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>

MATERIAL SAFETY DATA SHEET (MSDS)

SECTION 1: Product identifiers

Product Name : 2,4,6-Collidine, 98% Product Code : C 2450 CAS No: 108-75-8

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

SECTION 2: Hazards identification				
2.1 Classification of the substance or m	ixture			
Classification according to Regulation (EC) No 1272/2008				
Flammable liquids (Category 3), H226				
Acute toxicity, Oral (Category 4), H302				
Acute toxicity, Dermal (Category 3), H3	11			
Skin irritation (Category 2), H315				
Eye irritation (Category 2), H319				
Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335				
Long-term (chronic) aquatic hazard (Category 3), H412				
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.			
H302	Harmful if swallowe <mark>d.</mark>			
H311	Toxic in contact with skin.			
H315	Causes skin irritation.			
H319	Causes serious eye irritation.			
H335	May cause respiratory irritation.			
H412	Harmful to aquatic life with long lasting effects.			
Precautionary statement(s)				
P210	Keep away from heat, hot surfaces, sparks, open flames and			
	other ignition sources. No smoking.			
P273	Avoid release to the environment.			
P280	Wear protective gloves/ protective clothing/ eye protection/ face			
	protection.			
P301 + P312	IF SWALLOWED: Call a POISON CENTER/ doctor if you feel			
	unwell.			
P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated			
	clothing. Rinse skin with water.			
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes.			
	Remove contact lenses, if present and easy to do. Continue			
	rinsing.			
Supplemental Hazard				
Statements	none			
Reduced Labeling (<= 125 ml)				
Pictogram				
Signal Word	Danger			

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

Otto Chemie Pvt Ltd

bioaccumulative and toxic (PBT), c levels of 0.1% or higher. Ecological information: The substance/mixture does not co disrupting properties according to f (EU) 2017/2100 or Commission Re	REACH Article 57(f) or Commission Delegate	ent, /PvB) at prine ed regulation			
disrupting properties according to f	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:	ontain componente considered to have ander				
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	Ke				
Formula	: C8H11N				
Molecular weight CAS-No.	: 121,18 g/mol : 108-75-8				
EC-No.	: 203-613-3				
Component	Classification	Concentration			
2,4,6-trimethylpyridine					
CAS-No. 108-75-8	Flam. Liq. 3; Acute Tox. 4; Acute Tox. 3;	<= 100 %			
EC-No. 203-613-3	Skin Irrit. 2; Eye Irrit. 2; STOT SE 3; Aquatic Chronic 3; H226, H302, H311, H315, H319, H335, H412				

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.

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

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

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

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. 5.2 Special hazards arising from the substance or mixture Carbon oxides Nitrogen oxides (NOx) Combustible. Fire may cause evolution of: nitrous gases, nitrogen oxides 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 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. 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. 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 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 Protected from light.Keep container tightly closed in a dry and well-ventilated place. Keep away from heat and sources of ignition. Keep locked up or in an area accessible only to qualified or authorized persons. 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

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

SECTION 8: Exposure controls/personal protection

8.1 Control parameters Ingredients with workplace control parameters 8.2 Exposure controls Personal protective equipment Eve/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 EN 16523-1 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de). Full contact Material: Viton® Minimum layer thickness: 0,7 mm Break through time: 480 min 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 EN 16523-1 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: 0,4 mm Break through time: 10 min Body Protection Flame retardant antistatic protective clothing. Respiratory protection Recommended Filter type: Filter A-(P2) 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. Risk of explosion. **SECTION 9: Physical and chemical properties** 9.1 Information on basic physical and chemical properties a) Physical state liquid b) Color colorless c) Odor No data available d) Melting Melting point: -43 °C point/freezing point e) Initial boiling point 170 °C at 1.013 hPa - OECD Test Guideline 103 and boiling range f) Flammability (solid, No data available gas) g) Upper/lower No data available flammability or explosive limits h) Flash point 55 °C - closed cup i) Autoignition No data available temperature j) Decomposition No data available temperature k) pH No data available I) Viscosity Viscosity, kinematic: No data available Viscosity, dynamic: No data available m) Water solubility 23,8 g/l at 20 °C - OECD Test Guideline 105 n) Partition coefficient: log Pow: 1,25 at 20 °C - OECD Test Guideline 107

