1 July 2015

Background document for pyrochlore, antimony lead yellow

Document developed in the context of ECHA's 6th 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: Pyrochlore, antimony lead yellow
EC Number: 232-382-1
CAS Number: 8012-00-8
IUPAC Name: Lead antimonate

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 by June 2013 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 .

The prioritisation results of the substances included in the draft 6th recommendation have been updated as necessary after the public consultation. The updated results are available at http://echa.europa.eu/documents/10162/13640/updated_prioritisation_results_6th_axiv_rec_en.pdf

2.1. Intrinsic properties

Pyrochlore, antimony lead yellow was identified as a Substance of Very High Concern (SVHC) according to article 57 (c) as it is covered by Index number 082-001-00-6 in Regulation (EC) No 1272/2008 and classified in Annex VI, part 3, Table 3.1 (the list of harmonised classification and labelling of hazardous substances) as Toxic for Reproduction, Category 1A, H360D ("May damage the unborn child."), and was therefore included in the candidate list for authorisation on 19 December 2012, following ECHA's decision ED/169/2012.

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

2.2. Volume used in the scope of authorisation

The amount of pyrochlore, antimony lead yellow manufactured and/or imported into the EU is according to registration data in the range of 10 - <100 t/y. All tonnage appears to be in the scope of authorisation.

2.3. Wide-dispersiveness of uses

Registered uses of pyrochlore, antimony lead yellow in the scope of authorisation include formulation of mixtures at industrial sites and use as colouring agent/pigment in inks and glazings for decoration of ceramic articles at industrial sites and by professional workers.

Furthermore, according to registrations the substance is used in articles (colouring agent and pigment in ceramic articles). However, it appears that the release of the substance from these articles might be negligible.

2.4. Further considerations for priority setting

In the priority setting for the draft 6th recommendation, pyrochlore, antimony lead yellow was grouped with orange lead as it appeared that they are used in similar applications (e.g. pigments). However, it was not assessed whether the precise function of these substances in these applications is the same and whether or under which conditions substitution could happen in practice.

According to updated registration data and further information from industry (ComRef, 2015), pyrochlore, antimony lead yellow is only used as a pigment in the production of ceramic articles whereas orange lead is used as a pigment in anticorrosive paints. Based on the available information, the inter-substitution of these substances seems unlikely due to differences in their physico-chemical properties. Therefore, there may not be sufficiently strong reasons to group these substances.

2.5. Conclusions and justification

Verbal descriptions and Scores			Total Score
Inherent properties (IP)	Volume (V)	Wide dispersiveness of uses (WDU)	(= IP + V + WDU)
Pyrochlore, antimony lead yellow is classified as toxic for reproduction 1A meeting the criteria 57(c) Score: 1	The amount of pyrochlore, antimony lead yellow used in the scope of authorisation is in the range of 10 - <100 t/y. Score: 6	Pyrochlore, antimony lead yellow is used at industrial sites and by professional workers. Score: 10	17

Conclusion
Other Candidate List substances assessed in the sixth recommendation round receive higher priority than pyrochlore, antimony lead yellow based on the Art. 58(3) prioritisation criteria (see link to the prioritisation results above). Furthermore, based on the information submitted in the public consultation, there do not appear to be sufficiently strong reasons to group the substance with other higher priority lead substances. Consequently, pyrochlore, antimony lead yellow is not included in ECHA's final 6th recommendation for inclusion of substances in Annex XIV. The substance will be reassessed for priority in future recommendation rounds.

3. Further information on uses

Based on registration information, there is a low number of manufacturers/importers of pyrochlore, antimony lead yellow in the EU. There is no information available on the number or geographical distribution of other actors involved in the supply chain.

According to information from industry, the substance is only used in ceramics decorating, mainly at industrial sites (RCOM, 2012; ComRef, 2015). Downstream users are typically decal printers who buy ceramic colours and media to produce printing pastes by their own (RCOM, 2012). There is no information on the actual tonnage breakdown between industrial and professional use of the substance.

Pyrochlore, antimony lead yellow can be used by direct inclusion in a vehicle allowing its application by serigraphy or mixed in glazes which are applied with different techniques on ceramic articles (RCOM, 2012). Based on information from the registrations and from the industry (RCOM, 2012), in all applications the substance remains integrated in a matrix and protected by a glaze in the final glass and ceramic articles. Therefore, the release of the substance from these articles can be considered negligible.

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 the 6th recommendation are available at* http://echa.europa.eu/documents/10162/13640/6th_axiv_recommendation_july2015_en.pdf*.*

[*This section is not relevant as the substance is not included in the final 6th recommendation.*]

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

5. References

ComRef (2015): "Comments and references to responses" document for pyrochlore, antimony lead yellow. Document compiling comments and references to respective answers from commenting period 01/09/2014 –01/12/2014 on ECHA's 6th draft recommendation of priority substances for inclusion in the list of substances subject to authorisation (Annex XIV). http://echa.europa.eu/documents/10162/13640/6th_axiv_rec_comref_pyrochlore_antimony_lead_yellow_en.pdf

RCOM (2012):"*Responses to comments*" document. Document compiled by ECHA from the commenting period 03/09/2012-18/10/2012 on the proposal to identify pyrochlore, antimony lead yellow as a Substance of Very High Concern. http://echa.europa.eu/documents/10162/57c30470-06d5-4157-999d-21ff0a498cb5