

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

- Trade name CEROX® 1670 G
- 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 pulp, paper and paper products
- 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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**1.4 Emergency telephone number**

+44(0)1235 239 670 [CareChem 24]

**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**

- Slightly irritating to eyes.
- NO particular fire or explosion hazard.

**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.
- 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**

- no data available

**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****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/m3	
	General population	Dermal	Systemic effects	Long term	4,17 mg/kg bw/day	
		Inhalation	Systemic effects	Long term	1,5 mg/m3	
		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

**Melting point/freezing point**

Melting point/range: 2.600 °C

**Initial boiling point and boiling range**

no data available

<b><u>Flash point</u></b>	Not applicable mineral product
<b><u>Evaporation rate (Butylacetate = 1)</u></b>	Not applicable
<b><u>Flammability (solid, gas)</u></b>	no data available
<b><u>Flammability (liquids)</u></b>	no data available
<b><u>Flammability/Explosive limit</u></b>	<u>Lower flammability/explosion limit:</u> Not applicable, solid
	<u>Upper flammability/explosion limit:</u> Not applicable, solid
<b><u>Auto-ignition temperature</u></b>	no data available
<b><u>Vapour pressure</u></b>	Not applicable
<b><u>Vapour density</u></b>	Not applicable
<b><u>Density</u></b>	
<b><u>Relative density</u></b>	6,8 ( 25 °C)
<b><u>Solubility</u></b>	<u>Water solubility:</u> practically insoluble
	<u>Solubility in other solvents:</u> common organic solvents : insoluble
<b><u>Partition coefficient: n-octanol/water</u></b>	no data available
<b><u>Decomposition temperature</u></b>	no data available
<b><u>Viscosity</u></b>	<u>Viscosity, dynamic</u> : no data available, solid <u>Viscosity, kinematic</u> : Not applicable, solid
<b><u>Explosive properties</u></b>	no data available
<b><u>Oxidizing properties</u></b>	No information available.

**9.2 Other information**

no data available

**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**

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- 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**

Not classified as harmful if swallowed  
According to the data on the components  
According to the classification criteria for mixtures.  
Bibliography  
Unpublished internal reports

##### **Acute inhalation toxicity**

LC50 - 4 h 5,05 mg/l - Rat  
According to the data on the components

##### **Acute dermal toxicity**

LD50 > 2.000 mg/kg - Rabbit  
According to the data on the components

##### **Acute toxicity (other routes of administration)**

no data available

##### Skin corrosion/irritation

No skin irritation  
According to the data on the components  
Bibliography  
Unpublished internal reports

##### Serious eye damage/eye irritation

slight irritation  
Not classified as irritating to eyes  
According to the data on the components  
According to the classification criteria for mixtures.  
Bibliography  
Unpublished internal reports

##### Respiratory or skin sensitisation

Reaction Mass Of Cerium Dioxide And Lanthanum Fluoride And Lanthanum Oxide

Magnusson and Kligman method - Guinea pig  
Does not cause skin sensitisation.  
Method: OECD Test Guideline 406  
negative  
Unpublished internal reports



**Mutagenicity****Genotoxicity in vitro**

Reaction Mass Of Cerium Dioxide And Lanthanum Fluoride And Lanthanum Oxide

Mutagenicity (Salmonella typhimurium - reverse mutation assay) with and without metabolic activation

negative  
Method: OECD Test Guideline 471  
Unpublished internal reports

By analogy

In vitro gene mutation study in mammalian cells  
Strain: Chinese hamster fibroblasts  
with and without metabolic activationnegative  
Method: OECD Test Guideline 476  
Unpublished internal reports**Genotoxicity in vivo**

Reaction Mass Of Cerium Dioxide And Lanthanum Fluoride And Lanthanum Oxide

By analogy

In vivo micronucleus test - Mouse  
male and female  
Oral  
Method: OECD Test Guideline 474negative  
Gavage  
Unpublished internal reports**Carcinogenicity**

no data available

**Toxicity for reproduction and development****Toxicity to reproduction/Fertility**

Reaction Mass Of Cerium Dioxide And Lanthanum Fluoride And Lanthanum Oxide

By analogy  
The product is not considered to affect fertility.  
Unpublished internal reports  
Published data**Developmental Toxicity/Teratogenicity**

Reaction Mass Of Cerium Dioxide And Lanthanum Fluoride And Lanthanum Oxide

By analogy  
The product is not considered to be teratogenic.  
Unpublished internal reports  
Published data**STOT****STOT - single exposure**Exposure routes: Ingestion  
The substance or mixture is not classified as specific target organ toxicant, single exposure according to GHS criteria.**STOT - repeated exposure**

