Otto Chemie Pvt Ltd

An ISO 9001 : 2015 & GMP Certified Company Office : No 603, 6th Floor, Tardeo AC Market, 87, Tardeo Road, Tardeo, Mumbai, Maharashtra 400034, India (BHARAT) Tel : + 91 98200 41841 Email : <u>info@ottokemi.com</u> Web : <u>www.ottokemi.com</u>

MATERIAL SAFETY DATA SHEET (MSDS)

SECTION 1: Product identifiers

Product Name : Arsenic lump, 99.5% Product Code : A 2611 CAS No: 7440-38-2

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 No 603, 6th Floor, Tardeo AC Market, 87, Tardeo Road, Tardeo, Mumbai, Maharashtra 400034, India (BHARAT)

1.4. Emergency telephone number Phone no. : + 91 98200 41841 (10 : 00 am - 06 : 00 pm)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture Acute toxicity, (Category 3) Acute toxicity, (Category 3) Skin irritation, (Category 2) Serious eye damage, (Category 1) Carcinogenicity, (Category 1A) 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 H301 + H331 H315 H318 H350 H410 Precautionary Statements P273 P280

P301 + P310 P302 + P352 P304 + P340 + P311

P305 + P351 + P338

Supplemental Hazard Statements Reduced Labeling (<= 125 ml) Pictogram Signal Word Hazard Statements H350 H301: Toxic if swallowed. H331: Toxic if inhaled. H315: Causes skin irritation. H318: Causes serious eye damage.

H350: May cause cancer. H400: Very toxic to aquatic life.

H410: Very toxic to aquatic life with long lasting effects

Danger

Toxic if swallowed or if inhaled. Causes skin irritation. Causes serious eye damage. May cause cancer. Very toxic to aquatic life with long lasting effects. Avoid release to the environment. Wear protective gloves/ protective clothing/ eye protection/ face protection. IF SWALLOWED: Immediately call a POISON CENTER/ doctor. IF ON SKIN: Wash with plenty of water. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. none Danger

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May cause cancer.

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H318	Causes serious eye damage.				
H301 + H331	Toxic if swallowed or if inhaled.				
Precautionary Statements					
P280	Wear protective gloves/ protective clothing/ eye protection/ face				
D004 - D040	protection.				
P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER/ doctor.				
P304 + P340 + P311	IF INHALED: Remove person to tresh air and keep comfortable				
	for breathing. Call a POISON CENTER/ doctor.				
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes.				
	Remove contact lenses, if present and easy to do. Continue				
	rinsing.				
Supplemental Hazard	none				
Statements					
2.3 Other hazards					
This substance/mixture conta	ans no components considered to be either persistent,				
bioaccumulative and toxic (P	BT), 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.	not contain components considered to have and caring				
disrupting properties according	not contain components considered to have endocrime				
(ELI) 2017/2100 or Commission	ig to REACH Afficie 37(1) of Commission Delegated regulation				
(E0) 2017/2100 of Commiss	on Regulation (EO) 2016/605 at levels of 0.1% of higher.				
SECTION 3: Composition/i	nformation on ingradients				
3.1 Substances					
Formula · As					
Molecular weight 74.92 g	/mol				
CAS-No 7440-3					
FC-No 231-14	8-6				

Component	Classification	Concentration
arsenic		
CAS-No. 7440-38-2	Acute Tox. 3; Skin Irrit. 2; Eye Dam. 1;	<= 100 %
EC-No 231-148-6	Carc. 1A; Aquatic Acute 1; Aquatic	
	Chronic 1; H301, H331, H315, H318,	
	H350, H400, H410 M-Factor - Aquatic	
	Acute: 10 M-Factor - Aquatic Chronic: 1	

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

First aiders need to protect themselves. 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 water/ shower. Consult a physician.

In case of eye contact

After eye contact: rinse out with plenty of water. Immediately call in ophthalmologist.

Remove contact lenses.

If swallowed

If swallowed: give water to drink (two glasses at most). Seek medical advice immediately. In exceptional cases only, if medical care is not available within one hour, induce vomiting (only in persons who are wide awake and fully conscious), administer activated charcoal

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(20 - 40 g in a 10% slurry) and consult a doctor as quickly as possible.

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

Nature of decomposition products not known.

