

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1 Product identifier**

- Trade name CEROX® 2610
- EC-No. 909-701-4
- REACH : Registration number 01-2119541810-46-0000

1.2 Relevant identified uses of the substance or mixture and uses advised against**Uses of the Substance/Mixture**

- Glass polishing.
- Ceramics.
- Manufacture of wood and wood products
- Formulation [mixing] of preparations and/ or re-packaging (excluding alloys)
- Manufacture of other non-metallic mineral products, e.g. plasters, cement
- Manufacture of computer, electronic and optical products, electrical equipment

1.3 Details of the supplier of the safety data sheet**Company**

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SECTION 2: Hazards identification**2.1 Classification of the substance or mixture****Classification (Regulation (EC) No 1272/2008)**

- The product is not classified as dangerous according to Regulation (EC) No. 1272/2008.

2.2 Label elements**Regulation (EC) No 1272/2008**

- The product is not classified as dangerous according to Regulation (EC) No. 1272/2008.

2.3 Other hazards which do not result in classification

- NO particular fire or explosion hazard.

Results of PBT and vPvB assessment

- Not applicable (inorganic substance)

SECTION 3: Composition/information on ingredients**3.1 Substance**

- Chemical nature reaction mass based on rare earth(s) compound(s)

Information on Components and Impurities

Chemical name	Identification number	Classification Regulation (EC) No 1272/2008	Concentration [%]
Non-hazardous ingredients			
Reaction Mass Of Cerium Dioxide And Lanthanum Fluoride And Lanthanum Oxide		Not classified	80 - 100
	Registration number: 01-2119541810-46-0000		
	self classification		

3.2 Mixture

- Not applicable, this product is a substance.

SECTION 4: First aid measures**4.1 Description of first aid measures****General advice**

- Show this safety data sheet to the doctor in attendance.

In case of inhalation

- If breathed in, move person into fresh air.
- If symptoms persist, call a physician.

In case of skin contact

- Wash off with soap and water.
- If skin irritation persists, call a physician.

In case of eye contact

- Rinse with running water whilst keeping the eyes wide open (at least 15 minutes)
- If eye irritation persists, consult a physician

In case of ingestion

- If conscious, drink plenty of water.
- Never give anything by mouth to an unconscious person.
- Seek medical advice.
- Do not leave the victim unattended.

4.2 Most important symptoms and effects, both acute and delayed

- no data available

4.3 Indication of any immediate medical attention and special treatment needed

- no data available

SECTION 5: Firefighting measures**5.1 Extinguishing media****Suitable extinguishing media**

- Water
- Foam
- Not combustible.

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- Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Unsuitable extinguishing media

- None known.

5.2 Special hazards arising from the substance or mixture

- Not combustible.

5.3 Advice for firefighters

Special protective equipment for firefighters

- Gloves
- In the case of respirable dust and/or fumes, use self-contained breathing apparatus and dust impervious protective suit.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

- Personal protective equipment
- Respirator with a particle filter (EN 143)
- Wear suitable gloves.
- Safety glasses
- For further information refer to section 8 "Exposure controls/personal protection".

6.2 Environmental precautions

- No harmful effect to the environment is known or expected under normal conditions of use.
- Do not flush into surface water or sanitary sewer system.

6.3 Methods and materials for containment and cleaning up

Methods for containment

- Dam up.

Recovery

- Use only non-sparking tools.
- Sweep up and shovel into suitable containers for disposal.
- Keep in properly labelled containers.

Decontamination/cleaning

- Wash off with plenty of water.

6.4 Reference to other sections

- Refer to protective measures listed in sections 7 and 8.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

- Provide sufficient air exchange and/or exhaust in work rooms.
- Dust must be extracted directly at the point of origin.
- Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces.
- Avoid contact with skin and eyes.
- Do not breathe vapours/dust.

Hygiene measures

- Handle in accordance with good industrial hygiene and safety practice.
- Wash hands before breaks and at the end of workday.

7.2 Conditions for safe storage, including any incompatibilities**Technical measures/Storage conditions**

- Keep in properly labelled containers.
- Stable under normal conditions.
- To guarantee the quality and properties of the product keep :
 - Keep container tightly closed and dry.
- Keep away from: No special restrictions on storage with other products.

Packaging material**Suitable material**

- Plastic materials (polyethylene).

Unsuitable material

- None known.

Remarks

- Store in original container.

Requirements for storage rooms and vessels

- Stable under recommended storage conditions.

