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MATERIAL SAFETY DATA SHEET (MSDS)

SECTION 1: Product identifiers

Product Name : Methylamine, 40% Product Code : M 1939 CAS No: 74-89-5

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 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	
Classification according to Regulation (EC) No 1272/2008
Flammable liquids (Category 2), H225	
Acute toxicity, Oral (Category 4), H302	
Acute toxicity, Inhalation (Category 3),	H331
Skin corrosion (Category 1), H314	
Serious eye damage (Category 1), H31	
	posure (Category 3), Respiratory system, H335
For the full text of the H-Statements me	Intioned in this Section, see Section 16.
2.2 Label elements	
Labelling according Regulation (EC) No	0 1272/2008
Pictogram	
Signal Word	Danger
Hazard statement(s)	
H225	Highly flammable liquid and vapor.
H302	Harmful if swallow <mark>ed.</mark>
H314	Causes severe skin burns and eye damage.
H331	Toxic if inhaled.
H335	May cause respiratory irritation.
Precautionary statement(s)	
P210	Keep away from heat, hot surfaces, sparks, open flames and
Daga	other ignition sources. No smoking.
P280	Wear protective gloves/ protective clothing/ eye protection/ face
P301 + P312	protection.
P301 + P312	IF SWALLOWED: Call a POISON CENTER/ doctor if you feel
P303 + P361 + P353	unwell. IF ON SKIN (or hair): Take off immediately all contaminated
P303 + P301 + P353	clothing. Rinse skin with water.
P304 + P340 + P310	IF INHALED: Remove person to fresh air and keep comfortable
F 504 + F 540 + F 510	for breathing. Immediately call a POISON CENTER/ doctor.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes.
1 303 1 1 331 1 338	Remove contact lenses, if present and easy to do. Continue
	rinsing.
Supplemental Hazard	none
Statements	Tione
Reduced Labeling (<= 125 ml)	
Pictogram	
Signal Word	Danger
Hazard statement(s)	
H331	Toxic if inhaled.

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H314 Precautionary statement(s)	Causes severe skin burns and eye damage.				
P280 protection.	Wear protective gloves/ protective clothing/ eye protection/ face				
P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.				
P304 + P340 + P310	IF INHĂLED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/ doctor.				
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.				
	none none nponents considered to be either persistent,				
bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.					
SECTION 3: Composition/information on ingredients 3.2 Mixtures					
Synonyms : Monomethylamine Formula : CH5N Molecular weight : 31,06 g/mol					

Component	1	Classification	Concentration
methylamine in solution	Con-		
CAS-No 74-89-5		Flam. Liq. 1; Acute Tox. 4; Skin Corr. 1B;	>= 30 - < 50 %
EC-No. 200-820-0	harden	Eye Dam. 1; STOT SE 3; H224, H302,	
		H332, H314, H318, H335 Concentration	
		limits: >= 5 %: STOT SE 3, H335;	A SA

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. Immediately call in physician. If breathing stops: immediately apply artificial respiration, if necessary also oxygen.

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. Immediately call in ophthalmologist.

Remove contact lenses.

If swallowed

After swallowing: make victim drink water (two glasses at most), avoid vomiting (risk of perforation). Call a physician immediately. Do not attempt to neutralise.

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
Water 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 Nitrogen oxides (NOx) Carbon oxides Nitrogen oxides (NOx) Mixture with combustible ingredients. 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. 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 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. Keep locked up or in an area accessible only to qualified or authorized persons. 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

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government standards such as NIOSH (US) or EN 166(EU). Tightly fitting safety goggles Skin protection Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves have to satisfy the specifications of Regulation (EU) 2016/425 and the standard EN 374 derived from it. Full contact If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the EC approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario. Body Protection Flame retardant antistatic 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 AX 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, clear b) Color colorless unpleasant c) Odor d) Melting -40 °C point/freezing point 48 °C e) Initial boiling point and boiling range f) Flammability (solid, No data available gas) Upper explosion limit: 26,4 %(V) g) Upper/lower flammability or explosive limits Lower explosion limit: 5,2 %(V) h) Flash point -10 °C - closed cup i) Autoignition No data available temperature j) Decomposition No data available temperature k) pH 14,0 at 100 g/l I) Viscosity Viscosity, kinematic: No data available Viscosity, dynamic: No data available m) Water solubility soluble n) Partition coefficient: log Pow: -0,713 n-octanol/water o) Vapor pressure 371 hPa at 20 °C p) Density 0,897 g/mL at 25 °C Relative density No data available q) Relative vapor No data available density r) Particle No data available

