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MATERIAL SAFETY DATA SHEET (MSDS)

SECTION 1. Product identifiers

Product name: Hexachlorobutadiene, 97% Product Code: H 1310 CAS No : 87-68-3

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 3) H301: Toxic if swallowed. Acute toxicity, (Category 2) H310: Fatal in contact with skin. Skin irritation, (Category 2) H315: Causes skin irritation. H319: Causes serious eye irritation. Eye irritation, (Category 2) Carcinogenicity, (Category 2) H351: Suspected of causing cancer. 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 H301 Toxic if swallowed. H310 Fatal in contact with skin. H315 Causes skin irritation. H319 Causes serious eye irritation. Suspected of causing cancer. H351 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. P273 Avoid release to the environment. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor. P302 + P352 + P310 IF ON SKIN: Wash with plenty of water. Immediately call a POISON CENTER/ doctor. IF IN EYES: Rinse cautiously with water for several minutes. P305 + P351 + P338 Remove contact lenses, if present and easy to do. Continue rinsing. Supplemental Hazard none Statements Reduced Labeling (<= 125 ml) Pictogram Signal Word Danger Hazard Statements

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H301	Toxic if swallowed.		
H310	Fatal in contact with skin.		
H351	Suspected of causing cancer.		
Precautionary Statements	Suspected of causing cancer.		
	De net hendle until all sefetu nusses tions have been used and		
P202	Do not handle until all safety precautions have been read and understood.		
P280	Wear protective gloves/ protective clothing/ eye protection/ face protection.		
B201 + B210			
P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER/ doctor.		
P302 + P352 + P310	IF ON SKIN: Wash with plenty of water. Immediately call a POISON CENTER/ doctor.		
Supplemental Hazard	none		
Statements			
2.3 Other hazards			
This substance/mixture contains components considered to	he either persistent		
bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB).			
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 : Perchlorobutadiene			
Formula : C4Cl6			
Molecular weight : 260,76 g/mol			
CAS-No. : 87-68-3			
EC-No. : 201-765-5			
LO-NO 201-103-3			

Component	Classification	Concentration
Hexachlorobuta-1,3-diene		
CAS-No. 87-68-3	Acute Tox. 3; Acute Tox. 2; Skin Irrit. 2;	<= 100 %
EC-No. 201-765-5	Eye Irrit. 2; Carc. 2; Aquatic Acute 1;	
	Aquatic Chronic 1; H301, H310, H315,	
	H319, H351, H400, H410	

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. Call in physician.

In case of skin contact

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

water/ shower. Call a physician immediately.

In case of eye contact

After eye contact: rinse out with plenty of water. 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 (20 - 40 g in a 10% slurry) and consult a doctor as guickly as possible. 4.2 Most important symptoms and effects, both acute and delayed

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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
Water Foam Carbon dioxide (CO2) Dry powder
Unsuitable extinguishing media
For this substance/mixture no limitations of extinguishing agents are given.
5.2 Special hazards arising from the substance or mixture
Carbon oxides
Hydrogen chloride gas
Combustible.
Development of hazardous combustion gases or vapours possible in the event of fire.
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: Do not breathe vapors, aerosols. 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 with liquid-absorbent material (e.g. Chemizorb®). Dispose of properly. Clean up affected area. 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. Avoid generation of vapours/aerosols. 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. 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

SECTION 8: Exposure controls/personal protection

8.1 Control parametersIngredients with workplace control parameters8.2 Exposure controlsPersonal protective equipment

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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 vapours/aerosols 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 ABEK 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 j) 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

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liquid, clear light yellow No data available Melting point/range: -22 - -19 °C - lit.

210 - 220 °C - lit.

No data available

No data available

No data available No data available

No data available

No data available Viscosity, kinematic: No data available Viscosity, dynamic: No data available No data available No data available

0,3 hPa at 20,0 °C 1.665 g/cm3 at 25 °C - lit. No data available No data available

No data available

No data available No data available

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10.4 Conditions to avoid no information available10.5 Incompatible materialsStrong oxidizing agents10.6 Hazardous decomposition productsIn 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. Eve 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 LC50 - Pimephales promelas (fathead minnow) - 0,09 mg/l - 96 h Toxicity to daphnia and other aquatic invertebrates EC50 - Daphnia - 0,5 mg/l - 24 h Toxicity to fish(Chronic toxicity) LOEC - Pimephales promelas (fathead minnow) - 0,013 mg/l - 28 d 12.2 Persistence and degradability No data available 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 components considered to be either persistent. bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB). 12.6 Endocrine disrupting properties Product[.] : The substance/mixture does not contain components Assessment 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 **SECTION 14: Transport information** 14.1 UN number ADR/RID: 2279 IMDG: 2279 IATA: 2279 14.2 UN proper shipping name ADR/RID : HEXACHLOROBUTADIENE : HEXACHLOROBUTADIENE IMDG IATA : Hexachlorobutadiene 14.3 Transport hazard class(es) ADR/RID: 6.1 IMDG: 6.1 IATA: 6.1

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14.4 Packaging group ADR/RID: III 14.5 Environmental hazards ADR/RID: yes 14.6 Special precautions for user Tunnel restriction code : (E) Further information : No data available	IMDG: III IMDG Marine pollutant: yes	IATA: III IATA: no		
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 Regulation (EU) 2019/1021 on persistent organic pollutants (recast) : Hexachlorobuta-1,3-diene				
National legislation Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards		The C		
involving dangerous substances. H2 ACUTE TOXIC E1 ENVIRONMENTAL HAZARDS Other regulations				
Observe work restrictions regarding maternity prote stricter national regulations where applicable. Take note of Dir 94/33/EC on the protection of your 15.2 Chemical Safety Assessment For this product a chemical safety assessment was	ng people at work.			
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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