

**Trade name: GLOSSEX (pink and white)<sup>®</sup>**

Version: 1.0 / EN

Print date:

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## 1. IDENTIFICATION OF THE SUBSTANCE AND THE COMPANY

### 1.1 Identification of the product: GLOSSEX (pink and white)

**Identification of the substance:** Mixture of Cerium oxide, Lanthanum oxide, Cerium fluoride, Lanthanum trifluoride and mixed oxide of Cerium and Lanthanum.

**Identification on the label / trade name: GLOSSEX (pink and white)**

### 1.2 Identified uses of the substance or mixture and uses advised against.

#### 1.2.1 Identified uses:

Glass polish.

#### 1.2.2 Uses advised against:

There is any use advised against.

### 1.3 Company identification

**Supplier:** HERRAMIENTAS DE DIAMANTE, S.A. Camino Villanueva, 20 – 28880 Meco (Madrid).  
**Person responsible for the MSDS:** [info@pomdi.com](mailto:info@pomdi.com) (Alberto Oliva Flores)

### 1.4 Emergency telephone: (+34) 91 886 00 61

## 2 HAZARDS IDENTIFICATION

### 2.1 Classification:

According the 1272/2008 Regulation criteria, the product is classified as:

Skin Irritant, category 2 (H315)  
Reversible Eye Effects, category 2 (H319)

According the 1999/45/CE Directive criteria, the product is classified as:

Skin Irritant, cat 2., Xi R38  
Eye Irritant, cat. 2, Xi R36

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## 2.2 Label elements



### Warning

H315 – Causes skin irritation

H319 – Causes serious eye irritation

P264 – Wash the hands thoroughly after handling.

P280 – Wear protective gloves/protective clothing/eye protection/face protection

P302 + P352 – IF ON SKIN: Wash with plenty of soap and water..

P305 + P351 + P338 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P332 + P313 – If skin irritation occurs: Get medical advice/attention.

P337 + P313 – If eye irritation persists: Get medical advice/attention.

## 2.3 Other hazards:

The mixture does not meet the criteria for PBT or vPvB in accordance with Annex XIII

The possibility of dust generation must be taken into account while the product use.

## 3 COMPOSITION / INFORMATION ON INGREDIENTS

### 3.1 Relevant constituents

Component name	CAS N°	CE N°	% Conc. (w/w)	Classification according Reg. 1272/2008 (CLP)	Classification according 67/548/CE Directive	REACH Registration No.
Cerium Trifluoride	7758-88-5	231-841-3	≤5%	Not classified	Not classified	-
Cerium Tetrafluoride	10060-10-3	-	≤5%	Skin Irrit., cat. 2 (H315) Rev. Eyes effects, cat. 2 (H319) Acute tox. oral, cat. 4 (H302) Acute tox., dermal, cat. 4 (H312) Acute tox., inhal., cat. 4 (H332)	Skin Irrit. Cat. 2, R38 Eye Irrit. Cat. 2, R36 Harmful, R20/21/22	-
Lanthanum Trifluoride	13709-38-1	237-252-8	5% - 15%	Not classified	Not classified	-

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## **4 FIRST AID MESURES**

### **4.1 First aid measures description**

#### **4.1.1 In case of inhalation:**

Move the patient to a well ventilated place. Use the personal protection equipment if needed. If coughing, nausea or other discomfort persists, seek medical assistance.

#### **4.1.2 In case of skin contact:**

Wash the affected area with soap and water and remove soiled clothing. Whash or discard the contaminated clothes. If dermal irritation persists, seek medical assistance.

#### **4.1.3 In case of eye contact:**

Wash eyes with plenty of water for at least 15 minutes, separating the eyelids with fingers to ensure adequate flushing of the eyes. Remove contact lens if present and easy to do. Seek medical attention if irritation persists.

#### **4.1.4 In case of ingestion:**

Wash mouth with plenty of water if the patient is conscious. Do not give the patient water to drink. In the event of ingestion of large amounts of the product, seek medical assistance.

### **4.2 Major symptoms and effects**

The product could irritate the skin and the eyes. It may induce mild irritation of the respiratory tract if dust is inhaled.

