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### MATERIAL SAFETY DATA SHEET (MSDS)

### **SECTION 1. Product identifiers**

Product name: Heptane, 85% Product Code: H 1280 CAS No : 142-82-5

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 Flammable liquids, (Category 2) Skin irritation, (Category 2) Specific target organ toxicity single exposure, (Category 3), Central nervous system Aspiration hazard, (Category 1)

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 H225 H304 H315 H336 H410 **Precautionary Statements** P210

P233 P273 P301 + P310 P303 + P361 + P353

P331 Supplemental Hazard Statements Reduced Labeling (<= 125 ml) Pictogram Signal Word Hazard Statements H304 Precautionary Statements H225: Highly flammable liquid and vapor.

- H315: Causes skin irritation.
- H336: May cause drowsiness or dizziness.

H304: May be fatal if swallowed and enters airways. H400: Very toxic to aquatic life.

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

### Danger

Highly flammable liquid and vapor. May be fatal if swallowed and enters airways. Causes skin irritation. May cause drowsiness or dizziness. Very toxic to aquatic life with long lasting effects.

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container tightly closed. Avoid release to the environment. IF SWALLOWED: Immediately call a POISON CENTER/ doctor. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Do NOT induce vomiting. none

Danger

May be fatal if swallowed and enters airways.

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none

Do NOT induce vomiting.

IF SWALLOWED: Immediately call a POISON CENTER/ doctor.

### P301 + P310

P331 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	: C7H16
Molecular weight	: 100,21 g/mol
CAS-No.	: 142-82-5
EC-No.	: 205-563-8

Component	Classification	Concentration
n-heptane		
CAS-No. 142-82-5 EC-No. 205-563-8	Flam. Liq. 2; Skin Irrit. 2; STOT SE 3; Asp. Tox. 1; Aquatic Acute 1; Aquatic Chronic 1; H225, H315, H336, H304, H400, H410 Concentration limits: 20 %: STOT SE 3, H336; M-Factor - Aquatic Acute: 1 - 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. Call in physician. In case of skin contact In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower. In case of eye contact After eye contact: rinse out with plenty of water. Remove contact lenses. If swallowed After swallowing: caution if victim vomits. Risk of aspiration! Keep airways free. Pulmonary failure possible after aspiration of vomit. Call a physician immediately. 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 Foam Carbon dioxide (CO2) Dry powder Unsuitable extinguishing media For this substance/mixture no limitations of extinguishing agents are given.

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5.2 Special hazards arising from the substance or mixture Carbon oxides Combustible Pay attention to flashback. Vapors are heavier than air and may spread along floors. Development of hazardous combustion gases or vapours possible in the event of fire. Forms explosive mixtures with air at ambient temperatures. 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 Remove container from danger zone and cool with water. 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. Keep away from heat and sources of ignition. 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. Risk of explosion. 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. Advice on protection against fire and explosion Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharge. Hvgiene 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 Keep container tightly closed in a dry and well-ventilated place. Keep away from heat and sources of ignition. Recommended storage temperature see product label. Storage class Storage class (TRGS 510): 3: Flammable liquids 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 Derived No Effect Level (DNEL)

Application Area	Routes of exposure	Health effect	Value
Worker DNEL, longterm	inhalation	Systemic effects	2085 mg/m3
Worker DNEL, longterm	dermal	Systemic effects	
Consumer DNEL, longterm	inhalation	Systemic effects	447 mg/m3
Consumer DNEL, longterm	dermal	Systemic effects	
Consumer DNEL, longterm	oral	Systemic effects	

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### Predicted No Effect Concentration (PNEC)

Compartment	Value
No data available	
No data available         8.2 Exposure controls         Personal protective equipment         Eye/face protection         Use equipment for eye protection tested and approved under apprigovernment standards such as NIOSH (US) or EN 166(EU). Safet         Skin protection         This recommendation applies only to the product stated in the safe         supplied by us and for the designated use. When dissolving in orn         substances and under conditions deviating from those stated in EN         contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36         Internet: www.kcl.de).         Full contact         Material: Nitrile rubber         Minimum layer thickness: 0,4 mm         Break through time: 480 min         Material tested:Camatril® (KCL 730 / Aldrich Z677442, Size M)         This recommendation applies only to the product stated in the safe         supplied by us and for the designated use. When dissolving in orn         substances and under conditions deviating from those stated in EN         contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36         Internet: www.kcl.de).         Splash contact         Material: Nitrile rubber         Minimum layer thickness: 0,2 mm         Break through time: 60 min         Material tested:Dermatril® P (KCL 743 / Aldrich Z677388, Size M)         Body	y glasses ety data sheet, nixing with other N 16523-1 please S124 Eichenzell, ety data sheet, nixing with other N 16523-1 please S124 Eichenzell, on the following hards relating to sting of respiratory
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	liquid colorless No data available Melting point: -91,0 °C 98,2 - 98,4 °C at 1.000 hPa No data available Upper explosion limit: 7 %(V) Lower explosion limit: 1,1 %(V)
/ 1	I

