

# Otto Chemie Pvt Ltd

An ISO 9001 : 2015 & GMP Certified Company  
101, Aarkay Ruby Industrial Estate (1B), Opp Shree Narayan Industrial Estate,  
Chinchpada, Vasai East, Waliv, Maharashtra 401208. Tel : + 91 98200 41841  
Email : [info@ottokemi.com](mailto:info@ottokemi.com) Web : [www.ottokemi.com](http://www.ottokemi.com)

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## MATERIAL SAFETY DATA SHEET (MSDS)

### SECTION 1. Product identifiers

Product name: Zirconium oxide spheres, 10 mm dia  
Product Code: ZB 110  
CAS No: 1314-23-4

1.2. Relevant identified uses of the substance or mixture and uses advised against  
Use: Industrial. For professional use only.

1.3. Details of the supplier of the safety data sheet

Company identification

OTTO CHEMIE PVT LTD

101, Aarkay Ruby Industrial Estate(1B), Opp Shree Narayan Industrial Estate,  
Chinchpada, Vasai East, Waliv, Maharashtra 401208.

Email [info@ottokemi.com](mailto:info@ottokemi.com)

1.4. Emergency telephone number

Phone no. : + 91 22 2207 0099 (9:00am - 6:00 pm).

### 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

No hazard pictogram, no signal word, no hazard statement(s), no precautionary statement(s) required.

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.

Ecological information:

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Toxicological information:

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

### SECTION 3: Composition/information on ingredients

3.1 Substances

|                  |                     |
|------------------|---------------------|
| Synonyms         | : Zirconia          |
| Formula          | : O <sub>2</sub> Zr |
| Molecular weight | : 123,22 g/mol      |
| CAS-No.          | : 1314-23-4         |
| EC-No.           | : 215-227-2         |

No components need to be disclosed according to the applicable regulations.

### SECTION 4: First aid measures

4.1 Description of first aid measures

If inhaled

After inhalation: fresh air.

In case of skin contact

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower.

In case of eye contact

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After eye contact: rinse out with plenty of water. Remove contact lenses.

If swallowed

After swallowing: make victim drink water (two glasses at most). Consult doctor if feeling unwell.

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 extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given.

5.2 Special hazards arising from the substance or mixture

Zirconium oxides

Not combustible.

Ambient fire may liberate hazardous vapours.

5.3 Advice for firefighters

In the event of fire, wear self-contained breathing apparatus.

5.4 Further information

None

## SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Avoid inhalation of dusts. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert.

For personal protection see section 8.

6.2 Environmental precautions

No special precautionary measures necessary.

6.3 Methods and materials for containment and cleaning up

Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

6.4 Reference to other sections

For disposal see section 13.

## SECTION 7: Handling and storage

7.1 Precautions for safe handling

For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

Tightly closed. Dry.

Storage class

Storage class (TRGS 510): 13: Non Combustible Solids

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

Ingredients with workplace control parameters

8.2 Exposure controls

Personal protective equipment

Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses

Skin protection

This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN 16523-1 please

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contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell,  
Internet: [www.kcl.de](http://www.kcl.de)).

Full contact

Material: Nitrile rubber

Minimum layer thickness: 0,11 mm

Break through time: 480 min

Material tested: KCL 741 Dermatril® L

Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0,11 mm

Break through time: 480 min

Material tested: KCL 741 Dermatril® L

Respiratory protection

required when dusts are generated.

Our recommendations on filtering respiratory protection are based on the following  
standards: DIN EN 143, DIN 14387 and other accompanying standards relating to  
the used respiratory protection system.

Recommended Filter type: Filter type P2

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory  
protective devices are carried out according to the instructions of the producer.

These measures have to be properly documented.