### **4.3 Information about the medical attention:**

Medical attention is required if adverse symptoms are shown or after a large exposure. Treatment should in general be symptomatic and palliative.

## **5 FIRE-FIGHTING MEASURES**

**5.1 Suitable extinguishing media:** Water, foam, dry chemical, CO<sub>2</sub>.

**5.2 Extinguishing media which must not be used for safety reasons:** Not applicable.

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**5.3 Special exposure hazards resulting from the combustion products or gases produced:** May produce carbon monoxide (CO)

**5.4 Special protective equipment for firefighters:**

Use a face shield to protect against projections, as well as clothing, gloves and shoes suitable to protect the skin. It may be necessary to use self contained breathing apparatus (SCBA). Protective clothing for firefighters must meet at least the requirements of the standard EN 469.

**6 ACCIDENTAL RELEASE MEASURES**

**6.1 Personal precautions, protective equipment and emergency procedure.**

See section 5 for the Fire fighting measures. See section 4 for the first aid measures. See section 8 for exposure controls/personal protection. Avoid breathing the dust, if necessary, by spraying the area with water to limit dispersion in the air. Use a suitable dust mask, according to EN 149 (FFP1s). Avoid the skin and mucous contact.

**6.2 Environmental precautions:**

Contain spilled material and avoid the product reaches surface/underground water or the sewers.

**6.3 Methods and material for containment and cleaning up**

Collect with the aid of a shovel or by mechanical device, as a function of the size of the spill, avoiding dust formation by sprinkling the area with water.

**7 HANDLING AND STORAGE**

**7.1 Precautions for safe handling**

Use only with adequate ventilation to prevent accumulation of dust. Avoid breathing dust. Avoid contact with the product using appropriate protective measures. Wash thoroughly after handling. If occupational exposure limits are exceeded, use the appropriate personal protective equipment.

**7.2 Conditions for safe storage**

Store in a well ventilated area at room temperature (<25 °C) with a sunlight protection and avoiding heating/ignition sources. Avoid dispersion of dust.

Containers or big-bags made of plastic are recommended.

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**Incompatible materials:** None known.

**Storage conditions:** Keep in a dry, fresh and well-ventilated place.

**Temperature and moisture range/limits:** Not applicable.

**Special conditions:** None.

**Applicable regulations:** Not applicable.

## 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters:

Exposure limit values (Exposure limit values are not additives):

<b>Substance</b>	Dust, respirable
<b>CAS No.</b>	

	Limit value - Eight hours		Limit value - Short term	
	ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>
<u>Australia</u>				
<u>Austria</u>		5		10
<u>Belgium</u>		3		
Canada - Ontario				
<u>Canada - Québec</u>				
Denmark				
<u>European Union</u>				
<u>France</u>		<b>5 respirable aerosol</b>		
<u>Germany (AGS)</u>		3		6
<u>Germany (DFG)</u>		1,5		
<u>Hungary</u>		6		
<u>Ireland</u>		4		
Italy				
<u>Japan</u>				
Latvia				
<u>New Zealand</u>				
<u>Poland</u>				
<u>Singapore</u>				
<u>South Korea</u>				
<u>Spain</u>		3		
Sweden		5		
<u>Switzerland</u>		3		

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<u>The Netherlands</u>			
<u>USA - NIOSH</u>			
<u>USA - OSHA</u>		5	
<u>United Kingdom</u>			

	Remarks
Austria	STV 15 minutes average value
France	<b>Bold type: Restrictive statutory limit values</b>
Germany (AGS)	15 minutes average value, insoluble particulates
Germany (DFG)	Insoluble particulates

<b>Substance</b>	Dust, inhalable
<b>CAS No.</b>	

	Limit value - Eight hours		Limit value - Short term	
	ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>
<u>Australia</u>				
<u>Austria</u>		10		20
<u>Belgium</u>		10		
Canada - Ontario				
<u>Canada - Québec</u>				
Denmark		10		20
<u>European Union</u>				
<u>France</u>		<b>10</b>		
<u>Germany (AGS)</u>		10		20
<u>Germany (DFG)</u>		4		
<u>Hungary</u>		10		
<u>Ireland</u>		10		
Italy				
<u>Japan</u>				
Latvia				
<u>New Zealand</u>				
<u>Poland</u>				
<u>Singapore</u>		10		
<u>South Korea</u>				

