

## 5 September 2018

# Draft background document for sulfurous acid, lead salt, dibasic

## Document developed in the context of ECHA's ninth 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.

Information relevant for prioritisation and/or for proposing Annex XIV entries provided during the public consultation on the inclusion of sulfurous acid, lead salt, dibasic on the Authorisation List or in the registration dossiers (as of the last day of the public consultation, i.e. 5 December 2018) will be taken into consideration when finalising the recommendation and will be reflected in the final background document.

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## 1. Identity of the substance

Identity of the substance as provided in the Candidate List1:

Name: Sulfurous acid, lead salt, dibasic

EC Number: 263-467-1 CAS Number: 62229-08-7

## 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<sup>2</sup>. Results of the prioritisation of all substances included in the Candidate List by January 2018 and not yet included or recommended in Annex XIV of the REACH Regulation is available at <a href="https://echa.europa.eu/documents/10162/13640/prioritisation results cl substances sept 20">https://echa.europa.eu/documents/10162/13640/prioritisation results cl substances sept 20</a> 18 en.pdf.

### 2.1. Intrinsic properties

Sulfurous acid, lead salt, dibasic was identified as a Substance of Very High Concern (SVHC) according to Article 57 (c) as it 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 Toxic for Reproduction, Category 1A, H360D ("May damage the unborn child")<sup>3</sup>, and was therefore included in the Candidate List for authorisation on 19 December 2012, following ECHA's decision ED/169/2012.

### 2.2. Volume used in the scope of authorisation

The amount of sulfurous acid, lead salt, dibasic manufactured and/or imported in the EU is according to registration data (ECHA, 2018a) in the range of  $100 - 1,000 \, \text{t/y}$ . Part of the tonnage is directly exported after manufacture. All tonnage for use in the EU appears to be in the scope of authorisation.

Therefore, in conclusion, the volume in the scope of authorisation is estimated to be in the range of 100 - 1,000 t/y.

## 2.3. Wide-dispersiveness of uses

Registered uses of sulfurous acid, lead salt, dibasic in the scope of authorisation include uses at industrial sites (use as stabiliser, PVC processing, formulation and use of coatings/inks for mirror backing).

Furthermore, according to registrations the substance is used in articles (plastic articles, mirrors) in volumes above 10 t/y.

<sup>&</sup>lt;sup>1</sup> For further information please refer to the Candidate List and the respective support document at <a href="https://www.echa.europa.eu/candidate-list-table">https://www.echa.europa.eu/candidate-list-table</a>.

<sup>&</sup>lt;sup>2</sup> Document can be accessed at

http://echa.europa.eu/documents/10162/13640/gen approach svhc prior in recommendations en.pdf

<sup>&</sup>lt;sup>3</sup> The full hazard statement of the Annex VI (CLP) entry for lead compounds with the exception of those specified elsewhere in this Annex (index number 082-001-00-6) is H360Df ("May damage the unborn child. Suspected of damaging fertility.").

The stabiliser sector had a voluntary commitment to replace lead-based stabilisers in all their formulations sold in the EU market by the end of 2015. According to Vinylplus progress reports 2016 and 2017, ESPA members (European Stabilisers Producers Association representing most of the registrants of lead compounds used as stabilisers) completed the replacement according to foreseen timelines. The uses as stabiliser are however still reported in registrations.

Furthermore ECHA at the request of the Commission submitted a restriction dossier on lead compounds used as stabilisers in PVC in December 2016. RAC adopted its opinion in December 2017 and SEAC adopted its final opinion in March 2018. ECHA sent the combined opinion and supporting documentation to the Commission during April 2018 (ECHA, 2018b).

The scope of the restriction is specific in that it will cover the placing on the market and use of PVC articles stabilised with lead compounds.

It should be noted that the restriction and the voluntary commitment do not cover the uses for export.

Based on the information currently available it is unclear whether such uses for export currently take place and/or will continue in future.

More detailed information is provided in Annex I.