7.3 Specific end use(s)

- no data available

SECTION 8: Exposure controls/personal protection**8.1 Control parameters****Components with workplace occupational exposure limits**

Components	Value type	Value	Basis
Dust, non specific for insoluble/inorganic product	TWA	10 mg/m ³	UK. EH40 WEL - Workplace Exposure Limits
	Form of exposure : inhalable dust		
	TWA	4 mg/m ³	UK. EH40 WEL - Workplace Exposure Limits
	Form of exposure : Respirable dust		

Derived No Effect Level (DNEL) / Derived minimal effect level (DMEL)

Product name	Population	Route of exposure	Potential health effects	Exposure time	Value	Remarks
Reaction Mass Of Cerium Dioxide And Lanthanum Fluoride And Lanthanum Oxide	Workers	Dermal	Systemic effects	Long term	8.33 mg/kg bw/day	
		Inhalation	Systemic effects	Long term	3 mg/m ³	
	General population	Dermal	Systemic effects	Long term	4.17 mg/kg bw/day	
		Inhalation	Systemic effects	Long term	1.5 mg/m ³	
		Oral	Systemic effects	Long term	4.17 mg/kg bw/day	

Predicted No Effect Concentration (PNEC)

Product name	Compartment	Value	Remarks
Reaction Mass Of Cerium Dioxide And Lanthanum Fluoride And Lanthanum Oxide	Fresh water		No PNEC derivation as no adverse effect was observed (qualitative approach).
	Marine water		No PNEC derivation as no adverse effect was observed (qualitative approach).
	Fresh water sediment		No PNEC derivation as no adverse effect was observed (qualitative approach).
	Marine sediment		No PNEC derivation as no or insufficient data were available at present.
	Soil		No PNEC derivation as no adverse effect was observed (qualitative approach).
	STP		No PNEC derivation as no adverse effect was observed (qualitative approach).
	Oral (secondary poisoning)		No PNEC derivation as there is no potential for bioaccumulation.

8.2 Exposure controls

Control measures

Engineering measures

- Apply technical measures to comply with the occupational exposure limits.
- Local exhaust
- Dust must be extracted directly at the point of origin.

Individual protection measures

Respiratory protection

- Under normal conditions, in the absence of other airborne contaminants, the following devices should provide protection from this material up to the conditions specified by the appropriate local standard(s):
- Respirator with a particle filter (EN 143)

Hand protection

- For prolonged or repeated contact use protective gloves.

Eye protection

- In case of contact through splashing:
- Safety glasses with side-shields

Skin and body protection

- Long sleeved clothing

Hygiene measures

- Handle in accordance with good industrial hygiene and safety practice.
- Wash hands before breaks and at the end of workday.

Protective measures

- The protective equipment must be selected in accordance with current CEN standards and in cooperation with the supplier of the protective equipment.
- Selection of appropriate personal protective equipment should be based on an evaluation of the performance characteristics of the protective equipment relative to the task(s) to be performed, conditions present, duration of use, and the potential hazards and/or risks that may occur during use.

Environmental exposure controls

- No harmful effect to the environment is known or expected under normal conditions of use.
- Do not flush into surface water or sanitary sewer system.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Form: powder
 Physical state: solid
 Colour: light cream
 Particle size: < 5 µm

Odour

None

Odour Threshold

no data available

pH

Not applicable insoluble product

pKa:
 Not applicable

Melting point/freezing point

Melting point/range: > 500 °C
 Method: OECD Test Guideline 102

<u>Initial boiling point and boiling range</u>	: Not applicable solid for which the melting point is > 300 °C
<u>Flash point</u>	Not applicable (inorganic substance)
<u>Evaporation rate (Butylacetate = 1)</u>	Not applicable
<u>Flammability (solid, gas)</u>	The product is not flammable. Method: EU Test Guideline A10
<u>Flammability/Explosive limit</u>	<u>Lower flammability/explosion limit:</u> Not applicable, solid <u>Upper flammability/explosion limit:</u> Not applicable, solid
<u>Auto-ignition temperature</u>	> 500 °C Method: EU Test Guideline A16
<u>Vapour pressure</u>	Not applicable solid for which the melting point is > 300 °C
<u>Vapour density</u>	Not applicable
<u>Density</u>	
<u>Relative density</u>	6.8 (25 °C)
<u>Solubility</u>	<u>Water solubility:</u> 2.23 µg/l (20 °C)Method: OECD Test Guideline 105 insoluble <u>Solubility in other solvents:</u> common organic solvents : insoluble Not applicable (inorganic substance)
<u>Partition coefficient: n-octanol/water</u>	
<u>Decomposition temperature</u>	no data available
<u>Viscosity</u>	<u>Viscosity, dynamic</u> : Not applicable, solid <u>Viscosity, kinematic</u> : Not applicable, solid
<u>Explosive properties</u>	Not explosive Method : EU Test Guideline A14
<u>Oxidizing properties</u>	Method: EU Test Guideline A17 Not considered as oxidizing
9.2 Other information	
<u>Surface tension</u>	Not applicable insoluble product

SECTION 10: Stability and reactivity

10.1 Reactivity

- no data available

10.2 Chemical stability

- Stable under normal conditions.