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<u>Spain</u>		10		
<u>Sweden</u>		10		
<u>Switzerland</u>		10		
<u>The Netherlands</u>				
<u>USA - NIOSH</u>				
<u>USA - OSHA</u>		15		
<u>United Kingdom</u>				

	Remarks
France	Bold type: Restrictive statutory limit values
Germany (AGS)	15 minutes average value, insoluble particulates
Germany (DFG)	Long term exposure level, insoluble particulates

Substance	Fluorides as F
CAS No.	-

	Limit value - Eight hours		Limit value - Short term	
	ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>
<u>Australia</u>		2,5		
<u>Austria</u>				
<u>Belgium</u>		2,5		
Canada - Ontario		2,5		
<u>Canada - Québec</u>		2,5		
Denmark		2,5		5
<u>European Union</u>				
France		2,5		
<u>Germany (AGS)</u>		1 inhalable aerosol		4 inhalable aerosol
<u>Germany (DFG)</u>		1 inhalable aerosol		4 inhalable aerosol
<u>Hungary</u>				
<u>Ireland</u>		2,5		
Italy				
<u>Japan</u>				
Latvia				
<u>New Zealand</u>		2,5 (1)		
<u>Poland</u>		2		

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<u>Singapore</u>		2,5		
<u>South Korea</u>		2,5		
<u>Spain</u>				
<u>Sweden</u>				
<u>Switzerland</u>		1 inhalable aerosol		4 inhalable aerosol
<u>The Netherlands</u>				2
<u>USA - NIOSH</u>		2,5		
<u>USA - OSHA</u>		2,5		
<u>United Kingdom</u>				

	Remarks
France	Italic type: Indicative statutory limit values
Germany (AGS)	STV 15 minutes average value
Germany (DFG)	STV 15 minutes average value
New Zealand	(1) Exposure can also be estimated by biological monitoring.
The Netherlands	Applies for inorganic, soluble fluorides. As F

## 8.2 Exposure controls.

### 8.2.1. Technical controls

A ventilation system must ensure that at the work environment are not dangerous concentrations of substances in the air (above their respective occupational exposure limits).

There must be an eyebath and a shower in the place where the product is used.

### 8.2.2. Personal protection equipment

The selection of protective equipment changes depending on potential exposure conditions such as applications, handling, concentration and ventilation. The information presented below is based on normal use.

**Respiratory protection:** If the technical devices do not guarantee a concentration level below the occupational exposure limit, the personal protection equipment should be used. In case of suspended dust, use a dust mask according to EN 149.

**Hand protection:** The types of gloves to be considered are: Chemical resistant gloves. If contact with forearms Nitrilo and Viton gloves are recommended. Standards EN 420 and EN 374 lay down general requirements and lists of types of gloves. Gloves should be checked



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and replaced regularly because they wear out, can break and lose their protective effectiveness.

**Eye protection:** Use safety chemical splash glasses according to EN 166.

**Body protection:** Specific clothing is recommended: chemical resistant clothes.

**Hygienic measures:** Wash after handling material and before eating, drinking or smoking. Routinely, wash work clothing and protective equipment. Discard clothes which can not be washed.

### 8.2.3. Environmental exposure controls

Avoid the spill to the soil and water. Take into account the appropriate waste legislation.

See sections 6, 7, 12 and 13.

