1 September 2014

Draft background document for Anthracene oil

Document developed in the context of ECHA's sixth Recommendation for the inclusion of substances in Annex XIV

ECHA is required to regularly prioritise the substances from the Candidate List and to submit to the European Commission recommendations of substances that should be subject to authorisation. This document provides background information on the prioritisation of the substance, as well as on the determination of its draft entry in the Authorisation List (Annex XIV of the REACH Regulation). Information comprising confidential comments submitted during public consultation, or relating to content of Registration dossiers which is of such nature that it may potentially harm the commercial interest of companies if it was disclosed, is provided in a confidential annex to this document.

1. Identity of the substance

Chemical name: Anthracene oil
EC Number: 292-602-7
CAS Number: 90640-80-5
IUPAC Name: -

2. Background information for prioritisation

Priority was assessed by using the General approach for prioritisation of SVHCs for inclusion in the list of substances subject to authorisation[1]. Results of the prioritisation of all substances included in the Candidate List on 20 June 2013 or before and not yet included or recommended in Annex XIV of the REACH Regulation is available at http://echa.europa.eu/documents/10162/13640/prioritisation_results_6th_rec_en.pdf .

2.1. Intrinsic properties

Antracene oil was identified as a Substance of Very High Concern (SVHC) according to article 57 a, d and e of Regulation (EC) No 1907/2006 (REACH) and was therefore included in the Candidate List for authorisation on 13 January 2010, following ECHA's decision ED/68/2009.

Anthracene oil is classified in Annex VI, part 3, Table 3.1 (the list of harmonised classification and labelling of hazardous substances) of Regulation (EC) No 1272/2008 as Carcinogenic, Category 1B, H350 ("May cause cancer"). This classification does not apply if it can be shown that the substance contains less than 0.005 % (w/w) benzo[a]pyrene (EINECS No 200-028-5).

In addition, on the basis of the PBT and/or vPvB properties of its PAH-constituents, anthracene oil fulfils the PBT and the vPvB criteria according to article 57 d and e of the REACH Regulation.

2.2. Volume used in the scope of authorisation

The amount of anthracene oil manufactured and imported into the EU is according to

[1] Document can be accessed at http://echa.europa.eu/documents/10162/13640/gen_approach_svhc_prior_in_recommendations_en.pdf

registration data above 100,000 t/y.

Some uses appear not to be in the scope of authorisation, such as uses as intermediate.

Based on available information regarding the volume for uses outside the scope of authorisation, the volume in the scope of authorisation is estimated to be above 10,000 t/y.

2.3. Wide-dispersiveness of uses

Registered uses of anthracene oil in the scope of authorisation include:

- uses at industrial sites: in the carbon and graphite industry, in the metallurgic smelting, in the aluminium and electro steel industry, for refractories, coatings, paints, waterproofing materials and sealants. The substance is used as absorbent for industrial gas cleaning (scrubber) and as industrial solvent, and

- uses by professional workers: in coatings, paints, waterproofing materials and sealants.

Furthermore, according to registrations and the Annex XV report (2009) the substance is used in articles (such as component in tar paints for special application (e.g. underwater corrosion protection) and component of waterproof membranes for roofing and other sealing purposes) in volumes > 10 t/y.

2.4. Conclusions and justification

Verbal descriptions and Scores			Total Score
Inherent properties (IP)	Volume (V)	Wide dispersiveness of uses (WDU)	(= IP + V + WDU)
Anthracene oil is classified as carcinogenic Cat. 1B and it is identified as PBT and vPvB (meeting the criteria 57 a, d and e) Score: 15	The amount of anthracene oil used in the scope of authorisation is estimated to be above 10,000 t/y Score: 15	Anthracene oil is used at industrial sites and by professional workers. Initial score: 10 Furthermore, the substance is used in articles in volumes > 10 t/y. Refined score: 12	42

Conclusion

On the basis of the prioritisation criteria, anthracene oil received high priority among the substances in the Candidate List (refer to link to the prioritisation results above). Therefore, it is proposed to recommend anthracene oil for inclusion in Annex XIV.

3. Further information on uses

Based on registration information, the manufacturers and importers of anthracene oil in the EU are located in Denmark, the United Kingdom, the Netherlands, Czech Republic, Belgium, Poland, Germany, Spain and Cyprus. The exact number of sites of use of anthracene oil in the EU is not available, however, considering the nature of uses under the scope of authorisation and their similarity to the applications of coal tar pitch high temperature, the number of use sites is likely to be high.

Anthracene oil and CTPHT are used in same applications in a similar manner: e.g. as binding agents in the manufacture of anodes/electrodes in the metal industry - aluminium, metallurgic smelting, electro steel - , in refractories and as anti-corrosion agents in (specialty) coatings, paints and adhesives. Further information on the above applications can be found in the background document for CTPHT.

4. Background information for the proposed Annex XIV entry

Draft Annex XIV entries were determined on the basis of the General approach for preparation of draft Annex XIV entries for substances to be included in Annex XIV[2]. The draft Annex XIV entries for substances included in this draft recommendation are available at http://echa.europa.eu/documents/10162/13640/draft_axiv_entries_summarytable_6th_en.pdf
The section below provides background for allocation of the substance to the Latest Application

The LAD slots are set in 3 months intervals (i.e. 18, 21 and 24 months after inclusion in Annex XIV). Anthracene oil and coal tar pitch, high temperature have been considered to be placed in the same slot as they may fulfil the definition of a group according to section 1.5 of Annex XI of REACH (provision allowing submitting common applications for authorisation).

Allocation of (group of) substances to LAD slots aims at an even workload for all parties during the opinion forming and decision making on the authorisation applications. All substances can therefore not be set at the same LAD, however, the time differences between the LADs set out in a recommendation (i.e. 3-6 months) can be considered as minor compared to the total time reserved for the potential applicants to prepare their applications.

Based on rough indicators (such as the number of registered uses within the scope of authorisation, number of registrants, and number and type of SVHC endpoints), processing of applications is anticipated to be of higher workload in particular for three groups of substances among the substances included in the draft 6th recommendation. Those groups, comprising the two above coal-stream-substances, lead-substances, and borates, are therefore proposed to be allocated at separate LAD slots.

For anthracene oil and coal tar pitch high temperature, although the supply chain is not simple, preparation of an application may still require shorter time in comparison with the other, probably higher (overall) supply chain complexity, groups. Therefore anthracene oil and coal tar pitch high temperature are assigned in the 1st slot.

[2] Document can be accessed at
http://echa.europa.eu/documents/10162/13640/draft_axiv_entries_gen_approach_6th_en.pdf

5. References

Annex XV report (2009): Proposal for identification of a substance as a CMR Cat 1 or 2, PBT, vPvB or a substance of an equivalent level of concern. Anthracene oil Submitted by Germany, August 2009. http://echa.europa.eu/documents/10162/d0211bde-9548-43ca-8a09-87959cd5cf0f

RCOM (2009):"*Responses to comments*" document. Document compiled by Germany from the commenting period 31/08/2009-15/10/2009 on the proposal to identify anthracene oil as a Substance of Very High Concern. http://echa.europa.eu/documents/10162/42117bd5-4e80-4d82-9412-8b6417ab3172