### CAS No: MSDS



### MATERIAL SAFETY DATA SHEET (MSDS)

SECTION 1: Identification of the subst	ance/mixture and of the company/undertaking	
SECTION 1. Identification of the subst		
1.1. Product identifier		
Product form	: Mixture	
	:	
Product code	: 06227	
1.2. Relevant identified uses of the	e substance or mixture and uses advised against	
1.2.1. Relevant identified uses		
Use of the substance/mixture	: Laboratory chemicals, Manufacture of substances	
1.2.2. Uses advised against		
No additional information available		
1.3. Details of the supplier of the s	afoty data shoot	
Labogens Fine Chem Industries	alety tata sheet	
1st Floor, Above Bank of India, Guru Vih	ar, Rahon Road,	
Ludhiana Pb. (141007)		
+91 9316777775, +91 7707855700 sales@labogens.com - www.Labogens	com	
1.4. Emergency telephone number	r	
Emergency number	: +91 7707855700 (9:00am - 6:00 pm)	
SECTION 2: Hazards identification		
2.1. Classification of the substanc	e or mixture	
Classification according to Directive 67/548/EEC or 1999/45/EC		
T; R23/24/25		

T; R39/23/24/25

Full text of R-phrases: see section 16

#### Adverse physicochemical, human health and environmental effects

No additional information available

Safety Data Sheet

2.2. Label elements

#### Labelling according to Directive 67/548/EEC or 1999/45/EC

Hazard symbols



T - Toxic

 R23/24/25 - Toxic by inhalation, in contact with skin and if swallowed R39/23/24/25 - Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed
 S4 - Keep away from living quarters

S-phrases

R-phrases

S4 - Keep away from living quarters
S24 - Avoid contact with skin
S28 - After contact with skin, wash immediately with plenty of ... (to be specified by the manufacturer)
S35 - This material and its container must be disposed of in a safe way
S36/37 - Wear suitable protective clothing and gloves
S38 - In case of insufficient ventilation, wear suitable respiratory equipment
S45 - In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible)

S59 - Refer to manufacturer/supplier for information on recovery/recycling

#### 2.3. Other hazards

#### No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	Classification according to Directive 67/548/EEC	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Methanol	(CAS No) 67-56-1 (EC no) 200-659-6 (EC index no) 603- 001-00-X	75 - 99	F; R11 T; R23/24/25 T; R39/23/24/25	Flam. Liq. 2, H225 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Inhalation), H331 Acute Tox. 3 (Oral), H301 STOT SE 1, H370
TETRAMETHYL AMMONIUM HYDROXIDE 25% IN METHANOL	(CAS No) 75-59-2	15 - 25	Not classified	Not classified

Full text of R- and H-phrases: see section 16

Safety Data Sheet

#### **SECTION 4: First aid measures**

4.1. Description of first aid measures	3	
First-aid measures general	: Call a POISON CENTER or doctor/physician. Specific treatment (see on this label).	
First-aid measures after inhalation	: Remove victim to fresh air and keep at rest in a position comfortable for breathing.	
First-aid measures after skin contact	: Immediately call a POISON CENTER or doctor/physician. Remove/Take off immediately all contaminated clothing. Wash with plenty of soap and water. Specific measures (see on this label). Wash contaminated clothing before reuse.	
First-aid measures after eye contact	: Remove contact lenses, if present and easy to do. Continue rinsing. Rinse cautiously with water for several minutes.	
First-aid measures after ingestion	: Rinse mouth. Obtain emergency medical attention. Immediately call a POISON CENTER or doctor/physician. Specific treatment (see on this label).	
4.2. Most important symptoms and e	ffects, both acute and delayed	
Symptoms/injuries	: Causes damage to organs. Causes severe skin burns and eye damage.	
Symptoms/injuries after inhalation	: Toxic if inhaled.	
Symptoms/injuries after skin contact	: Toxic in contact with skin.	
Symptoms/injuries after ingestion	: Toxic if swallowed.	
4.3. Indication of any immediate med	lical attention and special treatment needed	
Treat symptomatically.		
SECTION 5: Firefighting measures		
5.1 Extinguishing modia		

5.1. Extinguishing media	
Suitable extinguishing media	: dry chemical powder, alcohol-resistant foam, carbon dioxide (CO2).
Unsuitable extinguishing media	: Do not use a heavy water stream.
5.2. Special hazards arising from the	e substance or mixture
Fire hazard	: Highly flammable liquid and vapour.
5.3. Advice for firefighters	
Protection during firefighting	: Do not attempt to take action without suitable protective equipment.
<b>SECTION 6: Accidental release measure</b>	S
6.1. Personal precautions, protective	e equipment and emergency procedures
6.1.1. For non-emergency personnel	
Emergency procedures	: Evacuate unnecessary personnel.
6.1.2. For emergency responders	
6.1.2. For emergency responders Protective equipment	: Avoid breathing dust/fume/gas/mist/vapours/spray.
Protective equipment	: Avoid breathing dust/fume/gas/mist/vapours/spray.

