Restrictions Roadmap under the Chemical Strategy for Sustainability (https://ec.europa.eu/docsroom/documents/49734) published by the Commission includes an entry for substances containing 4-tert butylphenol (4-TBP), 4-nonylphenol and other alkylphenols within Pool 2 i.e. Potential restriction. Restriction is being discussed by Authorities as a potential regulatory management option but no decision has yet been taken. The impact of a potential restriction on the priority of the substance cannot be assessed at this stage.	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 PDDP is postponed. **Consequently, it is proposed <u>NOT</u> to recommend PDDP for inclusion in Annex XIV in this recommendation round.**
Butyl 4-hydroxybenzoate	202-318-7	94-26-8	YES	7	0	0	Endocrine disrupting properties (Article 57(f) - human health)	There are currently no active registrations for butyl 4-hydroxybenzoate under Regulation (EC) No 1907/2006 (REACH).	There are currently no active registrations for butyl 4-hydroxybenzoate under Regulation (EC) No 1907/2006 (REACH). [score 0]	7	7	Potential grouping with isobutyl 4-hydroxybenzoate (EC 224-208-8), not yet recommended	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 butyl 4-hydroxybenzoate is postponed. **Consequently, it is proposed <u>NOT</u> to recommend butyl 4-hydroxybenzoate for inclusion in Annex XIV in this recommendation round.**

4-tert-butylphenol	202-679-0	98-54-4	YES	7	0	0	Endocrine disrupting properties (Article 57(f) - environment)	The amount of 4-tert-butylphenol 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 and is therefore not considered for priority assessment. 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). Some uses reported in registration dossiers seem to relate to the use of polymers rather than 4-tert-butylphenol as such (e.g. use in coatings). Therefore, in conclusion, it is estimated that there is no volume in the scope of authorisation.	There appears to be no registered uses in the scope of authorisation for the substance itself. Article service life reported in some registrations seems to refer to the use of polymers. As 4-tert-butylphenol reacts during polymer production, releases from those articles are considered unlikely.	7	7	Potential grouping with 4-alkylphenols not yet recommended Potential restriction under REACH The Restrictions Roadmap under the Chemical Strategy for Sustainability (https://ec.europa.eu/docsroom/documents/49734) published by the Commission includes an entry for substances containing 4-tert butylphenol (4-TBP), 4-nonylphenol and other alkylphenols within Pool 2 i.e. Potential restriction. Restriction is being discussed by Authorities as a potential regulatory management option but no decision has yet been taken. The impact of a potential restriction on the priority of the substance cannot be assessed at this stage.	Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations, the recommendation of 4-tert-butylphenol is postponed. **Consequently, it is proposed NOT to recommend 4-tert-butylphenol for inclusion in Annex XIV in this recommendation round.**
4-(1,1,3,3-tetramethylbutyl)phenol (4-tert-octylphenol)	205-426-2	140-66-9	YES	7	0	0	Endocrine disrupting properties (Article 57(f) - environment)	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 and is therefore not considered for priority assessment. 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 in the scope of authorisation. Professional and consumer uses are registered, however based on information available they seem not to refer to uses of 4-(1,1,3,3-tetramethylbutyl)phenol itself.	7	7	Potential grouping with 4-alkylphenols not yet recommended Potential restriction under REACH The Restrictions Roadmap under the Chemical Strategy for Sustainability (https://ec.europa.eu/docsroom/documents/49734) published by the Commission includes an entry for substances containing 4-tert butylphenol (4-TBP), 4-nonylphenol and other alkylphenols within Pool 2 i.e. Potential restriction. Restriction is being discussed by Authorities as a potential regulatory management option but no decision has yet been taken. The impact of a potential restriction on the priority of the substance cannot be assessed at this stage.	Given that other substances assessed for this recommendation round have higher priority based on Art. 58(3) prioritisation criteria or grouping considerations the recommendation of 4-(1,1,3,3-tetramethylbutyl)phenol is postponed. **Consequently, it is proposed NOT to recommend 4-(1,1,3,3-tetramethylbutyl)phenol for inclusion in Annex XIV in this recommendation round.**
p-(1,1-dimethylpropyl)phenol (4-tert-pentylphenol)	201-280-9	80-46-6	YES	7	0	0	Endocrine disrupting properties (Article 57(f) - environment)	The amount of p-(1,1-dimethylpropyl)phenol manufactured and/or imported into the EU is according to registration data in the range of 100 - <1,000 t/y. Part of the tonnage reported in registrations relates to the monomer imported as part of polymers and is therefore not considered for priority assessment. The registered uses appear not to be in the scope of authorisation (use as monomer in production of polymers (phenolic resins), use as intermediate in the production of perfumes & fragrances). Therefore, in conclusion, it is estimated that there is no volume in the scope of authorisation.	There appears to be no registered uses of p-(1,1-dimethylpropyl)phenol falling in the scope of authorisation.	7	7	Potential grouping with 4-alkylphenols not yet recommended Potential restriction under REACH The Restrictions Roadmap under the Chemical Strategy for Sustainability (https://ec.europa.eu/docsroom/documents/49734) published by the Commission includes an entry for substances containing 4-tert butylphenol (4-TBP), 4-nonylphenol and other alkylphenols within Pool 2 i.e. Potential restriction. Restriction is being discussed by Authorities as a potential regulatory management option but no decision has yet been taken. The impact of a potential restriction on the priority of the substance cannot be assessed at this stage.	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 p-(1,1-dimethylpropyl)phenol (4-tert-pentylphenol) is postponed. **Consequently, it is proposed NOT to recommend p-(1,1-dimethylpropyl)phenol (4-tert-pentylphenol) for inclusion in Annex XIV in this recommendation round.**