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) Autoignition	223,0 °C
emperature	
) Decomposition	No data available
emperature	
() pH	No data available
Viscosity	Viscosity, kinematic: 0,64 mm2/s at 20 °C Viscosity, dynamic: No data available
m) Water solubility	insoluble
n) Partition coefficient:	log Pow: > 3 - Bioaccumulation is not expected.
n-octanol/water	
b) Vapor pressure	48 hPa at 20,0 °C
b) Density	0,68 g/cm3 at 15 °C
Relative density	No data available
g) Relative vapor	No data available
density	
) Particle	No data available
characteristics	
s) Explosive properties	Not classified as explosive.
Ó Oxidizing properties	none
9.2 Other safety information	
No data available	
SECTION 10: Stability and reactivity	
10.1 Reactivity	
Vapors may form explosive mixture with air.	
10.2 Chemical stability	
The product is chemically stable under standard ambient conditions (ro	oom tomporaturo)
10.3 Possibility of hazardous reactions	Join temperature).
Risk of ignition or formation of inflammable gases or vapours with:	
Strong oxidizing agents	
phosphorus	
n the presence of:	
Chlorine	
10.4 Conditions to avoid	
Warming.	
10.5 Incompatible materials	
rubber, various plastics	
10.6 Hazardous decomposition products	
n 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	
nhalation LC50 Rat: > 50mg/L.	
Chronic Effects on Humans: CARCINOGENIC EFFECTS: Classified N	one. by NTP, None. by OSHA, None. by NIOSH.
Other Toxic Effects on Humans: Hazardous in case of skin contact (irrit	
Special Remarks on Toxicity	
o 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 LL50 - Rainbow darter (Etheostoma caeruleum) - > 13,4 mg/l - 96 h (OECD Test Guideline 203) Remarks: (ECHA) Toxicity to daphnia and other aquatic invertebrates static test EC50 - Daphnia magna (Water flea) - 0,23 mg/l - 21 d

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Remarks: (ECHA) (in analogy to similar products) Toxicity to algae EL50 - Pseudokirchneriella subcapitata (g h (OECD Test Guideline 201) Remarks: (ECHA) NOELR - Pseudokirchneriella subcapitata (green algae) - 4 72 h (OECD Test Guideline 201) Remarks: (ECHA) 12.2 Persistence and degradability Biodegradability aerobic - Exposure time 10 d Result: 70 % - Readily biodegradable. Remarks: (ECHA) Biochemical Oxygen Demand (BOD) 1.920 mg/g Remarks: (IUCLID) Theoretical oxygen demand 3.500 mg/g Remarks: (Lit.) 12.3 Bioaccumulative potential Indication of bioaccumulation. 12.4 Mobility in soil No data available 12.5 Results of PBT and vPvB assessment This substance/mixture contains no components considered bioaccumulative and toxic (PBT), or very persistent and very levels of 0.1% or higher. 12.6 Endocrine disrupting properties Product: Assessment : The substance/mixture does not con considered to have endocrine disrupti according to REACH Article 57(f) or C Delegated regulation (EU) 2017/2100 Regulation (EU) 2018/605 at levels of 12.7 Other adverse effects Additional ecological information Do not empty into drains. Avoid release to the environment <b>SECTION 13: Disposal considerations</b> 13.1 Waste treatment methods No data available	5,3 mg/l -	
SECTION 14: Transport information 14.1 UN number ADR/RID: 1206 14.2 UN proper shipping name ADR/RID : HEPTANES IMDG : HEPTANES IATA : Heptanes	IMDG: 1206	IATA: 1206
14.3 Transport hazard class(es)		
ADR/RID: 3 14.4 Packaging group	IMDG: 3	IATA: 3
ADR/RID: II 14.5 Environmental hazards	IMDG: II	IATA: II
ADR/RID: yes	IMDG Marine pollutant: yes	IATA: no

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#### 14.6 Special precautions for user Tunnel restriction code : (D/E)

Tunnel restriction code : Further information

: No data available

### 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 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 P5c FLAMMABLE LIQUIDS Other regulations Take note of Dir 94/33/EC on the protection of young people at work. 15.2 Chemical Safety Assessment A Chemical Safety Assessment has been carried out for this substance.

### **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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