### 2.4. Further considerations for priority setting

Lead substances that can be used as stabilisers in PVC are considered as a group. Therefore sulfurous acid, lead salt, dibasic is grouped with dioxobis(stearato)trilead; fatty acids, C16-18, lead salts; trilead dioxide phosphonate; [phthalato(2-)]dioxotrilead; trilead bis(carbonate) dihydroxide and lead oxide sulfate.

#### 2.5. Conclusion

Verbal descriptions and scores			Total score	Further
Inherent	Volume (V)	Wide dispersiveness of		considerations
properties (IP)		uses (WDU)	(= IP + V +	
			WDU)	
Sulfurous acid,	The amount	Sulfurous acid, lead salt,	17	Grouping with
lead salt, dibasic	of sulfurous	dibasic is used at		other lead
is classified as	acid, lead	industrial sites.		substances
toxic for	salt, dibasic			used as
reproduction 1A	used in the	Initial score: 5		stabilisers in
meeting the	scope of			PVC
criteria of Article	authorisation	Furthermore, the		
57(c)	is in the	substance is used in		
	range of 100	articles in volumes		
Score: 1	- 1,000 t/y	>10 t/y.		
	Score: 9	Refined score: 7		

#### Conclusion

On the basis of the prioritisation criteria further strengthened by grouping considerations, sulfurous acid, lead salt, dibasic receives priority among the substances on the Candidate List (see link to the prioritisation results above). Therefore, it is proposed to prioritise sulfurous acid, lead salt, dibasic for inclusion in Annex XIV.

The final outcome of the restriction process (see section 2.3) and its possible impact on the priority of the substance will be considered by ECHA when finalising its recommendation for inclusion of the substance in Annex XIV, together with any new information on tonnage and uses that will be made available via registrations updates or via the public consultation.

## 3. Background information for the proposed Annex XIV entry

### 3.1. Latest application and sunset dates

ECHA proposes the following transitional arrangements:

Latest application date (LAD): Date of inclusion in Annex XIV plus 18, 21 or 24

months

Sunset date: 18 months after LAD

ECHA will make the final LAD allocation when finalising the recommendation and will use all available relevant information including that received in the public consultation. ECHA will apply the Annex XIV entries approach<sup>4</sup> and the criteria described in the implementation document<sup>5</sup>. According to these documents, substances for which the available information indicates a relatively high number of uses and/or complex supply chain(s) are allocated to the "later" LAD slots.

A summary of the information currently available is provided in Annex I.

The time needed to prepare an authorisation application of sufficient quality has been estimated to require 18 months in standard cases. When setting the LADs ECHA has also to take into account the anticipated workload of ECHA's Committees and Secretariat to process authorisation applications. This is done by allocating the substances proposed to be included in the final recommendation in slots, normally 3, and setting the application dates with 3 months intervals in between these slots (standard LAD slots: 18, 21 and 24 months).

For substances to be included in the  $9^{th}$  recommendation, ECHA sees currently no reason to deviate from these standard LAD slots.

ECHA will allocate to the same slot substances considered as a group (see Section 2.4), i.e. sulfurous acid, lead salt, dibasic will be allocated to the same slot as the other lead substances.

#### 3.2. Review period for certain uses

ECHA proposes not to include in Annex XIV any review period for sulfurous acid, lead salt, dibasic.

In general, ECHA does not propose any upfront specific review periods in its draft recommendations for inclusion in the Authorisation List. Setting review periods in Annex XIV for any uses would require that ECHA had access to adequate information on different aspects relevant for a decision on the review period. Such information is generally not available to ECHA

<sup>&</sup>lt;sup>4</sup> General approach can be accessed at

https://echa.europa.eu/documents/10162/13640/recom\_general\_approach\_draft\_axiv\_entries.pdf

<sup>&</sup>lt;sup>5</sup> Practical implementation document can be accessed at <a href="https://echa.europa.eu/documents/10162/13640/recom\_general\_approach\_draft\_axiv\_entries\_draft\_implementation\_en.pdf">https://echa.europa.eu/documents/10162/13640/recom\_general\_approach\_draft\_axiv\_entries\_draft\_implementation\_en.pdf</a>

at the recommendation step. It is to be stressed that, in the next step of the authorisation process, i.e. during the decision on whether authorisation is granted based on specific applications by manufacturers, importers or downstream users of the substance, all authorisation decisions will include specific review periods which will be based on concrete case-specific information provided in the applications for authorisation.

