# ZIRCONIUM DIOXIDE AR MSDS

CAS No: 1314-23-4 MSDS



# **MATERIAL SAFETY DATA SHEET (MSDS)**

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

1.1. Product identifier

Product form : Substance

:

CAS No : 1314-23-4
Product code : 06566

Chemical structure

ZrO<sub>2</sub>

Synonyms : Zirconia

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

#### 1.2.1. Relevant identified uses

Use of the substance/mixture : Laboratory chemicals, Manufacture of substances

#### 1.2.2. Uses advised against

No additional information available

#### 1.3. Details of the supplier of the safety data sheet

Labogens Fine Chem Industries
1st Floor , Above Bank of India, Guru Vihar , Rahon Road,
Ludhiana Pb. (141007)
+91 9316777775, +91 7707855700
sales@labogens.com - www.Labogens.com

#### 1.4. Emergency telephone number

Emergency number : +91 7707855700 (9:00am - 6:00 pm)

### **SECTION 2: Hazards identification**

#### 2.1. Classification of the substance or mixture

#### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Serious eye damage/eye irritation, Category 2
Skin corrosion/irritation, H315
Category 2
Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation

Full text of classification categories and H statements : see section 16

www.Labogens.com 04/10/2016 1/8

# Safety Data Sheet

#### Classification according to Directive 67/548/EEC or 1999/45/EC

Xi; R36/37/38

Full text of R-phrases: see section 16

#### Adverse physicochemical, human health and environmental effects

No additional information available

#### 2.2. Label elements

### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :

GHS07

Signal word (CLP) : Warning

Hazard statements (CLP) : H315 - Causes skin irritation

H319 - Causes serious eye irritation H335 - May cause respiratory irritation

Precautionary statements (CLP) : P261 - Avoid breathing dust/fume/gas/mist/vapours/spray

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing

#### 2.3. Other hazards

No additional information available

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

# 3.1. Substance

Name : ZIRCONIUM DIOXIDE AR

CAS No : 1314-23-4

Full text of R- and H-phrases: see section 16

#### 3.2. Mixture

Not applicable

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

## 4.1. Description of first aid measures

First-aid measures after inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing.

Call a POISON CENTER or doctor/physician if you feel unwell.

First-aid measures after skin contact : Wash with plenty of soap and water. Get medical advice/attention.

www.Labogens.com 04/10/2016 2/8

# Safety Data Sheet

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present

and easy to do. Continue rinsing. Get medical advice/attention.

First-aid measures after ingestion : Rinse mouth. Do not induce vomiting.

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

Symptoms/injuries after inhalation : May cause respiratory irritation.

Symptoms/injuries after skin contact : Causes skin irritation.

Symptoms/injuries after eye contact : Causes serious eye irritation.

### 4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

#### **SECTION 5: Firefighting measures**

#### 5.1. Extinguishing media

Suitable extinguishing media : Carbon dioxide. Dry powder. Foam. Water spray.

Unsuitable extinguishing media : Do not use a heavy water stream.

#### 5.2. Special hazards arising from the substance or mixture

No additional information available

#### 5.3. Advice for firefighters

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory

protection.

#### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

#### 6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Use personal protective equipment as required.

# 6.2. Environmental precautions

Avoid release to the environment.

#### 6.3. Methods and material for containment and cleaning up

Methods for cleaning up : On land, sweep or shovel into suitable containers. Minimize generation of dust.

#### 6.4. Reference to other sections

No additional information available

### **SECTION 7: Handling and storage**

# 7.1. Precautions for safe handling

Precautions for safe handling : Avoid contact with skin and eyes. Avoid dust formation. Provide good ventilation in

process area to prevent formation of vapour.

Hygiene measures : Wash hands and other exposed areas with mild soap and water before eating,

drinking or smoking and when leaving work.

# 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep container tightly closed. Store in a well-ventilated place. Store in original

container. Store in a dry place.

# 7.3. Specific end use(s)

No additional information available

www.Labogens.com 04/10/2016 3/8

# Safety Data Sheet

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

#### 8.1. Control parameters

No additional information available

### 8.2. Exposure controls

Hand protection : protective gloves

Eye protection : Chemical goggles or safety glasses

Skin and body protection : Wear suitable protective clothing

Respiratory protection : Wear respiratory protection

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

# 9.1. Information on basic physical and chemical properties

Physical state : Solid

Molecular mass : 123.22 g/mol Colour : White powder.

Odour : odourless.