4-heptylphenol, branched and linear	-	-	YES	7	0	0	Endocrine disrupting properties (Article 57(f) - environment)	The total tonnage registered for 4-heptylphenol, branched and linear relates to import of monomer as part of polymers and is therefore not considered for priority assessment. 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-heptylphenol, branched and linear falling in the scope of authorisation.	7	7	Potential grouping with 4-alkylphenols not yet recommended Potential restriction under REACH The Restrictions Roadmap under the Chemical Strategy for Sustainability (https://ec.europa.eu/docsroom/documents/49734) published by the Commission includes an entry for substances containing 4-tert butylphenol (4-TBP), 4-nonylphenol and other alkylphenols within Pool 2 i.e. Potential restriction. Restriction is being discussed by Authorities as a potential regulatory management option but no decision has yet been taken. The impact of a potential restriction on the priority of the substance cannot be assessed at this stage.	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-heptylphenol, branched and linear is postponed. **Consequently, it is proposed NOT to recommend 4-heptylphenol, branched and linear for inclusion in Annex XIV in this recommendation round.**
Cadmium carbonate	208-168-9	513-78-0	YES	1	0-6	0-5	Carcinogenic (Article 57 a); Mutagenic (Article 57 b); Specific target organ toxicity after repeated exposure (Article 57(f) - human health)	The amount of Cadmium carbonate manufactured and/or imported into the EU is according to registration data in the range of 10 -100 t/y. All registered uses may fall outside the scope of authorisation: the use as laboratory reagent (to the extent it falls under the generic exemptions for authorisation requirement for scientific research and development) and the uses in the production of frits, glass and ceramics to the extent they fulfil the intermediate use criteria. Based on the information available, ECHA is not in a position to assess whether the criteria are met for all the uses and/or for which part of the tonnage. It is recognized that the intermediate/non-intermediate status of these uses is a complex issue, and it is also 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). Therefore, the volume in the scope of authorisation is estimated to be in the range of 0-100 t/y.	Registered uses of cadmium carbonate in the scope of authorisation may include uses at industrial sites (formulation of mixtures, manufacture of glass, ceramics and frits) to the extent they are non-intermediate uses. [score 0-5]	1-12	7	Potential grouping with some other cadmium compounds not yet recommended Occupational exposure limit A RAC opinion for a revised binding occupational exposure limits (OELs) under the Carcinogens, Mutagens or Reprotoxic substances Directive (Directive 2004/37/EC, CMRD from 9 March 2022) for Cadmium and its inorganic compounds has been adopted on 18/03/2021. The revision of the binding OEL is however not expected to significantly reduce the uses and volume of the substance falling in the scope of authorisation.	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 carbonate is postponed. **Consequently, it is proposed NOT to recommend cadmium carbonate for inclusion in Annex XIV in this recommendation round.**
Cadmium chloride	233-296-7	10108-64-2	YES	1	0-3	0-5	Carcinogenic (Article 57a); Mutagenic (Article 57b); Toxic for reproduction (Article 57c); Specific target organ toxicity after repeated exposure (Article 57(f) - human health)	The amount of cadmium chloride manufactured and/or imported into the EU is according to registration data above 1 t/y. There are uncertainties as to whether some uses in the scope of authorisation still happen in the EU. In conclusion, the volume in the scope of authorisation is estimated to be in the range of 0 - <10 t/y.	Uses of the substance at industrial sites in the scope of authorisation (in the formulation of mixtures and use in the production of PV-modules) are registered, however, there are uncertainties as to whether they still happen in the EU. [score 0 - 5]	1-9	5	Potential grouping with some other cadmium compounds not yet recommended Occupational exposure limit A RAC opinion for a revised binding occupational exposure limits (OELs) under the Carcinogens, Mutagens or Reprotoxic substances Directive (Directive 2004/37/EC, CMRD from 9 March 2022) for Cadmium and its inorganic compounds has been adopted on 18/03/2021. The revision of the binding OEL is however not expected to significantly reduce the uses and volume of the substance falling in the scope of authorisation.	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 chloride is postponed. **Consequently, it is proposed NOT to recommend cadmium chloride for inclusion in Annex XIV in this recommendation round.**