10.3 Possibility of hazardous reactions

- Hazardous polymerisation does not occur.
- Difficult to dissolve in acids. Carry out with caution (consult us).

10.4 Conditions to avoid

- No dangerous reaction known under conditions of normal use.
- Avoid dust formation.

10.5 Incompatible materials

- No dangerous reaction known with common products.
- Strong acids

10.6 Hazardous decomposition products

- No hazardous decomposition products are known.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Acute oral toxicity

LD50 Oral : > 2,000 mg/kg - Rat , female
 Method: OECD Test Guideline 423
 Not classified as hazardous for acute oral toxicity according to GHS.
 No mortality observed at this dose.
 No effect observed at this dose or concentration
 Unpublished internal reports

LD50 : > 5,000 mg/kg - Rat

Acute inhalation toxicity

By analogy

LC50 - 4 h > 5.05 mg/l - Rat , male and female
 Method: OECD Test Guideline 403
 Not classified as hazardous for acute inhalation toxicity according to GHS.
 No mortality observed at this concentration.
 No effect observed at this dose or concentration
 Unpublished internal reports

Acute dermal toxicity

By analogy

LD50 > 2,000 mg/kg - Rat , male and female
 Method: OECD Test Guideline 402
 Not classified as hazardous for acute dermal toxicity according to GHS.
 No mortality observed at this dose.
 No effect observed at this dose or concentration
 Unpublished internal reports

Acute toxicity (other routes of administration)

no data available

Skin corrosion/irritation

Rabbit
 No skin irritation
 Method: according to a standardised method

Not classified as irritating to skin
 Unpublished internal reports

<u>Serious eye damage/eye irritation</u>	<p>By analogy</p> <p>Rabbit No eye irritation Method: according to a standardised method</p> <p>Not classified as irritating to eyes Unpublished internal reports Published data</p>
<u>Respiratory or skin sensitisation</u>	<p>Magnusson and Kligman method - Guinea pig Does not cause skin sensitisation. Method: OECD Test Guideline 406 Unpublished internal reports</p>
<u>Mutagenicity</u>	
Genotoxicity in vitro	<p>Mutagenicity (Salmonella typhimurium - reverse mutation assay) with and without metabolic activation negative Method: OECD Test Guideline 471 Unpublished internal reports</p> <p>By analogy</p> <p>In vitro gene mutation study in mammalian cells Strain: Chinese hamster fibroblasts with and without metabolic activation negative Method: OECD Test Guideline 476 Unpublished internal reports</p>
Genotoxicity in vivo	<p>By analogy</p> <p>In vivo micronucleus test - Mouse male and female Oral Method: OECD Test Guideline 474 negative Gavage Unpublished internal reports</p>
<u>Carcinogenicity</u>	no data available
<u>Toxicity for reproduction and development</u>	
Toxicity to reproduction/Fertility	<p>By analogy The product is not considered to affect fertility. Unpublished internal reports Published data</p>
Developmental Toxicity/Teratogenicity	<p>By analogy The product is not considered to be teratogenic. Unpublished internal reports Published data</p>

STOT**STOT - single exposure**

The substance or mixture is not classified as specific target organ toxicant, single exposure according to GHS criteria.

STOT - repeated exposure

The substance or mixture is not classified as specific target organ toxicant, repeated exposure according to GHS criteria.

By analogy

Oral - Rat , male and female
NOEL: 1000 mg/kg/day
Method: OECD Test Guideline 422
Gavage
No systemic toxicity observed.
Unpublished internal reports

By analogy

Inhalation (aerosol) 90 Days - Rat , male and female
NOAEC: 5 mg/m³
Method: OECD Test Guideline 413
No systemic toxicity observed.
Unpublished internal reports

Aspiration toxicity

Not applicable

SECTION 12: Ecological information**12.1 Toxicity****Aquatic Compartment****Acute toxicity to fish**

LL50 - 96 h : > 100 mg/l - Oncorhynchus mykiss (rainbow trout)
semi-static test
Test substance: At saturation in water
Method: OECD Test Guideline 203
No toxicity at the limit of solubility
Unpublished internal reports

