# SIGMA-ALDRICH

## SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 Version 5.2 Revision Date 22.11.2016 Print Date 26.05.2017 GENERIC EU MSDS - NO COUNTRY SPECIFIC DATA - NO OEL DATA

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1	Product identifiers Product name	:	Chromium(III) oxide, ultra dry	
	Product Number Brand REACH No. CAS-No.	: :	769533 Aldrich A registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline. 1308-38-9	
4.0				
1.2	2 Relevant identified uses of the substance or mixture and uses advised against			
	Identified uses	:	Laboratory chemicals, Manufacture of substances	
1.3	1.3 Details of the supplier of the safety data sheet			
	Company	:		
1.4	Emergency telephone number			
	Emergency Phone #			

## **SECTION 2: Hazards identification**

## 2.1 Classification of the substance or mixture

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

## 2.2 Label elements

#### Labelling according Regulation (EC) No 1272/2008

Pictogram	none
Signal word	none
Hazard statement(s)	none
Precautionary statement(s)	none
Supplemental Hazard Statements	none

Safety data sheet available on request.

## 2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

#### **SECTION 3: Composition/information on ingredients**

#### 3.1 Substances Formula

: Cr2O3

Molecular weight	:	151,99 g/mol
CAS-No.	:	1308-38-9
EC-No.	:	215-160-9

#### Hazardous ingredients according to Regulation (EC) No 1272/2008

Component		Classification	Concentration	
Chromium (III) oxide				
CAS-No. EC-No.	1308-38-9 215-160-9		<= 100 %	

## **SECTION 4: First aid measures**

#### 4.1 Description of first aid measures

#### **General advice**

Consult a physician. Show this safety data sheet to the doctor in attendance.

#### If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

#### In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

#### In case of eye contact

Flush eyes with water as a precaution.

#### If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

## 4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

**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

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture No data available

## **5.3** Advice for firefighters Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further information No data available

## **SECTION 6: Accidental release measures**

6.1 Personal precautions, protective equipment and emergency procedures Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Avoid breathing dust. For personal protection see section 8.

## 6.2 Environmental precautions Do not let product enter drains.

## 6.3 Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For disposal see section 13.

## SECTION 7: Handling and storage

## 7.1 Precautions for safe handling

Provide appropriate exhaust ventilation at places where dust is formed. For precautions see section 2.2.

**7.2** Conditions for safe storage, including any incompatibilities Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

Handle and store under inert gas. Hygroscopic.

#### 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## **SECTION 8: Exposure controls/personal protection**

## 8.1 Control parameters

Components with workplace control parameters

#### 8.2 Exposure controls

#### Appropriate engineering controls

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

## Personal protective equipment

#### Eye/face protection

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

#### **Skin protection**

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

#### **Body Protection**

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

#### **Respiratory protection**

Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

### Control of environmental exposure

Do not let product enter drains.

## **SECTION 9: Physical and chemical properties**

## 9.1 Information on basic physical and chemical properties

- a) Appearance Form: powder
  - Colour: green

c)	Odour Threshold	No data available
d)	рН	No data available
e)	Melting point/freezing point	Melting point/freezing point: 2.435 °C
f)	Initial boiling point and boiling range	4.000 °C
g)	Flash point	Not applicable
h)	Evaporation rate	No data available
i)	Flammability (solid, gas)	No data available
j)	Upper/lower flammability or explosive limits	No data available
k)	Vapour pressure	No data available
I)	Vapour density	No data available
m)	Relative density	5,210 g/cm3 at 25 °C
n)	Water solubility	insoluble
o)	Partition coefficient: n- octanol/water	No data available
p)	Auto-ignition temperature	No data available
q)	Decomposition temperature	No data available
r)	Viscosity	No data available
s)	Explosive properties	No data available
t)	Oxidizing properties	No data available
Oth	er safety information	
	Bulk density	ca.800 kg/m3

## **SECTION 10: Stability and reactivity**

10.1 Reactivity No data available

9.2

- **10.2 Chemical stability** Stable under recommended storage conditions.
- **10.3 Possibility of hazardous reactions** No data available
- **10.4** Conditions to avoid Avoid moisture.
- **10.5** Incompatible materials Strong oxidizing agents
- Hazardous decomposition products
   Hazardous decomposition products formed under fire conditions. Chromium oxides
   Other decomposition products No data available
   In the event of fire: see section 5

## **SECTION 11: Toxicological information**

#### 11.1 Information on toxicological effects

#### Acute toxicity

LD50 Oral - Rat - male - > 15.000 mg/kg (OECD Test Guideline 401)

LC50 Inhalation - Rat - male and female - 4 h - > 5,41 mg/l (OECD Test Guideline 403)

#### Skin corrosion/irritation

Skin - Rabbit Result: Mild skin irritation

#### Serious eye damage/eye irritation

Eyes - Rabbit Result: Mild eye irritation

#### **Respiratory or skin sensitisation** No data available

#### Germ cell mutagenicity

OECD Test Guideline 474 Mouse - male and female Result: negative

#### Carcinogenicity

This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP, or EPA classification.

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

#### Reproductive toxicity

No data available

Specific target organ toxicity - single exposure No data available

#### Specific target organ toxicity - repeated exposure No data available

Aspiration hazard No data available

#### Additional Information

Repeated dose Rat - male and female - NOAEL : 2.000 mg/kg toxicity RTECS: GB6475000

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

#### **SECTION 12: Ecological information**

#### 12.1 Toxicity

Toxicity to fish static test LC50 - Danio rerio (zebra fish) - > 10.000 mg/l - 96 h

#### **12.2 Persistence and degradability** No data available

**12.3 Bioaccumulative potential** No data available

## 12.4 Mobility in soil

No data available

## 12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

#### 12.6 Other adverse effects

No data available

#### **SECTION 13: Disposal considerations**

#### 13.1 Waste treatment methods

#### Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

#### **Contaminated packaging**

Dispose of as unused product.

SECTION 14: Transport information				
14.1	<b>UN number</b> ADR/RID: -	IMDG: -	IATA: -	
14.2	UN proper shipping nameADR/RID:Not dangerous goodsIMDG:Not dangerous goodsIATA:Not dangerous goods			
14.3	Transport hazard class(es) ADR/RID: -	IMDG: -	IATA: -	
14.4	Packaging group ADR/RID: -	IMDG: -	IATA: -	
14.5	Environmental hazards ADR/RID: no	IMDG Marine pollutant: no	IATA: no	
14.6	Special precautions for user No data available			
SECT	CION 15: Pogulatory information			

#### **SECTION 15: Regulatory information**

**15.1** Safety, health and environmental regulations/legislation specific for the substance or mixture This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

## **15.2 Chemical safety assessment** For this product a chemical safety assessment was not carried out

## **SECTION 16: Other information**

#### Further information

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The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigmaaldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.