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characteristics s) Explosive properties t) Oxidizing properties 9.2 Other safety information Surface tension 19,19 mN/m at 25 °C Relative vapor density 1,07 - (Air = 1.0)

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 (room temperature) .
10.3 Possibility of hazardous reactions
No data available
10.4 Conditions to avoid
Warming.
10.5 Incompatible materials
acids, Acid chlorides, Acid anhydrides, Oxidizing agents, Chloroformates, Phosphorus halides
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 Mixture No data available 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 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: Assessment : 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

12.7 Other adverse effects No data available Components methylamine in solution

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Regulation (EU) 2018/605 at levels of 0.1% or higher.

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No data available				
Toxicity to daphnia	static test EC50 - Daphnia magna (Wat	ter flea) - 163 mg/l - 48		
	h			
	Remarks: (ECHA)			
and other aquatic				
invertebrates				
Toxicity to algae	static test ErC50 - Desmodesmus subs	picatus (green algae) - >		
	281,8 mg/l - 72 h			
	(OECD Test Guideline 201)			
Toxicity to bacteria	EC20 - activated sludge - 240 mg/l - 30	J min		
	(ISO 8192)			
CECTION 42: Dispessel consideration	-			
SECTION 13: Disposal consideration	S			
13.1 Waste treatment methods				
Product				
	es regarding the return of chemicals and			
containers, or contact us there if you ha	ive further questions.			
SECTION 14: Transport information				
14.1 UN number	IN IDO 1005			
ADR/RID: 1235	IMDG: 1235	IATA: 1235		
14.2 UN proper shipping name				
	AMINE, AQUEOUS SOLUTION			
	AMINE, AQUEOUS SOLUTION			
	nine, aqueous solution			
14.3 Transport hazard class(es)				
ADR/RID: 3 (8)	IMDG: 3 (8)	IATA: 3 (8)		
14.4 Packaging group ADR/RID: II	IMDG: II	LATA, II		
14.5 Environmental hazards	IIVIDG. II	IATA: II		
ADR/RID: no	IMDG Marine pollutant: no	IATA: no		
14.6 Special precautions for user	INIDO Marine polititarit. no	IATA. 110		
Tunnel restriction code : (D/E)				
Further information : No data available				
SECTION 15: Regulatory information				
15.1 Safety, health and environmental	equilations/legislation specific for the			
substance or mixture	egulations/legislation specific for the			
	s with the requireme <mark>nts of R</mark> egulation (E			
1907/2006.	3 with the requirements of Regulation (E	6) 110.		
National legislation				
Seveso III: Directive 2012/18/EU of the	Furopean	ACUTE TOXIC		
Parliament and of the Council on the co				
major-accident hazards involving dange		: FLAMMABLE LIQUIDS		
substances.		: ACUTE TOXIC		
		: FLAMMABLE LIQUIDS		
Other regulations				
Observe work restrictions regarding maternity protection in accordance to Dir 92/85/EEC or				
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 asse	ssment 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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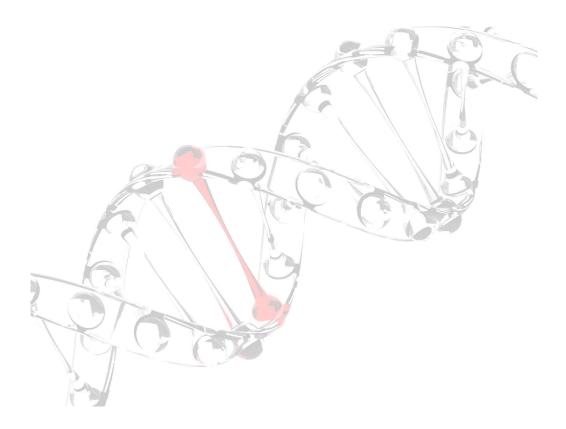
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