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### MATERIAL SAFETY DATA SHEET (MSDS)

### SECTION 1. Product identifiers

Product name: Lead thiocyanate, 98% Product Code: L 1428 CAS No : 592-87-0

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 <u>info@ottokemi.com</u>

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 H302: Harmful if swallowed. Acute toxicity, (Category 4) Acute toxicity, (Category 4) H332: Harmful if inhaled. Acute toxicity, (Category 4) H312: Harmful in contact with skin. H360FD: May damage fertility. May Reproductive toxicity, (Category damage the unborn child. 1A) Specific target organ toxicity H373: May cause damage to organs repeated exposure, (Category 2) through prolonged or repeated exposure. Short-term (acute) aquatic H400: Very toxic to aquatic life. hazard, (Category 1) Long-term (chronic) aquatic H410: Very toxic to aquatic life with long hazard, (Category 1) lasting effects. 2.2 Label elements Labelling according Regulation (EC) No 1272/2008 Pictogram Signal Word Danger Hazard Statements H302 + H312 + H332 Harmful if swallowed, in contact with skin or if inhaled. H360FD May damage fertility. May damage the unborn child. H373 May cause damage to organs through prolonged or repeated exposure. H410 Very toxic to aquatic life with long lasting effects. **Precautionary Statements** Avoid release to the environment. P273 P280 Wear protective gloves/ protective clothing/ eye protection/ face protection IF SWALLOWED: Call a POISON CENTER/ doctor if you feel P301 + P312 unwell P302 + P352 + P312 IF ON SKIN: Wash with plenty of water.Call a POISON CENTER/ doctor if you feel unwell. IF INHALED: Remove person to fresh air and keep comfortable P304 + P340 + P312 for breathing. Call a POISON CENTER/ doctor if you feel unwell. P308 + P313 IF exposed or concerned: Get medical advice/ attention. Supplemental Hazard none Statements Restricted to professional users. Reduced Labeling (<= 125 ml) Pictogram Signal Word Danger

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#### Hazard Statements H360FD Precautionary Statements P280

P308 + P313 PI Supplemental Hazard no Statements 2.3 Other hazards

Wear protective gloves/ protective clothing/ eye protection/ face protection.

May damage fertility. May damage the unborn child.

IF exposed or concerned: Get medical advice/ attention. none

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	: Lead sulfocyanide	
	Lead(II) rhodanide	
	Plumbous thiocyanate	
Formula	C2N2PbS2	
Molecular weight	: 323,36 g/mol	
CAS-No. : 592-87-0		
EC-No.	: 209-774-6	

Component	Classification	Concentration
Lead dithiocyanate		
CAS-No. 592-87-0	Acute Tox. 4; Repr. 1A; STOT RE 2;	<= 100 %
EC-No. 209-774-6	Aquatic Acute 1; Aquatic Chronic 1;	
	H302, H332, H312, H360FD, H373,	
	H400, H410 Concentration limits: >= 2,5	
	%: Repr. 2, H361f; >= 0,5 %: STOT RE 2,	
	H373; M-Factor - Aquatic Acute: 10 M-	
	Factor - Aquatic Chronic: 10	

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.

apply artificial respiration, if necessary also oxyg

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

water/ shower. Consult a physician. In case of eve 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

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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 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 inhalation of dusts. 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 gualified 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 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 parametersIngredients with workplace control parameters8.2 Exposure controlsPersonal protective equipmentEye/face protection

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Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses 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 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 i) Decomposition temperature k) pH I) Viscosity

m) Water solubility n) Partition coefficient: n-octanol/water o) Vapor pressure p) Density Relative density q) Relative vapor density r) Particle characteristics s) Explosive properties t) Oxidizing properties 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 No data available 10.4 Conditions to avoid

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powder beige No data available Melting point/ range: 190 °C

No data available

The product is not flammable.