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

Otto Chemie Pvt Ltd

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 Surface tension 30.7 mN/m at 21 °C

2 hPa at 20 °C - OECD Test Guideline 104 0,914 g/cm3 at 20 °C No data available No data available

No data available

No data available none

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: halogen-halogen compounds Fluorine anhydrides peroxi compounds nitrogen oxides potassium dichromate . chromium(VI) oxide acids Oxidizing agents 10.4 Conditions to avoid Heating. 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 Othonic Effects on Humans: Not available. Special Remarks on other Toxic Effects on Humans: Not available.

SECTION 12: Ecological information

12.1 Toxicity Toxicity to daphnia and other aquatic invertebrates static test LC50 - Daphnia magna (Water flea) - 96,5 mg/l - 48 h (OECD Test Guideline 202) Remarks: (Lit.) Toxicity to algae static test ErC50 - Pseudokirchneriella subcapitata (green algae) -23,6 mg/l - 72 h (OECD Test Guideline 201) 12.2 Persistence and degradability Biodegradability aerobic - Exposure time 28 d

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>

Result: 3 % - Not 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 assessm This substance/mixture contains no com bioaccumulative and toxic (PBT), or very levels of 0.1% or higher. 12.6 Endocrine disrupting properties Product: Assessment :	ent ponents considered to be eith	nulative (vPvB) at not contain components e disrupting properties 57(f) or Commission 017/2100 or Commission
12.7 Other adverse effects No data available		
SECTION 13: Disposal considerations 13.1 Waste treatment methods No data available	5	
IMDG: FLAMMA	IMDG: 1992 BLE LIQUID, TOXIC, N.O.S. (BLE LIQUID, TOXIC, N.O.S. (le liquid, toxic, n.o.s. (2,4,6-trin IMDG: 3 (6.1) IMDG: III IMDG Marine pollutant: no	(2,4,6-trimethylpyridine)
SECTION 15: Regulatory information 15.1 Safety, health and environmental re- substance or mixture This material safety data sheet complies 1907/2006. 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. P5c FLAMMABLE LIQUIDS Other regulations Observe work restrictions regarding mat stricter national regulations where applic Take note of Dir 94/33/EC on the protec 15.2 Chemical Safety Assessment For this product a chemical safety asses	egulations/legislation specific f s with the requirements of Reg l s ternity protection in accordance cable. tion of young people at work.	julation (EC) No.

Section 16: Other Information

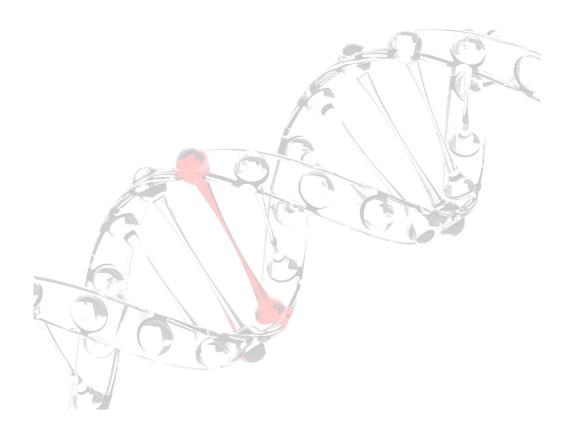
Otto Chemie Pvt Ltd - products are only for laboratory use only. Not for drug, medicinal, household or any other use. No liability accepted for mishandling in use - please test before use

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



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 - 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 - 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