

Substance Name: Lead bis(tetrafluoroborate)

EC Number: 237-486-0

CAS Number: 13814-96-5

MEMBER STATE COMMITTEE

SUPPORT DOCUMENT FOR IDENTIFICATION OF

LEAD BIS(TETRAFLUOROBORATE)

**AS A SUBSTANCE OF VERY HIGH CONCERN BECAUSE OF ITS
CMR¹ PROPERTIES**

Adopted on 29 November 2012

¹ CMR means carcinogenic, mutagenic or toxic for reproduction

CONTENTS

| | | |
|----------|---|----------|
| 1 | IDENTITY OF THE SUBSTANCE AND PHYSICAL AND CHEMICAL PROPERTIES | 4 |
| 1.1 | NAME AND OTHER IDENTIFIERS OF THE SUBSTANCE | 4 |
| 1.2 | COMPOSITION OF THE SUBSTANCE | 4 |
| 2 | HARMONISED CLASSIFICATION AND LABELLING | 6 |
| 3 | ENVIRONMENTAL FATE PROPERTIES | 7 |
| 4 | HUMAN HEALTH HAZARD ASSESSMENT | 7 |
| 5 | ENVIRONMENTAL HAZARD ASSESSMENT | 7 |
| 6 | CONCLUSIONS ON THE SVHC PROPERTIES | 7 |
| 6.1 | CMR ASSESSMENT | 7 |

TABLES

Tables

| | |
|---|---|
| Table 1: Substance identity | 4 |
| Table 2: Constituents | 5 |
| Table 3: Classification according to part 3 of Annex VI, Table 3.1 ((list of harmonised classification and labelling of hazardous substances) of Regulation (EC) No 1272/2008 | 6 |
| Table 4: Classification according to part 3 of Annex VI, Table 3.2 (list of harmonized classification and labelling of hazardous substances from Annex I of Council Directive 67/548/EEC) of Regulation (EC) No 1272/2008 | 6 |

Substance Name: Lead bis(tetrafluoroborate)

EC Number: 237-486-0

CAS number: 13814-96-5

Lead bis(tetrafluoroborate) is identified as substance meeting the criteria of Article 57 (c) of Regulation (EC) 1907/2006 (REACH) owing to its classification as toxic for reproduction 1A² which corresponds to classification as toxic for reproduction category 1³.

Summary of how the substance meets the criteria set out in Article 57 (c) of REACH (Repr. 1A).

Lead bis(tetrafluoroborate) 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 (list of harmonised classification and labelling of hazardous substances) as toxic for reproduction, Repr. 1A (H360D: "May damage the unborn child"). The corresponding classification 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) No 1272/2008 is toxic for reproduction, Repr. Cat. 1, R61 ("May cause harm to the unborn child.").

Therefore, this classification of lead bis(tetrafluoroborate) in Regulation (EC) No 1272/2008 shows that the substance meets the criteria for classification as toxic for reproduction in accordance with Article 57 (c) of REACH.

Registration dossiers submitted for the substance? Yes

² Classification in accordance with Regulation (EC) No 1272/2008 Annex VI, part 3, Table 3.1 List of harmonised classification and labelling of hazardous substances, OJ L 353, p.1, 31.12.2008.

³ Classification in accordance with Regulation (EC) No 1272/2008, Annex VI, part 3, Table 3.2 List of harmonised classification and labelling of hazardous substances (from Annex I to Council Directive 67/548/EEC), OJ L 353, p.1, 31.12.2008.

JUSTIFICATION

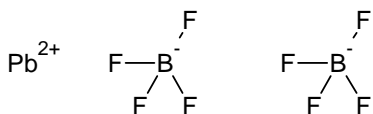
1 Identity of the substance and physical and chemical properties