# 3.3. Uses or categories of uses exempted from authorisation requirement

#### 3.3.1 Exemption under Article 58(2)

ECHA proposes not to recommend exemptions for uses of sulfurous acid, lead salt, dibasic on the basis of Article 58 (1)(e) in combination with Article 58(2) of the REACH Regulation.

According to Article 58(2) of REACH it is possible to exempt from the authorisation requirement uses or categories of uses 'provided that, on the basis of the existing specific Community legislation imposing minimum requirements relating to the protection of human health or the environment for the use of the substance, the risk is properly controlled'.

ECHA considers the following elements in deciding whether to recommend an exemption of a use of a substance:

- There is existing EU legislation (i.e., rules of law adopted by a European Union entity intended to produce binding effects) addressing the specific use (or categories of use) that is proposed to be exempted;
- The existing EU legislation properly controls the risks to human health and/or the
  environment from the use of the substance arising from the intrinsic properties of the
  substance that are specified in Annex XIV; generally, the legislation in question should
  specifically refer to the substance to be included in Annex XIV either by naming the
  substance or by referring to a group of substances that is clearly distinct from other
  substances;
- The existing EU legislation imposes minimum requirements for the control of risks of the use. The piece of legislation (i) has to define the minimum standard to be adopted in the interest of public health or the environment and (ii) allows EU Member States to impose more stringent requirements than the specific minimum requirements set out in the EU legislation in question. Legislation setting only a general framework of requirements or the aim of imposing measures or not clearly specifying the actual type and effectiveness of measures to be implemented is not regarded as sufficient to meet the requirements under Article 58(2). Furthermore, it can be implied from the REACH Regulation that attention should be paid as to whether and how the risks related to the life-cycle stages resulting from the uses in question (i.e. service-life of articles and waste stage(s), as relevant) are covered by the legislation.

Where interested parties are considering making a request for exemption from authorisation under Art. 58(2) for a particular use, it is strongly recommended that they take into account ECHA's previous responses to Art. 58(2) exemption requests<sup>6</sup>. It is noted that any Art. 58(2) request is assessed case-by-case.

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<sup>&</sup>lt;sup>6</sup> See analysis of most relevant pieces of legislation e.g. in sections C.2.8 – C.2.12 in <a href="https://echa.europa.eu/documents/10162/b80fccc0-c055-7cd7-4743-8d3c26956b15">https://echa.europa.eu/documents/10162/b80fccc0-c055-7cd7-4743-8d3c26956b15</a>, or in section C.2 in <a href="https://echa.europa.eu/documents/10162/b1820209-b7f4-4f87-998a-a996729c7375">https://echa.europa.eu/documents/10162/b1820209-b7f4-4f87-998a-a996729c7375</a>

Furthermore, it should be noted that if a use falls under the generic exemptions from authorisation<sup>7</sup>, there is no need to propose an additional specific exemption.

# 3.3.2 Exemption of product and process oriented research and development (PPORD)

ECHA proposes not to recommend to include in Annex XIV any exemption from authorisation for the use of sulfurous acid, lead salt, dibasic for PPORD.

So far, ECHA has not considered it appropriate to recommend specific exemptions for PPORD for any substance. ECHA notes that an operator may use a substance included in Annex XIV for a PPORD activity if that operator has obtained authorisation for that use of the substance in accordance with Articles 60 to 64 of the REACH Regulation.

No PPORD notifications have been submitted for sulfurous acid, lead salt, dibasic8.

<sup>&</sup>lt;sup>7</sup> Generic exemptions from the authorisation requirement: https://echa.europa.eu/documents/10162/13640/generic exemptions authorisation en.pdf/9291ab2a-fe2f-418d-9ce7-4c5abaaa04fc

 $<sup>^{\</sup>rm 8}$  As of 1 February 2018.