N-(hydroxymethyl)acrylamide	213-103-2	924-42-5	YES	1	0	0	Carcinogenic (Article 57a); Mutagenic (Article 57b)	The amount of N-(hydroxymethyl)acrylamide manufactured and/or imported into the EU is according to registration data above 10,000 t/y. Part of this tonnage is related to monomer imported as part of polymers and is therefore not considered for priority assessment. All uses appear not to be in the scope of authorisation (uses 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 N-(hydroxymethyl)acrylamide falling in the scope of authorisation.	1	1	Potential grouping with acrylamide (EC 201-173-7), not yet recommended	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-(hydroxymethyl)acrylamide is postponed. **Consequently, it is proposed NOT to recommend n-(hydroxymethyl)acrylamide for inclusion in Annex XIV in this recommendation round.**
Diethyl sulphate	200-589-6	64-67-5	YES	1	0	0	Carcinogenic (Article 57a); Mutagenic (Article 57b)	The amount of diethyl sulphate manufactured and/or imported into the EU is >10 t/y. The registered uses appear not to be in the scope of authorisation (use as intermediate). Therefore, in conclusion, there is no volume in the scope of authorisation.	There appears to be no registered uses of diethyl sulphate 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, the recommendation of diethyl sulphate is postponed. **Consequently, it is proposed NOT to recommend diethyl sulphate for inclusion in Annex XIV in this recommendation round.**
Triethyl arsenate	427-700-2	15606-95-8	YES	1	0	0	Carcinogenic (Article 57a)	After revocation of unclaimed notifications under NONS in 2022, there are currently no active registrations for triethyl arsenate under Regulation (EC) No 1907/2006 (REACH).	There are currently no active registrations for triethyl arsenate under Regulation (EC) No 1907/2006 (REACH). [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 triethyl arsenate is postponed. **Consequently, it is proposed NOT to recommend triethyl arsenate for inclusion in Annex XIV in this recommendation round.**
Lead cyanamidate	244-073-9	20837-86-9	YES	1	0	0	Toxic for reproduction (Article 57 c)	There are currently no active registrations for Lead cyanamidate under Regulation (EC) No 1907/2006 (REACH).	There are currently no active registrations for Lead cyanamidate under Regulation (EC) No 1907/2006 (REACH).	1	1	Potential grouping with some other lead substances not yet recommended	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 cyanamidate is postponed. **Consequently, it is proposed NOT to recommend lead cyanamidate for inclusion in Annex XIV in this recommendation round.**
Cadmium nitrate	233-710-6	10022-68-1, 10325-94-7	YES	1	0	0	Carcinogenic (Article 57 a); Mutagenic (Article 57 b); Specific target organ toxicity after repeated exposure (Article 57(f) - human health)	The amount of cadmium nitrate manufactured and/or imported into the EU is according to registration data ≥ 0 t/y. The registered uses appear not to be in the scope of authorisation (use as intermediate). Therefore, in conclusion, it is estimated that there is no volume in the scope of authorisation.	There appears to be no registered uses of cadmium nitrate falling in the scope of authorisation. [score 0]	1	1	Potential grouping with some other cadmium compounds not yet recommended	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 nitrate is postponed. **Consequently, it is proposed NOT to recommend cadmium nitrate for inclusion in Annex XIV in this recommendation round.**
Silicic acid, lead salt	234-363-3	11120-22-2	YES	1	0	0	Toxic for reproduction (Article 57 c)	There are currently no active registrations for silicic acid, lead salt under Regulation (EC) No 1907/2006 (REACH).	There are currently no active registrations for silicic acid, lead salt under Regulation (EC) No 1907/2006 (REACH). [score 0]	1	1	Potential grouping with some other lead substances not yet recommended	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, lead salt is postponed. **Consequently, it is proposed NOT to recommend silicic acid, lead salt for inclusion in Annex XIV in this recommendation round.**
3-ethyl-2-methyl-2-(3-methylbutyl)-1,3-oxazolidine	421-150-7	143860-04-2	YES	1	0	0	Toxic for reproduction (Article 57 c)	There are currently no active registrations for 3-ethyl-2-methyl-2-(3-methylbutyl)-1,3-oxazolidine, under Regulation (EC) No 1907/2006 (REACH).	There are currently no active registrations for 3-ethyl-2-methyl-2-(3-methylbutyl)-1,3-oxazolidine, under Regulation (EC) No 1907/2006 (REACH). [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 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.**
1,2,3-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 above 1,000 t/y. 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 1,2,3-trichloropropane 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 1,2,3-trichloropropane is postponed. **Consequently, it is proposed NOT to recommend 1,2,3-trichloropropane for inclusion in Annex XIV in this recommendation round.**
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 above 10,000 t/y. Part of the registered tonnage is related to monomer imported as part of polymers and is therefore not considered for priority assessment. 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	Potential grouping with N-(hydroxymethyl)acrylamide (EC 213-103-2), not yet recommended	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. Part of this tonnage is exported outside the EU. All uses appear not to be in the scope of authorisation (uses as intermediate 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 postponed. **Consequently, it is proposed NOT to recommend o-toluidine for inclusion in Annex XIV in this recommendation round.**