## 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 Web: www.ottokemi.com

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

**SECTION 1. Product identifiers** 

Product name: Lead monoxide, puriss, ≥99%

Product Code: L 1386 CAS No: 1317-36-8

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

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

Acute toxicity, (Category 4) Acute toxicity, (Category 4) Carcinogenicity, (Category 2) Reproductive toxicity, (Category

Effects on or via lactation

Specific target organ toxicity repeated exposure, (Category 1), Central nervous system. Kidney.

Blood

Short-term (acute) aquatic

hazard, (Category 1) Long-term (chronic) aquatic

hazard, (Category 1)

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008

Pictogram Signal Word Hazard Statements H302 + H332 H351 H360Df H362 H372

H410

**Precautionary Statements** 

P260 P263 P273 P301 + P312

P304 + P340 + P312

P308 + P313 Supplemental Hazard

Statements

H302: Harmful if swallowed. H332: Harmful if inhaled.

H351: Suspected of causing cancer. H360Df: May damage the unborn child. Suspected of damaging fertility. H362: May cause harm to breast-fed children.

- H372: Causes damage to organs through prolonged or repeated exposure.

H400: Very toxic to aquatic life.

H410: Very toxic to aquatic life with long lasting effects.

## Danger

Harmful if swallowed or if inhaled. Suspected of causing cancer.

May damage the unborn child. Suspected of damaging fertility.

May cause harm to breast-fed children.

Causes damage to organs (Central nervous system, Kidney,

Blood) through prolonged or repeated exposure. Very toxic to aquatic life with long lasting effects.

Do not breathe dust.

Avoid contact during pregnancy and while nursing.

Avoid release to the environment.

IF SWALLOWED: Call a POISON CENTER/ doctor if you feel

unwell.

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell.

IF exposed or concerned: Get medical advice/ attention.

none

### DISCI AIMER

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Danger

exposure.

Do not breathe dust.

Restricted to professional users.

"As from 24 August 2023 adequate training is required before

Causes damage to organs through prolonged or repeated

IF exposed or concerned: Get medical advice/ attention.

May damage the unborn child. Suspected of damaging fertility.

industrial or professional use."

Suspected of causing cancer.

May cause harm to breast-fed children.

Reduced Labeling (<= 125 ml)

Pictogram

Signal Word

**Hazard Statements** 

H351 H362

H372

H360Df

**Precautionary Statements** 

P260

P308 + P313

Supplemental Hazard

Statements

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

Formula : OPb

Molecular weight : 223,20 g/mol CAS-No. : 1317-36-8 EC-No. : 215-267-0

Component	Classification	Concentration
lead(II) oxide Included in the Candidate List of Substances of Very High Concern (SVHC) according to Regulation (EC) No. 1907/2006 (REACH)		
CAS-No. 1317-36-8 EC-No. 215-267-0	Acute Tox. 4; Carc. 2; Repr. 1A; Lact.; STOT RE 1; Aquatic Acute 1; Aquatic Chronic 1; H302, H332, H351, H360Df, H362, H372, H400, H410 Concentration limits: >= 2,5 %: Repr. 2, H361f; >= 0,5 %: STOT RE 2, H373; M-Factor - Aquatic Acute: 10 - Aquatic Chronic: 1	<= 100 %

For the full text of the H-Statements mentioned in this Section, see Section 16.

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

4.1 Description of first-aid measures

General advice

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

If inhaled

After inhalation: fresh air. Immediately call in physician. If breathing stops: immediately

apply artificial respiration, if necessary also oxygen.

In case of skin contact

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

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water/ shower. Consult a physician.

In case of eye contact

After eye contact: rinse out with plenty of water. Call in ophthalmologist. Remove contact

lenses. If swallowed

After swallowing: immediately make victim drink water (two glasses at most). 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 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

Lead oxides

Not combustible.

Ambient fire may liberate hazardous vapours.

5.3 Advice for firefighters

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

5.4 Further information

Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

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

6.1 Personal precautions, protective equipment and emergency procedures Advice for non-emergency personnel: Avoid generation and inhalation of dusts in all circumstances. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert.

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

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up carefully. 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

Advice on safe handling

Work under hood. Do not inhale substance/mixture.

Hygiene measures

Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

Tightly closed. Dry. Keep in a well-ventilated place. Keep locked up or in an area accessible only to qualified or authorized persons.

Storage class

Storage class (TRGS 510): 6.1D: Non-combustible, acute toxic Cat.3 / toxic hazardous materials or hazardous materials causing chronic effects

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#### 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 contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: 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

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 contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell,

Internet: www.kcl.de). Splash contact Material: Nitrile rubber

Minimum layer thickness: 0,11 mm Break through time: 480 min Material tested:KCL 741 Dermatril® L

Body Protection protective clothing 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 P3

The entrepeneur 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 Do not let product enter drains.