## 9 PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information about physical and chemical properties

**Appearance:** Powder

**Physical state:** Solid

**Colour:** Pink or White

**Odour:** No.

Parameter	Value	Units	Method
pH	7-8		
Humidity	2400 (CeO <sub>2</sub> )		
Melting point	No available	°C	
Freezing point	No available		
Boiling point	No available		
Flammability	No available		
Evaporation rate	No applicable		
Autoignition temperature	Not flammable		Based on components data
Decomposition temperature	Not applicable		
Vapour pressure	Not applicable		
Relative density (H <sub>2</sub> O=1) at 25°C	7-8 (CeO <sub>2</sub> )	g/cm <sup>3</sup>	
Water solubility at 25°C	Insoluble	g/100 mL	
n-Octanol/water (log Po/w)	Not applicable		

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<b>Viscosity</b>	Not applicable		
<b>Explosive properties</b>	No explosive properties.		Based on components data
<b>Oxidizing properties</b>	Not available		

## 10 STABILITY AND REACTIVITY

**10.1 Chemical stability:** The material is stable under normal conditions.

**10.2 Possibility of hazardous reactions:** Reacts with acids. See section 5.

**10.2.1 Conditions to avoid:** Strong acids.

**10.3 Hazardous polymerization:** Polymerization process does not occur.

**10.4 Hazardous decomposition products:** In case of fire, see section 5

## 11 TOXICOLOGICAL INFORMATION

### 11.1 Acute toxicity

There is any data available from assays made with the mixture, but according to the published data of each component<sup>i, ii</sup> and taking into account the CLP criteria applied, the mixture must not be classified in any category of acute toxicity. However, due to the particle size ( $D_{90} = 6 \mu\text{m}$ , 90% of the particles have a diameter  $\leq 6 \mu\text{m}$ ), it should be taking into account the possible effects in the respiratory and gastrointestinal tract.<sup>ii</sup>

The foreseen presence of cerium tetrafluoride, substance classified as skin irritant, cat.2 and eye irritant, cat. 2 in the Classification and Labelling Inventory (ECHA), in a concentration level above 1% (w/w), the mixture may show also those irritant effects.

**Skin contact:** The product is classified as irritant neither according to the criteria of Regulation (CE) 1272/2008 nor according to Directive 67/548/EEC. Extended exposure may dry and crack the skin and cause irritation in sensitive individuals.

**Eye contact:** The substance may irritate the eyes, although severe lesions are not to be expected.

**Ingestion:** No adverse systemic effects are expected by the oral route of exposure. In case of ingestion of high particles size dust, these can cause damage to the digestive tract by

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mechanical action. It may induce mild gastrointestinal irritation if ingested large amounts of dust.

**Inhalation:** Studies conducted to assess the acute inhalation toxicity indicate that prolonged inhalation of dust (respirable fraction) may cause respiratory diseases.

### 11.2 Chronic toxicity

According to some published studies,<sup>i, ii</sup> for some components, carcinogenic, mutagenic or reprotoxic effects are not expected.

### 11.3 Specific target organs toxicity

According to some published studies for the mixture components, specific target organs toxicity is not expected.<sup>i, ii</sup>

## 12 ECOLOGICAL INFORMATION

**12.1 Ecotoxicity:** Adverse effects are not expected on aquatic organisms. Product is insoluble in water and therefore has low mobility in the middle

### 12.2 Persistence and degradability

Being an inorganic compound, this concept is not applicable.

### 12.3 Bioaccumulative potential

The presence of the inorganic substances in the mixture and the already known cerium characteristics,<sup>iii</sup> main component, indicates that the bioaccumulative potential is not expected.

### 12.4 Results of PBT and mPmB assesment.

Being an inorganic compound, PBT or vPvB concept is not assessable. The acute aquatic toxicity is expected to be  $CL_{50} > 100$  mg/L, due to the insolubility in water. The mixture is not calssified as carcinogenic, mutagenic or reprotoxic.

## 13 DISPOSAL CONSIDERATIONS

### 13.1 Suitable waste treatment/elimination methods:

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The waste generated may have to be managed as hazardous waste, according to the Waste Framework Directive 2008/98/CE.

### 13.2 Code of the EWL applicable:

16 03 03\* Inorganic wastes that contain hazardous substances.

The waste generated after the foreseen use, may be identified as:

10 11 14 glass-polishing and -grinding sludge other than those mentioned in 10 11 13\*.

## 14 TRANSPORT INFORMATION

The substance is not classified according to the laws governing the transport of dangerous goods.