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

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): 6.1A: Combustible, acute toxic Cat. 1 and 2 / very toxic hazardous materials
7.3 Specific end use(s)

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

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SECTION 8: Exposure controls/personal protection

8.1 Control parameters Ingredients with workplace control parameters 8.2 Exposure controls Personal protective equipment Eve/face protection Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Tightly fitting safety goggles 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 gray c) Odor No data available Melting point/range: 817 °C - lit. d) Melting point/freezing point e) Initial boiling point 613 °C - lit. and boiling range f) Flammability (solid, No data available gas) g) Upper/lower No data available flammability or explosive limits h) Flash point Not applicable i) Autoignition > 430 °C

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temperature

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does not ignite j) Decomposition No data available temperature k) pH No data available Viscosity, kinematic: No data available I) Viscosity Viscosity, dynamic: No data available ca.0,0106 g/l at 20 °C - OECD Test Guideline 105- slightly m) Water solubility soluble n) Partition coefficient: Not applicable for inorganic substances n-octanol/water o) Vapor pressure No data available p) Density 5,727 g/mL at 25 °C - lit. Relative density 5,6 at 22,4 °C - OECD Test Guideline 109 q) Relative vapor No data available density r) Particle No data available *c*haracteristics s) Explosive properties No data available t) Oxidizing properties none 9.2 Other safety information No data available **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 Exothermic reaction with: Aluminum Bromine bromates chlorates iodates Nitric acid Risk of ignition or formation of inflammable gases or vapours with: nitrates Alkali metals Zinc Reducing agents Strong oxidizing agents Risk of explosion with: potassium permanganate azides halogen-halogen compounds Peroxides nitrogen trichloride 10.4 Conditions to avoid Heat. Exposure to air may affect product quality. no information available 10.5 Incompatible materials No data available 10.6 Hazardous decomposition products In the event of fire: see section 5

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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 Othonic 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 - Oreochromis mossambicus (Mozambique tilapia) -28,68 mg/l - 96 h Remarks: (ECHA) Toxicity to daphnia and other aquatic invertebrates static test EC50 - Bosmina longirostris (water flea) - 0,85 mg/l - 48 h Remarks: (ECHA) Toxicity to algae static test NOEC - Macrocystis pyrifera (brown algae) - 0,04 mg/l -42 h Remarks: (ECHA) Toxicity to bacteria static test EC50 - activated sludge - 10,6 mg/l - 10 Days Remarks: (ECHA) Toxicity to fish(Chronic toxicity) flow-through test NOEC - Pimephales promelas (fathead minnow) -2,13 mg/l - 35 d Remarks: (ECHA) Toxicity to daphnia and other aquatic invertebrates(Chronic toxicity) flow-through test NOEC - Shrimp - 0,631 mg/l - 51 d Remarks: (ECHA) 12.2 Persistence and degradability The methods for determining biodegradability 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

12.7 Other adverse effects No data available

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Regulation (EU) 2018/605 at levels of 0.1% or higher.

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SECTION 13: Disposal considerations

13.1 Waste treatment methods No data available

SECTION 14: Transport information

14.1 UN number					
ADR/RID: 1558	IMDG: 1558	IATA: 1558			
14.2 UN proper shipping name					
ADR/RID: ARSEN	liC				
IMDG: ARSEN	lic				
IATA: ARSEN	liC				
14.3 Transport hazard class(es)					
ADR/RID: 6.1	IMDG: 6.1	IATA: 6.1			
14.4 Packaging group					
ADR/RID: II	IMDG: II	IATA: II			
14.5 Environmental hazards					
ADR/RID: yes	IMDG Marine pollutant: yes	IATA: no			
14.6 Special precautions for user	. ,				
Tunnel restriction code (D/E)					
Further information : No data available					
SECTION 15: Regulatory information	n /				
15.1 Safety, health and environmenta	regulations/legislation specific	for the			
substance or mixture	5 5 1				
This material safety data sheet compl	es with the requirements of Rec	ulation (EC) No			
1907/2006					
Authorisations and/or restrictions on u	se and a second				
REACH - Restrictions on the manufacture					
placing on the market and use of cert	ain	i produce de la companya de la compa			
placing of the market and use of certain date of certain dangerous substances mystures and articles					
(Annex XVII)					
: arsenic					
National legislation					
Seveso III: Directive 2012/18/ELL of th					
European Parliament and of the Coun	cil				
on the control of major accident bazar					
involving dangerous substances	us				
Other regulations					
Outer regulations					
Observe work resultations regarding materinity protection in accordance to Dir 92/05/EEC of					
Take note of Dir 04/33/EC on the prot	action of young poople at work				
Take note of Dir 34/03/LC of the protection of young people at work.					
TO 2 Continued Galety assessment was not carried out					
Tor this product a chemical safety ass	essment was not camed 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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