An ISO 9001 : 2015 & GMP Certified Company 101, Aarkay Ruby Industrial Estate (1B), Opp Shree Narayan Industrial Estate, Chinchpada, Vasai East, Waliv, Maharashtra 401208. 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: Decane, puriss, 99%+ Product Code: D 1235 CAS No : 124-18-5

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 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 Classification according to Regulation (EC) No 1272/2008 Flammable liquids (Category 3), H226 Aspiration hazard (Category 1), H304 For the full text of the H-Statements mentioned in this Section, see Section 16. 2.2 Label elements Labelling according Regulation (EC) No 1272/2008 Pictogram Signal Word Danger Hazard statement(s) H226 Flammable liquid and vapor. H304 May be fatal if swallowed and enters airways. Precautionary statement(s) P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container tightly closed. P233 Ground and bond container and receiving equipment. P240 Use explosion-proof electrical/ ventilating/ lighting/ equipment. P241 P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor. Do NOT induce vomiting. P331 Supplemental Hazard information (EU) EUH066 Repeated exposure may cause skin dryness or cracking. Reduced Labeling (<= 125 ml) Pictogram Signal Word Danger Hazard statement(s) H304 May be fatal if swallowed and enters airways. Precautionary statement(s) P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor. P331 Do NOT induce vomiting. Supplemental Hazard information (EU) EUH066 Repeated exposure may cause skin dryness or cracking. 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

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levels of 0.1% or higher.

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SECTION 3: Composition/information on ingredients

3.1 Substances Formula : C10H22 Molecular weight : 142,28 g/mol CAS-No. : 124-18-5 EC-No. : 204-686-4

Component	Classification	Concentration
decane		
CAS-No. 124-18-5 EC-No. 204-686-4	Flam. Liq. 3; Asp. Tox. 1; H226, H304	<= 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.

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 Carbon dioxide (CO2) Foam 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 Combustible. Vapors are heavier than air and may spread along floors. Forms explosive mixtures with air at elevated temperatures. Development of hazardous combustion gases or vapours possible in the event of fire. 5.3 Advice for firefighters In the event of fire, wear self-contained breathing apparatus. 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

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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 protection against fire and explosion Keep away from open flames, hot surfaces and sources of ignition Take precautionary measures against static discharge. Hygiene measures Change contaminated clothing. Preventive skin protection recommended. Wash hands 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. 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 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 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 EN374 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: 0,4 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 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 EN374 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: 30 min Material tested:KCL 741 Dermatril® L Body Protection Flame retardant antistatic protective clothing. Respiratory protection Recommended Filter type: Filter A (acc. to DIN 3181) for vapours of organic compounds 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.

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Control of environmental exposure Do not let product enter drains. Risk of explosion.

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

j) Decomposition temperature k) pH I) Viscosity

temperature

m) Water solubilityn) Partition coefficient:n-octanol/watero) 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

Vapor/air-mixtures are explosive at intense warming. 10.2 Chemical stability The product is chemically stable under standard ambient conditions (room temperature) . 10.3 Possibility of hazardous reactions Violent reactions possible with: Strong oxidizing agents 10.4 Conditions to avoid Heating. 10.5 Incompatible materials various plastics 10.6 Hazardous decomposition products In the event of fire: see section 5

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liquid, clear colorless No data available -30,0 °C

174 °C - lit.

No data available

Upper explosion limit: 2,6 %(V) Lower explosion limit: 0,8 %(V)

46 °C - closed cup 210,0 °C

206 °C at 1.013 hPa No data available

No data available Viscosity, kinematic: 1,16 mm2/s at 20 °C Viscosity, dynamic: No data available No data available No data available

5,1 hPa at 37,7 °C 1,3 hPa at 16,5 °C 1 hPa at 20 °C 0,73 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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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 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 semi-static test LC50 - Oncorhynchus mykiss (rainbow trout) - > 1.000 mg/l - 96 h (OECD Test Guideline 203) Toxicity to daphnia and other aquatic invertebrates static test EC50 - Daphnia magna (Water flea) - > 1.000 mg/l - 48 h Toxicity to algae static test EC50 - Pseudokirchneriella subcapitata -> 1.000 mg/l -72 h (OECD Test Guideline 201) 12.2 Persistence and degradability Biodegradability aerobic - Exposure time 28 d Result: 83,2 % - Readily biodegradable. (OECD Test Guideline 301F) 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. : 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: 2247 IMDG: 2247 IATA: 2247 14.2 UN proper shipping name ADR/RID : n-DECANE IMDG • n-DFCANF : n-Decane IATA 14.3 Transport hazard class(es) ADR/RID: 3 IMDG: 3 IATA: 3 14.4 Packaging group ADR/RID: III IMDG: III IATA: III

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14.5 Environmental hazards ADR/RID: no IMDG Marine pollutant: no 14.6 Special precautions for user 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. National legislation Seveso III: Directive 2012/18/EU of the European : FLAMMABLE LIQUIDS

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

: FLAMMABLE LIQUIDS

IATA: no

Other regulations 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.

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