1.1 Name and other identifiers of the substance

Table 1: Substance identity

| | |
|---|---|
| EC number: | 237-486-0 |
| EC name: | lead bis(tetrafluoroborate) |
| CAS number (in the EC inventory): | 13814-96-5 |
| CAS number: Deleted CAS numbers: | 13814-96-5 35254-34-3 |
| CAS name: | Borate(1-), tetrafluoro-, lead(2+) (2:1) |
| IUPAC name: | Lead(2+) ditetrafluoroborate |
| Index number in Annex VI of the CLP Regulation | 082-001-00-6 |
| Molecular formula: | B ₂ F ₈ Pb |
| Molecular weight range: | 380.8 g/mol |
| Synonyms: | Borate(1-), tetrafluoro-, lead(2+); Lead fluoborate (Pb(BF ₄) ₂); Lead tetrafluoroborate (Pb(BF ₄) ₂); Lead boron fluoride; Lead fluoroborate; Lead fluoroborate (Pb(BF ₄) ₂); Lead(II) tetrafluoroborate |

Structural formula:



1.2 Composition of the substance

Name: Lead bis(tetrafluoroborate)

Description: ---

Degree of purity: 65 - 68 %

Table 2: Constituents

| Constituents | Typical concentration | Concentration range | Remarks |
|--|------------------------------|----------------------------|---|
| Lead bis(tetrafluoroborate) 237-486-0 | | 65 – 68 % | Information according to the available registration dossiers. |
| Water 231-791-2 | | 29.6 – 32 % | Information according to the available registration dossiers. |

ECHA is not in the position to assess if the water is present as hydrate, stabiliser or simply a solvent which cannot be removed from the substance without decomposing it. Therefore water is considered in the composition as indicated in the registration dossiers.

2 Harmonised classification and labelling

Lead bis(tetrafluoroborate) is covered by Index number 082-001-00-6 in Annex VI, part 3 of Regulation (EC) No 1272/2008 as follows:

Table 3: Classification according to part 3 of Annex VI, Table 3.1 ((list of harmonised classification and labelling of hazardous substances) of Regulation (EC) No 1272/2008

| Index No | International Chemical Identification | EC No | CAS No | Classification | | Labelling | | | Spec. Conc. Limits, M-factors | Notes |
|--------------|--|-------|--------|---|---|--------------------------------|---|---------------------------------|-------------------------------|-------|
| | | | | Hazard Class and Category Code(s) | Hazard statement code(s) | Pictogram, Signal Word Code(s) | Hazard statement code(s) | Suppl. Hazard statement code(s) | | |
| 082-001-00-6 | lead compounds with the exception of those specified elsewhere in this Annex | - | - | Repr. 1A Acute Tox. 4 * Acute Tox. 4 * STOT RE 2 * Aquatic Acute 1 Aquatic Chronic 1 | H360-Df H332 H302 H373** H400 H410 | GHS08 GHS07 GHS09 Dgr | H360Df H332 H302 H373 ** H410 | | STOT RE 2; H373: C ≥ 0,5 % | A1 |

Table 4: Classification according to part 3 of Annex VI, Table 3.2 (list of harmonized classification and labelling of hazardous substances from Annex I of Council Directive 67/548/EEC) of Regulation (EC) No 1272/2008

| Index No | International Chemical Identification | EC No | CAS No | Classification | Labelling | Concentration Limits | Notes |
|--------------|--|-------|--------|--|---|---------------------------------------|-------|
| 082-001-00-6 | lead compounds with the exception of those specified elsewhere in this Annex | - | - | Repr. Cat. 1; R61 Repr. Cat. 3; R62 Xn; R20/22 R33 N; R50-53 | T; N R: 61-20/22-33-62-50/53 S: 53-45-60-61 | Xn; R20/22: C ≥ 1 % R33: C ≥ 0,5 % | AE1 |

3 Environmental fate properties

Not relevant for the identification of the substance as SVHC in accordance with Article 57(c).

4 Human health hazard assessment

See section 2 on harmonised classification and labelling.

5 Environmental hazard assessment

Not relevant for the identification of the substance as SVHC in accordance with Article 57(c).

6 Conclusions on the SVHC Properties

6.1 CMR assessment

Lead bis(tetrafluoroborate) 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 (list of harmonised classification and labelling of hazardous substances) as toxic for reproduction, Repr. 1A (H360D: "May damage the unborn child"). The corresponding classification 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) No 1272/2008 is toxic for reproduction, Repr. Cat. 1, R61 ("May cause harm to the unborn child.").

Therefore, this classification of lead bis(tetrafluoroborate) in Regulation (EC) No 1272/2008 shows that the substance meets the criteria for classification as toxic for reproduction in accordance with Article 57 (c) of REACH.