

Annex XV dossier

PROPOSAL FOR IDENTIFICATION OF A SUBSTANCE AS A CMR 1A OR 1B, PBT, vPvB OR A SUBSTANCE OF AN EQUIVALENT LEVEL OF CONCERN

Substance Name: Lead titanium zirconium oxide

EC Number: 235-727-4

CAS Number: 12626-81-2

Submitted by: European Chemicals Agency at the request of the European Commission

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The substance is proposed to be identified as substance meeting the criteria of Article 57 (c) of Regulation (EC) 1907/2006 (REACH) owing to its classification as toxic for reproduction category 1 A¹.

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

Lead titanium zirconium oxide 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 (H360: "May damage the unborn child"). The corresponding classification in Annex VI, part 3, Table 3.2 (the list of harmonised and 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 the substance in Regulation (EC) No 1272/2008 shows that it meets the criteria for classification as toxic for reproduction in accordance with Article 57 (c) of REACH.

Registration dossiers submitted for the substance? Yes

¹ 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.

PART I

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: | 235-727-4 |
| EC name: | Lead titanium zirconium oxide |
| CAS number (in the EC inventory): | 12626-81-2 |
| CAS number: Deleted CAS numbers: | 12626-81-2 37189-44-9, 37221-92-4, 37382-38-0, 39387-81-0, 56730-15-5, 69670-72-0, 106804-23-3, 118217-11-1, 135699-34-2, 143928-79-4, 188417-76-7, 200444-20-8, 1245817-44-0 |
| CAS name: | Lead titanium zirconium oxide (Pb(Ti,Zr)O ₃) |
| IUPAC name: | Lead titanium zirconium trioxide |
| Index number in Annex VI of the CLP Regulation | 082-001-00-6 |
| Molecular formula: | Unspecific |
| Molecular weight range: | Unspecific |
| Synonyms: | Lead titanate zirconate; Lead titanate zirconate (Pb(Ti,Zr)O ₃); Lead titanate zirconate (PbTiO-1ZrO-1O ₃); Lead titanium zirconium oxide (PbTiO-1ZrO-1O ₃); Lead zirconate titanate |

Structural formula:



1.2 Composition of the substance

Name: Lead titanium zirconium oxide

Description: ---

Degree of purity: 80 - 98 %

Table 2: Constituents

| Constituents | Typical concentration | Concentration range | Remarks |
|--------------------------------------------|------------------------------|----------------------------|---------------------------------------------------------------------|
| Lead titanium zirconium oxide 235-727-4 | | 80 - 98 % | According to the information available in the registration dossiers |

2 Harmonised classification and labelling

Lead titanium zirconium oxide 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 | H360Df 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 % | AE 1 |

3 Environmental fate properties

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

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 57c.

6 Conclusions on the SVHC Properties

6.1 CMR assessment

Lead titanium zirconium oxide 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 (H360: "May damage the unborn child"). The corresponding classification in Annex VI, part 3, Table 3.2 (the list of harmonised and 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 the substance in Regulation (EC) No 1272/2008 shows that it meets the criteria for classification as toxic for reproduction in accordance with Article 57 (c) of REACH.

PART II

INFORMATION ON USE, EXPOSURE, ALTERNATIVES AND RISKS

The available use and exposure information is provided in the registration dossiers (authorities with access rights only) or on ECHA's dissemination website²:

<http://echa.europa.eu/information-on-chemicals>

ECHA has not carried out further analysis of this information.

² Information published by ECHA on the substance can be searched at this site (field "Search for Chemicals" at upper right) by EC number, CAS number or substance name.