Reaction Mass Of Cerium Dioxide And Lanthanum Fluoride And Lanthanum Oxide

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

Reaction Mass Of Cerium Dioxide And

By analogy

Lanthanum Fluoride And Lanthanum Oxide

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

By analogy

Inhalation (aerosol) 90 Days - Rat , male and female  
 NOAEC: 5 mg/m<sup>3</sup>  
 Method: OECD Test Guideline 413  
 Repeated exposure  
 No systemic toxicity observed.  
 Unpublished internal reports

**Aspiration toxicity**

no data available

**SECTION 12: Ecological information**

**12.1 Toxicity**

**Aquatic Compartment**

**Acute toxicity to fish**

Reaction Mass Of Cerium Dioxide And Lanthanum Fluoride And Lanthanum Oxide LL50 - 96 h : > 100 mg/l - Oncorhynchus mykiss (rainbow trout)  
 Method: OECD Test Guideline 203  
 Unpublished internal reports

**Acute toxicity to daphnia and other aquatic invertebrates.**

Reaction Mass Of Cerium Dioxide And Lanthanum Fluoride And Lanthanum Oxide LL50 - 48 h : > 100 mg/l - Daphnia magna (Water flea)  
 Method: OECD Test Guideline 202  
 Unpublished internal reports

**Toxicity to aquatic plants**

Reaction Mass Of Cerium Dioxide And Lanthanum Fluoride And Lanthanum Oxide EL50 - 72 h : > 100 mg/l - Desmodesmus subspicatus (green algae)  
 Method: OECD Test Guideline 201  
 Growth rate  
 Unpublished internal reports

**Toxicity to microorganisms**

Reaction Mass Of Cerium Dioxide And Lanthanum Fluoride And Lanthanum Oxide 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.**

Reaction Mass Of Cerium Dioxide And Lanthanum Fluoride And Lanthanum Oxide

By analogy

- Daphnia magna (Water flea)  
Reproduction Test  
Method: OECD Test Guideline 211  
Does not have any known long-term adverse effects on the aquatic organisms tested  
Unpublished internal reports

**Chronic Toxicity to aquatic plants**

no data available

**Terrestrial Compartment****Toxicity to soil dwelling organisms**

Reaction Mass Of Cerium Dioxide And Lanthanum Fluoride And Lanthanum Oxide

By analogy

NOEC:  $\geq 1.000$  mg/kg - 14 Days - Eisenia fetida (earthworms) mortality  
Method: OECD Test Guideline 207  
Unpublished internal reports

By analogy

NOEC:  $\geq 1.000$  mg/kg - 28 d - soil micro-organisms  
Respiration inhibition  
Method: OECD Test Guideline 217  
Unpublished internal reports

**Toxicity to terrestrial plants**

Reaction Mass Of Cerium Dioxide And Lanthanum Fluoride And Lanthanum Oxide

By analogy

- Avena sativa (oats)  
  
- Lactuca sativa (lettuce)  
  
- Brassica rapa

NOEC:  $\geq 1.000$  mg/l - 17 Days  
Method: OECD Test Guideline 208  
Unpublished internal reports

**M-Factor**

Reaction Mass Of Cerium Dioxide And Lanthanum Fluoride And Lanthanum Oxide

( Not applicable )

**12.2 Persistence and degradability****Abiotic degradation****Stability in water**

Reaction Mass Of Cerium Dioxide And Lanthanum Fluoride And Lanthanum Oxide

Not applicable insoluble product,

**Physical- and photo-chemical elimination** no data available

**Biodegradation**

**Biodegradability** Not applicable mineral product

**12.3 Bioaccumulative potential**

**Partition coefficient: n-octanol/water** no data available

**Bioconcentration factor (BCF)**

Reaction Mass Of Cerium Dioxide And Lanthanum Fluoride And Lanthanum Oxide By analogy  
Not bioaccumulable.  
Published data

**12.4 Mobility in soil**

**Adsorption potential (Koc)**

Reaction Mass Of Cerium Dioxide And Lanthanum Fluoride And Lanthanum Oxide 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**

Reaction Mass Of Cerium Dioxide And Lanthanum Fluoride And Lanthanum Oxide Not applicable (inorganic substance)

**12.6 Other adverse effects** no data available

**Ecotoxicity assessment**

**Acute aquatic toxicity**

According to the data on the components  
The product does not have any known adverse effects on the aquatic organisms tested  
Unpublished internal reports

**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**

NB: In this document the numerical separator of the thousands is the "." (point), the decimal separator is "," (comma).

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.