Odour threshold : No data available

pH : No data available

Relative evaporation rate (butylacetate=1) : No data available

Melting point : > 2600 °C

Freezing point : No data available

Boiling point : 4300 °C

Flash point : No data available

Auto-ignition temperature : No data available

Decomposition temperature : No data available

Flammability (solid, gas) : No data available

Vapour pressure : No data available

Relative vapour density at 20  $^{\circ}\text{C}$  : No data available

Relative density : No data available

Density : 5.85 g/cm<sup>3</sup>

Solubility : Water: Insoluble in water

Log Pow : No data available

Viscosity, kinematic : No data available

Viscosity, dynamic : No data available

www.Labogens.com 04/10/2016 4/8

# Safety Data Sheet

Explosive properties : No data available

Oxidising properties : No data available

Explosive limits : No data available

# 9.2. Other information

No additional information available

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

### 10.1. Reactivity

No additional information available

#### 10.2. Chemical stability

Stable under normal conditions.

## 10.3. Possibility of hazardous reactions

No additional information available

#### 10.4. Conditions to avoid

Direct sunlight. Air contact. Moisture.

#### 10.5. Incompatible materials

No additional information available

# 10.6. Hazardous decomposition products

No additional information available

# **SECTION 11: Toxicological information**

### 11.1. Information on toxicological effects

Acute toxicity : Not classified

Skin corrosion/irritation : Causes skin irritation.

Serious eye damage/irritation : Causes serious eye irritation.

Respiratory or skin sensitisation : Not classified Germ cell mutagenicity : Not classified Carcinogenicity : Not classified

Reproductive toxicity : Not classified

Specific target organ toxicity (single : May cause respiratory irritation.

exposure)

Specific target organ toxicity (repeated

exposure)

: Not classified

Aspiration hazard : Not classified

www.Labogens.com 04/10/2016 5/8

# Safety Data Sheet

# **SECTION 12: Ecological information**

#### 12.1. Toxicity

No additional information available

#### 12.2. Persistence and degradability

No additional information available

### 12.3. Bioaccumulative potential

No additional information available

#### 12.4. Mobility in soil

No additional information available

### 12.5. Results of PBT and vPvB assessment

No additional information available

### 12.6. Other adverse effects

No additional information available

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

#### 13.1. Waste treatment methods

No additional information available

# **SECTION 14: Transport information**

In accordance with ADR / RID / IMDG / IATA / ADN

#### 14.1. UN number

UN-No. (ADR) : Not applicable
UN-No. (IMDG) : Not applicable
UN-No.(IATA) : Not applicable
UN-No.(ADN) : Not applicable
UN-No. (RID) : Not applicable

# 14.2. UN proper shipping name

Proper Shipping Name (ADR) : Not applicable
Proper Shipping Name (IMDG) : Not applicable
Proper Shipping Name (IATA) : Not applicable
Proper Shipping Name (ADN) : Not applicable
Proper Shipping Name (RID) : Not applicable

# 14.3. Transport hazard class(es)

#### **ADR**

Transport hazard class(es) (ADR) : Not applicable

# IMDG

Transport hazard class(es) (IMDG) : Not applicable

www.Labogens.com 04/10/2016 6/8

# Safety Data Sheet

**IATA** 

Transport hazard class(es) (IATA) : Not applicable

**ADN** 

Transport hazard class(es) (ADN) : Not applicable

**RID** 

Transport hazard class(es) (RID) : Not applicable

14.4. Packing group

Packing group (ADR) : Not applicable
Packing group (IMDG) : Not applicable
Packing group (IATA) : Not applicable
Packing group (ADN) : Not applicable
Packing group (RID) : Not applicable

14.5. Environmental hazards

Dangerous for the environment : No Marine pollutant : No

Other information : No supplementary information available

#### 14.6. Special precautions for user

#### - Overland transport

No data available

# - Transport by sea

No data available

### - Air transport

No data available

### - Inland waterway transport

No data available

# - Rail transport

No data available

### 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

### SECTION 15: Regulatory information

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

### 15.1.1. EU-Regulations

No REACH Annex XVII restrictions

ZIRCONIUM DIOXIDE AR is not on the REACH Candidate List ZIRCONIUM DIOXIDE AR is not on the REACH Annex XIV List

#### 15.1.2. National regulations

www.Labogens.com 04/10/2016 7/8

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#### Germany

AwSV/VwVwS Annex reference : Water hazard class (WGK) nwg, non-hazardous to water (Classification according to

VwVwS, Annex 3; WGK No 2894)

12th Ordinance Implementing the Federal

Immission Control Act - 12.BImSchV

: Is not subject of the 12. BlmSchV (Hazardous Incident Ordinance)

#### Denmark

Recommendations Danish Regulation : Young people below the age of 18 years are not allowed to use the product

### 15.2. Chemical safety assessment

No additional information available

### **SECTION 16: Other information**

#### Full text of R-, H- and EUH-phrases:

Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H315	Causes skin irritation
H319	Causes serious eye irritation
H335	May cause respiratory irritation
R36/37/38	Irritating to eyes, respiratory system and skin
Xi	Irritant

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product

www.Labogens.com 04/10/2016 8/8