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 : Cadmium sulphide, 99% Product Code : C 1309 CAS No: 1306-23-6

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 H302: Harmful if swallowed. Acute toxicity, (Category 4) Germ cell mutagenicity, H341: Suspected of causing genetic defects. (Category 2) Carcinogenicity, (Category 1B) H350: May cause cancer. Reproductive toxicity, (Category 2) H361fd: Suspected of damaging fertility. Specific target organ toxicity -Suspected of damaging the unborn child. repeated exposure, (Category 1) H372: Causes damage to organs 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 lasting effects. hazard, (Category 1) 2.2 Label elements Labelling according Regulation (EC) No 1272/2008 Pictogram Signal Word Danger Hazard Statements H302 Harmful if swallowed. H341 Suspected of causing genetic defects. H350 May cause cancer. H361fd Suspected of damaging fertility. Suspected of damaging the unborn child. H372 Causes damage to organs through prolonged or repeated exposure H410 Very toxic to aquatic life with long lasting effects. **Precautionary Statements** P202 Do not handle until all safety precautions have been read and understood. P260 Do not breathe dust. P264 Wash skin thoroughly after handling. P273 Avoid release to the environment. P301 + P312 IF SWALLOWED: Call a POISON CENTER/ doctor if you feel

DISCLAIMER

Otto Chemie Pvt Ltd - products are only for laboratory use only. Not for drug, medicinal, household or any other use. No liability accepted for mishandling in use - please test before use

Otto Chemie Pvt Ltd - shall not be responsible for any damage resulting from handling or from contact with the above product.

**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>

	unwell.				
P308 + P313 I	F exposed or concerned: Get medical advice/ attention.				
Supplemental Hazard	none				
Statements					
Restricted to professional users.					
Reduced Labeling (<= 125 ml)					
Pictogram					
Signal Word	Danger				
Hazard Statements					
H341	Suspected of causing genetic defects.				
H350	May cause cancer.				
H372	Causes damage to organs through prolonged or repeated exposure.				
H361fd	Suspected of damaging fertility. Suspected of damaging the				
nsond	unborn child.				
Precautionary Statements					
P202	Do not handle until all safety precautions have been read and				
	understood.				
P260	Do not breathe dust.				
P264	Wash skin thoroughly after handling.				
P308 + P313	IF exposed or concerned: Get medical advice/ attention.				
Supplemental Hazard					
Statements	none				
2.3 Other hazards					
This substance/mixture contains no	components considered to be either persistent,				
	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					
	EACH Article 57(f) or Commission Delegated regulation				
	ulation (EU) 2018/605 at levels of 0.1% or higher.				
Toxicological information:					
	tain components considered to have endocrine				
disrupting properties according to REACH Article 57(f) or Commission Delegated regulation					
(EU) 2017/2100 or Commission Reg	ulation (EU) 2018/605 at levels of 0.1% or higher.				
SECTION 3: Composition/information	tion on ingredients				
3.1 Substances					
Formula	: CdS				
Molecular weight	: 144,48 g/mol				
CAS-No.	: 1306-23-6				
EC-No.	: 215-147-8				
Component	Classification Concentration				
cadmium sulphide Included in the Candidate List of Substances of Very High Concern (SVHC) according to					
Regulation (EC) No. 1907/2006 (R	EACH)				
CAS-No. 1306-23-6	Acute Tox. 4; Muta. 2; Carc. 1B; Repr. 2; STOT <= 100 %				
EC-No. 215-147-8	RE 1; Aquatic Acute 1; Aquatic Chronic 4;				
	Aquatic Chronic 1; H302, H341, H350, H361fd,				

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

DISCLAIMER

H372, H400, H413, H410 Concentration limits: >= 10 %: STOT RE 1, H372; 0,1 - < 10 %: STOT

Otto Chemie Pvt Ltd - products are only for laboratory use only. Not for drug, medicinal, household or any other use. No liability accepted for mishandling in use - please test before use

Otto Chemie Pvt Ltd - shall not be responsible for any damage resulting from handling or from contact with the above product.

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: info@ottokemi.com Web: www.ottokemi.com

### **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. Call in physician. 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 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 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 Sulfur oxides Cadmium/cadmium 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.

DISCI AIMER

Otto Chemie Pvt Ltd - products are only for laboratory use only. Not for drug, medicinal, household or any other use. No liability accepted for mishandling in use - please test before use

Otto Chemie Pvt Ltd - shall not be responsible for any damage resulting from handling or from contact with the above product.

Otto Chemie Pvt Ltd - provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product

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>

### **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 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 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	orange			
c) Odor	odorless			
d) Melting	Melting point/range: 871 - 890 °C - OECD Test Guideline 102 -			
(sublimed)				
point/freezing point				
e) Initial boiling point	No data available			
and boiling range				
f) Flammability (solid,	The product is not flammable.			
gas)				
g) Upper/lower	No data available			
flammability or				
explosive limits				
h) Flash point	Not applicable			
i) Autoignition	No data available			
temperature				
j) Decomposition	No data available			
temperature				
k) pH	No data available			

#### DISCLAIMER

Otto Chemie Pvt Ltd - products are only for laboratory use only. Not for drug, medicinal, household or any other use. No liability accepted for mishandling in use - please test before use

Otto Chemie Pvt Ltd - shall not be responsible for any damage resulting from handling or from contact with the above product.