Control of environmental exposure

No special precautionary measures necessary.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

a) Physical state

b) Color

c) Odor

d) Melting

point/freezing point

e) Initial boiling point

and boiling range

f) Flammability (solid,  
gas)

g) Upper/lower

flammability or  
explosive limits

h) Flash point

i) Autoignition

temperature

j) Decomposition

temperature

k) pH

l) Viscosity

m) Water solubility

n) Partition coefficient:

n-octanol/water

o) Vapor pressure

p) Density

Relative density

q) Relative vapour

density

r) Particle

characteristics

s) Explosive properties

t) Oxidizing properties

9.2 Other safety information

No data available

Balls

white

No data available

Melting point/ range: 2.700 °C - lit.

5.000 °C - lit.

The product is not flammable.

No data available

Not applicable

No data available

No data available

No data available

Viscosity, kinematic: No data available

Viscosity, dynamic: No data available

0,00006 g/l at 20 °C - OECD Test Guideline 105

No data available

No data available

5,89 g/mL at 25 °C - lit.

5,77 at 20 °C - OECD Test Guideline 109

No data available

Not classified as explosive.

none

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## SECTION 10: Stability and reactivity

### 10.1 Reactivity

No data available

### 10.2 Chemical stability

The product is chemically stable under standard ambient conditions (room temperature) .

### 10.3 Possibility of hazardous reactions

No data available

### 10.4 Conditions to avoid

no information available

### 10.5 Incompatible materials

Strong acids

### 10.6 Hazardous decomposition products

In the event of fire: see section 5

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

Routes of Entry: Absorbed through skin. Dermal contact. Eye contact. Toxicity to Animals:

Oral LD50 Rat: 1500 mg/kg; Dermal LD50 Rabbit: 2000mg/kg

Inhalation LC50 Rat: > 50mg/L.

Chronic Effects on Humans: CARCINOGENIC EFFECTS: Classified None. by NTP, None. by OSHA, None. by NIOSH.

Other Toxic Effects on Humans: Hazardous in case of skin contact (irritant), of inhalation (lung irritant).

Special Remarks on Toxicity

to Animals: Not available.

Special Remarks on Chronic Effects on Humans: Not available.

Special Remarks on other Toxic Effects on Humans: Not available.

## SECTION 12: Ecological information

### 12.1 Toxicity

Toxicity to fish static test - Danio rerio (zebra fish) - > 100 mg/l - 96 h

(OECD Test Guideline 203)

Toxicity to daphnia static test EC50 - Daphnia magna (Water flea) - > 100 mg/l - 48 h

and other aquatic

invertebrates

(Regulation (EC) No. 440/2008, Annex, C.2)

### 12.2 Persistence and degradability

The methods for determining the biological degradability are not applicable to inorganic substances.

### 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 Endocrine disrupting properties

Product:

Assessment

: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

### 12.7 Other adverse effects

No data available

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

No data available

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## SECTION 14: Transport information

|                                                                      |                           |          |
|----------------------------------------------------------------------|---------------------------|----------|
| 14.1 UN number                                                       |                           |          |
| ADR/RID: -                                                           | IMDG: -                   | IATA: -  |
| 14.2 UN proper shipping name                                         |                           |          |
| ADR/RID: Not dangerous goods                                         |                           |          |
| IMDG: Not dangerous goods                                            |                           |          |
| IATA: 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                                                    |                           |          |
| Further information                                                  |                           |          |
| Not classified as dangerous in the meaning of transport regulations. |                           |          |
| 14.7 Maritime transport in bulk according to IMO instruments         |                           |          |
| Not applicable for product as supplied.                              |                           |          |

## SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture  
This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.  
Authorisations and/or restrictions on use  
15.2 Chemical safety assessment  
For this product a chemical safety assessment was not carried out

## SECTION 16: Other Information

This safety data sheet should be used in conjunction with technical sheets. It does not replace them. The information given is based on our knowledge of this product, at the time of publication. It is given in good faith. The attention of the user is drawn to the possible risks incurred by using the product for any other purpose other than that for which it was intended. This does not in any way excuse the user from knowing and applying all the regulations governing his activity. It is the sole responsibility of the user to take all precautions required in handling the product. The aim of the mandatory regulations mentioned is to help the user to fulfill his obligations regarding the use of hazardous products.

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