Regulation	UN number	UN proper shipping name	Class	Packing group	Additional info
ADR/RID	Not classified				
ADNR	Not classified				
IMGD	Not classified				
IATA	Not classified				

## 15 REGULATORY INFORMATION

### 15.1 Regulations and safety, health and environment legislation specific to the substance or mixture.

- **Authorisations and/or restrictions on use:**

Authorisations: Not applicable.

Restrictions on use: Not applicable.

- **Other EU regulations:**

**Directive 89/391 - OSH "Framework Directive" of 12 June 1989 on the introduction of measures to encourage improvements in the safety and health of workers at work - "Framework Directive".**

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**Directive 2008/105/EC** of the European Parliament and of the Council of 16 December 2008 on environmental quality standards in the field of water policy, amending and subsequently repealing Council Directives 82/176/EEC, 83/513/EEC, 84/156/EEC, 84/491/EEC, 86/280/EEC and amending Directive 2000/60/EC of the European Parliament and of the Council (O.J. L 348/84 24.12.2008, pages 84-97)

## 15.2 Chemical Safety Assessment

A Chemical Safety Assessment of the mixture has not been carried out.

## 16 OTHER INFORMATION

This material safety data sheet has been elaborated according to Commission Regulation (EU) No 453/2010 of 20 May 2010 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

### 16.1 Relevant R phrases- and H codes (number and full text):

H315 – Causes skin irritation

H319 – Causes serious eyes irritation

H302 – Harmful if swallowed

H312 – Harmful in contact with skin

H332 – Harmful if inhaled.

R36 – Irritating to eyes

R38 – Irritating to skin

R 20/21/22 – Harmful by inhalation, in contact with skin and if swallowed

### 16.2 Relevant Precautionary statements (phrases P) (number and full text):

P264 – Wash the hands thoroughly after handling.

P280 – Wear protective gloves/ protective clothing/eye protection/face protection.

P302 + P352 – IF ON SKIN: Wash with plenty of soap and water.

P321 – Specific treatment (see section 4).

P305 + P351 + P338 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P332 + P313 – If skin irritation occurs: Get medical advice/ attention.

P337 + P313 – If eye irritation persists: Get medical advice/ attention.

P362 – Take off contaminated clothing and wash before reuse

### 16.3 Criteria of classification

The classification criteria used are those established in the tables 3.2.3 of Annex I of 1272/2008 Regulation.

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#### 16.4 Data sources.

*See documents indicated at the end of this MSDS*

#### 16.3 Other information

This document complements the technical instructions on usage, but does not substitute them. The information contained herein is based, to our best knowledge, on the technical information available on the product up to date. Users are advised that there is an inherent risk associated to the use of the product for different purposes to those for which it is intended.

This document does not exempt, in any way, the user of the product from the duty of fully understanding and applying all regulatory requirements.

All the information contained herein is provided, exclusively, with the aim of aiding the receiver to comply with his regulatory obligations with regard to the use of dangerous substances.

The present list of information must not be considered as exhaustive, not exempting the receiver from adopting other precautions, which may be described in documents not mentioned herein, regarding the storage and use of the product, of which the receiver is solely responsible.

#### **ANNEXES: EXPOSURE SCENARIOS**

**ANNEXES ARE NOT PROVIDED BECAUSE THE CHEMICAL SAFETY REPORT HAS NOT BEEN PERFORMED.**

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*i ECHA database information of registered substances under REACH Regulation:*

*<http://apps.echa.europa.eu/registered/registered-sub.aspx#search>*

*ii Toxicological Review of Cerium Oxide and Cerium Compounds. EPA/635/R-08/002F - [www.epa.gov/iris](http://www.epa.gov/iris)*

*iii Johnston BD, Scown TM, Moger J, Cumberland SA, Baalousha M, Linge K, van Aerle R, Jarvis K, Lead JR, Tyler CR.*

*Bioavailability of nanoscale metal oxides TiO(2), CeO(2), and ZnO to fish. Environ Sci Technol. 2010 Feb 1;44(3):1144-51*