

15 June 2011

Background document for ammonium dichromate

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

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:	ammonium dichromate
EC Number:	232-143-1
CAS Number:	7789-09-5
IUPAC Name:	ammonium dichromate

2. Background information

2.1. Intrinsic properties

Ammonium dichromate was identified as a Substance of Very High Concern (SVHC) according to Article 57(a), (b) and (c) as it is classified according to Annex VI, part 3, Table 3.1 (the list of harmonised classification and labelling of hazardous substances) of Regulation (EC) No 1272/2008 as a carcinogen category 1B¹(H350: "May cause cancer"), as mutagen category 1B² (H340: "May cause genetic defects") and as toxic for reproduction category 1B³(H360-FD: "May damage fertility. May damage the unborn child"), and was therefore included in the candidate list for authorisation on 18 June 2010, following ECHA's decision ED/30/2010.

¹ This corresponds to a classification as carcinogen category 2 (R45 : May cause cancer) in Annex VI, part 3, Table 3.2 (the list of harmonised classification and labelling of hazardous substances from Annex I to Directive 67/548/EEC) of Regulation (EC) N° 1272/2008

² This corresponds to a classification as mutagen category 2 (R46 : May cause heritable genetic damage) in Annex VI, part 3, Table 3.2 (the list of harmonised classification and labelling of hazardous substances from Annex I to Directive 67/548/EEC) of Regulation (EC) N° 1272/2008

³ This corresponds to a classification as toxic for reproduction category 2 (R60-61: May impair fertility. May cause harm to the unborn child) in Annex VI, part 3, Table 3.2 (the list of harmonised classification and labelling of hazardous substances from Annex I to Directive 67/548/EEC) of Regulation (EC) N° 1272/2008

2.2. Imports, exports, manufacture and uses

2.2.1. *Volume(s), imports/exports*

According to the Risk Assessment Report (RAR), ammonium dichromate was manufactured in quantities of 850 t in the EU in 1997 (EC, 2005). Communication with industry indicated a significantly lower EU production volume in 2004 (reference cited in RPA, 2005).

There is no indication that there is any manufacture of ammonium dichromate in the EU. The substance has been registered as transported isolated intermediate in the tonnage band 1 - 1000 t/y.

The tonnage allocated to uses within the scope of authorisation is 0 t/y.

Registration under Article 10 as a full dossier: NO

Registration under Article 18 as a transported isolated intermediate: YES

2.2.2. *Manufacture and uses*

2.2.2.1. Manufacture and releases from manufacture

Ammonium dichromate is not produced in EU.

2.2.2.2. Uses and releases from uses

According to registration information ammonium dichromate is used as intermediate in the synthesis of fine and bulk large scale chemicals. Furthermore it is used as laboratory chemical.

France stated that they received contradictory information on the use of ammonium dichromate in metal finishing. According to the French Metal Finishing Trade Union ammonium dichromate was used to prepare ~ 2 % of treatment baths in metal finishing workshops in 2004 (Annex XV, 2010). However, this cannot be confirmed by registration (or any other) information. Therefore, it is assumed that ammonium dichromate is presently not used in metal finishing.

There were no uses identified within the scope of authorisation.

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2.2.2.3. Geographical distribution and conclusions in terms of (organisation and communication in) supply chain

Not relevant.

2.3. Availability of information on alternatives⁴

Not relevant.

2.4. Existing specific Community legislation relevant for possible exemption

No data available.

2.5. Any other relevant information (e.g. for priority setting)

No data available.

⁴ Please note that this information was not used for prioritisation.

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3. Conclusions and justification

3.1. Prioritisation

No uses identified in the scope of authorisation.

Verbal-argumentative approach

On the basis of the criteria the substance has a very low priority for inclusion in Annex XIV.

Scoring approach

Score			Total Score
Inherent properties (IP)	Volume (V)	Uses - wide dispersiveness (WDU)	(= IP + V + WDU)
1	0	0	1
Art. 57 (a), (b) & (c); Carc 1B, Muta 1B, Repro 1B	(no registered volume in the scope of authorisation)	(no uses in scope of authorisation))	

Conclusion, taking regulatory effectiveness considerations into account

On the basis of the prioritisation criteria, ammonium dichromate gets very low priority for inclusion in Annex XIV.

However, this substance could be used to replace other hexavalent chromium compounds with similar hazard profile and similar uses.

Therefore, it is proposed to recommend ammonium dichromate for inclusion in Annex XIV.

4. References

- Annex XV (2010): Ammonium dichromate. Proposal for identification of a substance as a CMR Cat 1 or 2, PBT, vPvB or a substance of an equivalent level of concern. Submitted by France, February 2010.
- EC (2005): European Union Risk Assessment Report: chromium trioxide, sodium chromate, sodium dichromate, ammonium dichromate, potassium dichromate. 3rd Priority List, Volume 53. European Commission, Joint Research Centre.
- RPA (2005): Environmental risk reduction strategy and analysis of advantages and drawbacks for hexavalent chromium. Risk & Policy Analysis Ltd. Prepared for Department for Environment, Food and Rural Affairs. October 2005.