NOEC - 96 h : > 100 mg/l - Brachydanio rerio (zebrafish)
According to the data on the components

Acute toxicity to daphnia and other aquatic invertebrates.	LL50 - 48 h : > 100 mg/l - Daphnia magna (Water flea) static test Test substance: At saturation in water Method: OECD Test Guideline 202 No toxicity at the limit of solubility Unpublished internal reports
Toxicity to aquatic plants	EL50 - 72 h : > 100 mg/l - Desmodemus subspicatus (green algae) static test End point: Growth rate Test substance: At saturation in water Method: OECD Test Guideline 201 No toxicity at the limit of solubility phosphate depletion of the test medium due to complexation with the test item Unpublished internal reports
Toxicity to microorganisms	By analogy NOEC - 3 h : >= 1,003.8 mg/l - activated sludge Respiration inhibition Method: OECD Test Guideline 209 Unpublished internal reports
Chronic toxicity to fish	no data available
Chronic toxicity to daphnia and other aquatic invertebrates.	By analogy No toxicity at the limit of solubility Unpublished internal reports
Chronic Toxicity to aquatic plants	The product itself has not been tested.
<u>Terrestrial Compartment</u>	
Toxicity to soil dwelling organisms	By analogy This product does not have any known adverse effect on the soil organisms tested. Unpublished internal reports
Toxicity to terrestrial plants	By analogy This product does not have any known adverse effects on the flora tested Unpublished internal reports
<u>M-Factor</u>	
Reaction Mass Of Cerium Dioxide And Lanthanum Fluoride And Lanthanum Oxide	(Not applicable)

12.2 Persistence and degradability**Abiotic degradation**

Stability in water Not applicable insoluble product,

Physical- and photo-chemical elimination no data available

Biodegradation

Biodegradability Not applicable (inorganic substance)

Degradability assessment Not applicable
inorganic

12.3 Bioaccumulative potential

Partition coefficient: n-octanol/water Not applicable
inorganic

Bioconcentration factor (BCF) By analogy
Not bioaccumulable.
Published data

12.4 Mobility in soil

Adsorption potential (Koc) Not applicable

Known distribution to environmental compartments Ultimate destination of the product : Soil
Ultimate destination of the product : Sediment

12.5 Results of PBT and vPvB assessment Not applicable (inorganic substance)

12.6 Other adverse effects no data available

Ecotoxicity assessment

Acute aquatic toxicity No toxicity at the limit of solubility

Chronic aquatic toxicity No toxicity at the limit of solubility

SECTION 13: Disposal considerations**13.1 Waste treatment methods****Product Disposal**

- Dispose of in accordance with local regulations.

Advice on cleaning and disposal of packaging

- Clean with cold water.
- Dispose of in accordance with local regulations.

SECTION 14: Transport information**ADR**

not regulated

RID

not regulated

IMDG

not regulated

IATA

not regulated

ADN/ADNR

not regulated

Note: The above regulatory prescriptions are those valid on the date of publication of this sheet. Given the possible evolution of transport regulations for hazardous materials, it would be advisable to check their validity with your sales office.

SECTION 15: Regulatory information**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture****Notification status**

Inventory Information	Status
United States TSCA Inventory	- Listed on Inventory
Canadian Domestic Substances List (DSL)	- Listed on Inventory
Australia Inventory of Chemical Substances (AICS)	- Listed on Inventory
Japan. CSCL - Inventory of Existing and New Chemical Substances	- Listed on Inventory
Korea. Korean Existing Chemicals Inventory (KECI)	- Listed on Inventory
China. Inventory of Existing Chemical Substances in China (IECSC)	- Listed on Inventory
Philippines Inventory of Chemicals and Chemical Substances (PICCS)	- One or more components not listed on inventory

15.2 Chemical safety assessment

- no data available

SECTION 16: Other information**Key or legend to abbreviations and acronyms used in the safety data sheet**

- TWA Long-term exposure limit (8-hour TWA reference period)

Further information

- Mixture in CLP Format

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of

its publication. Such information is only given as a guidance to help the user handle, use, process, store, transport, dispose and release the product in satisfactory safety conditions and is not to be considered as a warranty or quality specification. It should be used in conjunction with technical sheets but do not replace them. Thus, the information only relates to the designated specific product and may not be applicable if such product is used in combination with other materials or in any other manufacturing process, unless otherwise specifically indicated. It does not release the user from ensuring he is in conformity with all regulations linked to its activity.