No data available

Not applicable No data available

190 °C

No data available Viscosity, kinematic: No data available Viscosity, dynamic: No data available at 20 °C soluble Not applicable for inorganic substances

No data available 3.82 g/mL at 25 °C No data available No data available

No data available

During processing, dust may form explosive mixture in air. No data available

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	materials Nitrates, Nitrites, Perchlorates., Stron ecomposition products	g oxidizing agents	
11.1 Information of Routes of Entry: A	<b>xicological information</b> on toxicological effects bbsorbed through skin. Dermal contac 500 mg/kg; Dermal LD50 Rabbit: 2000 tat: > 50mg/L.		
	ts on Humans: Hazardous in case of	TS: Classified None. by NTP, None. by OSHA, No skin contact (irritant), of inhalation (lung irritant).	ne. by NIOSH.
	/ailable. on Chronic Effects on Humans: Not a on other Toxic Effects on Humans: N		
SECTION 12: Eco	ological information		
12.1 Toxicity	C C		
No data available			
12.2 Persistence			
	Result: - Not readily biodegradable.		
	thods for determining biodegradabilit	y are not	
applicable to inorg 12.3 Bioaccumula			21
No data available			
12.4 Mobility in sc	il Carlo		
No data available			M
	BT and vPvB assessment		Ì
This substance/m	ixture contains no components consid	dered to be either persistent,	
	and toxic (PBT), or very persistent and	d very bioaccumulative (vPvB) at	
levels of 0.1% or l			
	srupting properties		
Product:			
Assessment	: The substance/mixture does not		
9	considered to have endocrine disru		
	according to REACH Article 57(f) of Delegated regulation (EU) 2017/21		
No. of Street,	Regulation (EU) 2018/605 at levels		
12.7 Other advers		sor of the trighter.	
No data available			
SECTION 13: Dis	posal considerations		
13.1 Waste treatm	nent methods		
No data available			
SECTION 14: Tra 14.1 UN number	insport information		
ADR/RID: 3077		IMDG: 3077	IATA: 3077
14.2 UN proper sh	ainning name		IATA. 3077
ADR/RID		DUS SUBSTANCE, SOLID, N.O.S. (Lead	
IMDG		OUS SUBSTANCE, SOLID, N.O.S. (Lead	
	dithiocyanate)	ana colid no co (lood dithicoversta)	
IATA 14.3 Transport ha		ance, solid, n.o.s. (Lead dithiocyanate)	
ADR/RID: 9	zaiu 0/035(25)	IMDG: 9	IATA: 9
14.4 Packaging gi	roup		IA I A. 3
ADR/RID: III	oop	IMDG: III	IATA: III
14.5 Environment	al hazards		0.0170.00

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ADR/RID: yes 14.6 Special precautions for user Tunnel restriction code : (-) Further information	IMDG Marine pollutant: yes	IATA: yes
EHS-Mark required (ADR 2.2.9.1.10, IMDG code combination packagings containing inner packag or > 5kg for solids.Packages smaller than or equ Class 9	ings with Dangerous Goods > 5L for liquids	
14.7 Maritime transport in bulk according to IMO Not applicable for product as supplied.	instruments	
<b>SECTION 15: Regulatory information</b> 15.1 Safety, health and environmental regulation	s/legislation specific for the	
substance or mixture	<b>0</b>	
This material safety data sheet complies with the 1907/2006.	e requirements of Regulation (EC) No.	
Authorisations and/or restrictions on use		
REACH - Restrictions on the manufacture, : Lead	d dithiocyanate	
placing on the market and use of certain		
dangerous substances, mixtures and articles		
(Annex XVII) National legislation		
Seveso III: Directive 2012/18/EU of the		
European Parliament and of the Council		
on the control of major-accident hazards		1 N
involving dangerous substances.		
E1 ENVIRONMENTAL HAZARDS		
E1 ENVIRONMENTAL HAZARDS		
Other regulations		
Observe work restrictions regarding maternity pro-	otection in accordance to Dir 92/85/EEC or	-12
stricter national regulations where applicable.		4.6
Take note of Dir 94/33/EC on the protection of yo	oung people at work.	
15.2 Chemical Safety Assessment		
For this product a chemical safety assessment w	as not carried out	
SECTION 16: Other Information		
	ction with technical sheets. It does not replace them.	The information given is based
	publication. It is given in good faith. The attention of t	

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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