

Substance Name: Lead titanium zirconium oxide

EC Number: 235-727-4

CAS Number: 12626-81-2

MEMBER STATE COMMITTEE

SUPPORT DOCUMENT FOR IDENTIFICATION OF

LEAD TITANIUM ZIRCONIUM OXIDE

**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

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Lead titanium zirconium oxide 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 category 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 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 Lead titanium zirconium oxide in Regulation (EC) No 1272/2008 shows that it meets the criterion 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:	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").

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