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>

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 Viscosity, kinematic: No data available Viscosity, dynamic: No data available practically insoluble Not applicable for inorganic substances

No data available 4,82 g/mL at 25 °C - lit. No data available No data available

No data available

No data available 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
No data available
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. 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 other Toxic Effects on Humans: Not available.

# **SECTION 12: Ecological information**

12.1 Toxicity Toxicity to fish static test LC50 - Pimephales promelas (fathead minnow) - 0,108 mg/l - 96 h Remarks: (ECOTOX Database) Toxicity to daphnia and other aquatic invertebrates static test LC50 - Daphnia magna (Water flea) - 0,0011 mg/l - 48 h Remarks: (ECOTOX Database) 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

DISCLAIMER

Otto Chemie Pvt Ltd - products are only for laboratory use only. Not for drug, medicinal, household or any other use. No liability accepted for mishandling in use - please test before use

Otto Chemie Pvt Ltd - shall not be responsible for any damage resulting from handling or from contact with the above product.

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>

	BT), or very persister	considered to be either persiste and very bioaccumulative (vF				
Assessment :		The substance/mixture does n considered to have endocrine according to REACH Article 5 Delegated regulation (EU) 20 Regulation (EU) 2018/605 at 1	disrupting properties 7(f) or Commission 17/2100 or Commission			
<ul> <li>12.7 Other adverse effects</li> <li>No data available</li> <li>SECTION 13: Disposal cons</li> <li>13.1 Waste treatment method</li> <li>No data available</li> </ul>						
SECTION 14: Transport info	ormation					
14.1 UN number						
ADR/RID: 3077		IMDG: 3077	IATA: 3077			
14.2 UN proper shipping nam ADR/RID:			E SOLID NOS (andmium			
sulphide)	ENVIRONWENTAL	LY HAZARDOUS SUBSTANC	E, SOLID, N.O.S. (cauffiditi			
IMDG:	ENVIRONMENTAL	LY HAZARDOUS SUBSTANC	E, SOLID, N.O.S. (cadmium			
sulphide)						
IATA:		zardous substance, solid, n.o.s	s. (cadmium sulphide)			
14.3 Transport hazard class( ADR/RID: 9	es)	IMDG: 9	IATA: 9			
14.4 Packaging group	Que :	INDG. 9	IATA. 9			
ADR/RID: III		IMDG: III	IATA: III			
14.5 Environmental hazards		A A A A A A A A A A A A A A A A A A A				
ADR/RID: yes		IMDG Marine pollutant: yes	IATA: yes			
14.6 Special precautions for u Tunnel restriction code : (-)	Jser					
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						
		to 5 kg / L , not dangerous go				
Class 9		to 5 kg / L, not dangerous go				
SECTION 15: Regulatory information 15.1 Safety, health and environmental regulations/legislation specific for the						
substance or mixture	Shmental regulations	registration specific for the				
	et complies with the r	equirements of Regulation (EC	C) No.			
1907/2006.		<b>U</b>				
Authorisations and/or restricti						
REACH - Candidate List of S High Concern for Authorisation						
: cadmium sulphide	// (Allice 39).					
REACH - Restrictions on the manufacture,						
placing on the market and use of certain						
dangerous substances, mixtures and articles						
(Annex XVII) : cadmium sulphide						
National legislation						
Seveso III: Directive 2012/18/EU of the						
European Parliament and of the Council						
E1 ENVIRONMENTAL HAZARDS on the control of major-accident hazards						
involving dangerous substances.						
Other regulations						
Observe work restrictions reg	arding maternity prot	ection in accordance to Dir 92/	/85/EEC or			

DISCLAIMER

Otto Chemie Pvt Ltd - products are only for laboratory use only. Not for drug, medicinal, household or any other use. No liability accepted for mishandling in use - please test before use

Otto Chemie Pvt Ltd - shall not be responsible for any damage resulting from handling or from contact with the above product.

Otto Chemie Pvt Ltd - provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product

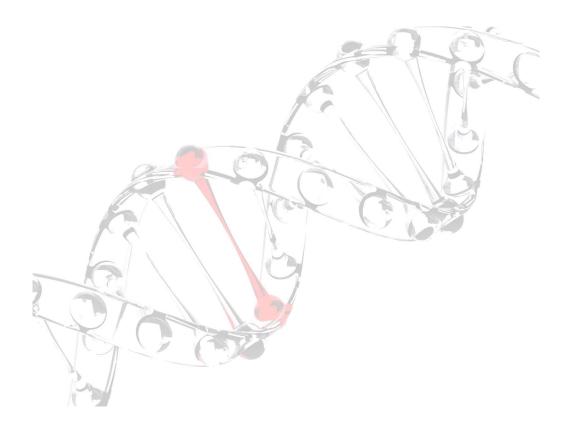
An ISO 9001 : 2015 & GMP Certified Company Office : No 603, 6th Floor, Tardeo AC Market, 87, Tardeo Road, Tardeo, Mumbai, Maharashtra 400034, India (BHARAT) Tel : + 91 98200 41841 Email : <u>info@ottokemi.com</u> Web : <u>www.ottokemi.com</u>

stricter national regulations where applicable.

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.



DISCLAIMER

Otto Chemie Pvt Ltd - products are only for laboratory use only. Not for drug, medicinal, household or any other use. No liability accepted for mishandling in use - please test before use

Otto Chemie Pvt Ltd - shall not be responsible for any damage resulting from handling or from contact with the above product.