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

9.1 Information on basic physical and chemical properties

a) Physical state powder b) Color yellowlight yellow

c) Odor odorless
d) Melting Melting point/ range: 886 °C - lit.

point/freezing point
e) Initial boiling point
> 600 °C at ca.1.013 hPa - OECD Test Guideline 103

and boiling range 1.470 °C f) Flammability (solid, The product is not flammable.

gas)

g) Úpper/lower No data available flammability or

explosive limits
h) Flash point
Not applicable

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i) Autoignition temperaturej) Decomposition temperaturek) pH

I) Viscosity

m) Water solubility n) Partition coefficient: n-octanol/water o) Vapor pressure p) Density Relative density

q) Relative vapor densityr) Particle characteristics

s) Explosive properties t) Oxidizing properties 9.2 Other safety information

No data available

No data available

No data available

8 - 9 at 100 g/l at 20 °C (slurry)
Viscosity, kinematic: No data available
Viscosity, dynamic: No data available
0,0702 g/l at 20 °C - OECD Test Guideline 105- slightly soluble
Not applicable for inorganic substances

No data available 9,530 g/cm3 at 20 °C 9,96 at 22,5 °C - OECD Test Guideline 109

No data available

Not classified as explosive. none

## **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

Risk of explosion with:

Aluminum

Powdered metals performic acid perchloric acid

glycerol

Violent reactions possible with:

violent reactions poss carbides Sulfur oxides hydrogen peroxide halogens alkenes

Risk of ignition or formation of inflammable gases or vapours with:

Boron

Alkali metals hydrides silanes

vegetable/animal oils

Fluorine

10.4 Conditions to avoid no information available

10.5 Incompatible materials

No data available

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.

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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 LC50 - Oncorhynchus mykiss (rainbow trout) - 0,1 mg/l -

96 h

Remarks: (ECHA) Toxicity to daphnia and other aquatic invertebrates

EC50 - Daphnia magna (Water flea) - 0,13 mg/l - 48 h

Remarks: (ECOTOX Database)

Toxicity to algae static test EC10 - Skeletonema costatum (marine diatom) - 0,0294

mg/l - 96 h Remarks: (ECHA) Toxicity to

fish(Chronic toxicity)

semi-static test NOEC - Pimephales promelas (fathead minnow) -

1,33 mg/l - 7 d Remarks: (ECHA) Toxicity to daphnia and other aquatic invertebrates(Chronic

toxicity)

semi-static test NOEC - Ceriodaphnia dubia (water flea) - 0,0224

mg/l - 7 d (US-EPA)

12.2 Persistence and degradability

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

substances.

Biodegradability Result: - According to the results of tests of biodegradability this

product is not readily biodegradable.

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

Discharge into the environment must be avoided.

## **SECTION 13: Disposal considerations**

13.1 Waste treatment methods

No data available

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IATA: yes

#### **SECTION 14: Transport information**

14.1 UN number

ADR/RID: 3077 IMDG: 3077 IATA: 3077

14.2 UN proper shipping name

ADR/RID : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (lead(II) oxide)
IMDG : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (lead(II) oxide)

IATA : Environmentally hazardous substance, solid, n.o.s. (lead(II) oxide)

14.3 Transport hazard class(es)

ADR/RID: 9 IMDG: 9 IATA: 9

14.4 Packaging group

ADR/RID: III IMDG: III IATA: III

14.5 Environmental hazards

ADR/RID: yes IMDG Marine pollutant: yes

14.6 Special precautions for user Tunnel restriction code : (-)

Further information

EHS-Mark required (ADR 2.2.9.1.10, IMDG code 2.10.3) for single packagings and combination packagings containing inner packagings with Dangerous Goods > 5L for liquids or > 5kg for solids.Packages smaller than or equal to 5 kg / L , not dangerous goods of Class 9

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 REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII)

: lead(II) oxide

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REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

(Annex XVII)

: lead(II) oxide

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59).

: lead(II) oxide

National legislation

Seveso III: Directive 2012/18/EU of the

European Parliament and of the Council

on the control of major-accident hazards

involving dangerous substances.

E1 ENVIRONMENTAL HAZARDS

Other regulations

Observe work restrictions regarding maternity protection in accordance to Dir 92/85/EEC or stricter national regulations where applicable.

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Take note of Dir 94/33/EC on the protection of young people at work. 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.