#### 4. References

ECHA (2018a): Sulfurous acid, lead salt, dibasic. ECHA's dissemination website on registered substances. Accessed on 1 February 2018.

https://echa.europa.eu/search-for-chemicals

ECHA (2018b): Background document by RAC and SEAC to the opinion on the Annex XV dossier proposing restrictions on lead compounds-PVC<sup>9</sup>. 15 March 2018.

https://www.echa.europa.eu/documents/10162/79751532-2a8b-aefd-e634-6cc4b4bb21d8

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 sulfurous acid, lead salt, dibasic as a Substance of Very High Concern.

 $\frac{https://www.echa.europa.eu/documents/10162/ba3e823e-bc52-4bbf-a676-c5717d629f60}{c5717d629f60}$ 

Vinylplus (2016): Vinylplus progress report 2016 (reporting on 2015 activities)

https://vinylplus.eu/uploads/160826 VINYPLUS 2016 WEB PS Singlepage version.pdf

Vinylplus (2017): Vinylplus progress report 2017 (reporting on 2016 activities)

https://vinylplus.eu/uploads/downloads/VinylPlus Progress Report 2017.pdf

<sup>&</sup>lt;sup>9</sup> The background document is based on the restriction report submitted by ECHA (2016) but updated with relevant information received during the opinion forming process.

#### Annex I: Further information on uses

## 1. Further details on main (sector of) uses, market trend per use and type of applications

The major use of sulfurous acid, lead salt, dibasic seems to be in PVC processing (RCOM, 2012).

In the last years the consumption of lead-based stabilisers has decreased substantially. According to Vinylplus (2016 and 2017) ESPA members (European Stabilisers Producers Association representing most of the registrants of lead compounds used as stabilisers) completed the replacement of lead stabilisers for use in the EU by the end of 2015.

However, the uses are still reported in registrations<sup>10</sup>.

According to registrations, the substance is used in plastic articles used by professional workers and consumers (external plastics, plastic materials used as internal structural component of buildings) (ECHA, 2018a). Further article types include water pipes and window profiles (RCOM, 2012).

### 2. Structure and complexity of supply chains

The following assumptions are made based on currently available information and will be used, together with any relevant information from public consultation, to allocate the substance to a specific LAD slot in the final recommendation:

Sulfurous acid, lead salt, dibasic is manufactured and/or imported by a limited number of registrants. The Lead REACH Consortium commenting during the SVHC public consultation (RCOM, 2012) indicated that in the EU there are less than 10 sites manufacturing lead stabilisers. Up to 20,000 plastic converters are processing PVC (but only a fraction of them may use lead stabilisers). No precise and up-to-date information is available on the number of industrial sites where the substances is currently used.

The supply chain can be characterised 11 by the following actors: formulators, producers of articles and articles assemblers (multi-layer assembling chain) (relevant life cycle stages: F, IS, SLs).

The substance is used in products categorised as polymer preparations and compounds as well as coatings and paints, thinners, paint removes (relevant product categories: PC9a, PC32).

A number of sectors seem to rely on the substance including manufacturers of plastic products (including compounders and converters) and of bulk, large scale chemicals (including petroleum products), the building and construction as well as the electricity, steam, gas, water supply and sewage treatment sector (relevant sector of use categories: SU8, SU12, SU19 and SU23).

The substance ends up in a number of article types such as plastic articles, stone, plaster, cement, glass and ceramic articles, metal articles and machinery, mechanical appliances, electrical/electronic articles and vehicles (relevant article categories: AC1, AC2, AC4, AC7 and AC13).

Some categories mentioned are not explicitly listed as use descriptors in registrations but could be derived from the information on uses available in the registration dossiers.

<sup>&</sup>lt;sup>10</sup> As of 1 February 2018

<sup>&</sup>lt;sup>11</sup> Categories listed here after (life cycle stage, SU, PC and AC) make reference to the use descriptor system described in ECHA's guidance on use description: https://echa.europa.eu/documents/10162/13632/information requirements r12 en.pdf