6.3.	Methods and material for contain	ment and cleaning up
Methods	for cleaning up	: Collect spillage. On land, sweep or shovel into suitable containers. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible.

#### 6.4. Reference to other sections

No additional information available

Safety Data Sheet

SECTION 7: Handling and storage	
7.1. Precautions for safe hand	ling
Precautions for safe handling	: Do not breathe dust/fume/gas/mist/vapours/spray.
Hygiene measures	Do not eat, drink or smoke when using this product. Wash thoroughly after handling.
7.2. Conditions for safe storag	e, including any incompatibilities
Storage conditions	: Store in original container. Keep container tightly closed. Store in a dry place. Protect from moisture.
7.3. Specific end use(s)	
No additional information available	
SECTION 8: Exposure controls/per	rsonal protection
8.1. Control parameters	

No additional information available

8.2. Exposure controls	
Hand protection	: protective gloves
Eye protection	: Chemical goggles or safety glasses
Skin and body protection	: Wear suitable protective clothing
Respiratory protection	: Wear respiratory protection
<b>SECTION 9: Physical and chemical prop</b>	perties
9.1. Information on basic physical a	and chemical properties
Physical state	: Liquid
Colour	: Clear Colorless.
Odour	: alcoholic odour.
Odour threshold	: No data available
рН	: No data available
Relative evaporation rate (butylacetate=1)	: 5.2
Melting point	: -97.8 °C
Freezing point	: No data available
Boiling point	: 63.9 °C
Flash point	: 6 °C
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: Flammable

Safety Data Sheet

Safety Data Sheet	
Vapour pressure	: 29 mm Hg (at 20°C)
Relative vapour density at 20 °C	: 1.1
Relative density	: No data available
Density Solubility	: 0.8 g/cm³ : Water: Soluble in water
Log Pow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available
9.2. Other information No additional information available	
SECTION 10: Stability and reactivity	
10.1. Reactivity	
No additional information available	
10.2. Chemical stability	
Highly flammable liquid and vapour.	
10.3. Possibility of hazardous rea	actions
No additional information available	

#### 10.4. Conditions to avoid

Direct sunlight. Overheating. Open flame. Heat. Sparks.

#### 10.5. Incompatible materials

No additional information available

#### 10.6. Hazardous decomposition products

No additional information available

<b>SECTION 11: Toxicological information</b>	n
11.1. Information on toxicological e	ffects
Acute toxicity	: Toxic by inhalation, in contact with skin and if swallowed. Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.
Irritation	: Not classified
Corrosivity	: Not classified
Sensitisation	: Not classified

: Not classified

: Not classified

: Not classified

Carcinogenicity

Mutagenicity

Repeated dose toxicity

oxicity for reproduction	: Not classified
Potential adverse human health effects and symptoms	: Toxic if swallowed. Toxic in contact with skin.
SECTION 12: Ecological information	
12.1. Toxicity	
No additional information available	
12.2. Persistence and degradability	
No additional information available	
12.3. Bioaccumulative potential	
No additional information available	
12.4. Mobility in soil	
No additional information available	
12.5. Results of PBT and vPvB ass	essment
No additional information available	
12.6. Other adverse effects	
No additional information available	
SECTION 13: Disposal considerations	
13.1. Waste treatment methods	
Product/Packaging disposal	: Dispose of contents/container to
recommendations	
Ecology - waste materials	: Hazardous waste due to toxicity.
SECTION 14: Transport information	

14.1. UN number	
UN-No. (ADR)	: 3286
UN-No. (IMDG)	: 3286
UN-No.(IATA)	: 3286
UN-No.(ADN)	: 3286
UN-No. (RID)	: 3286
14.2. UN proper shipping name	
Proper Shipping Name (ADR)	: FLAMMABLE LIQUID, TOXIC, CORROSIVE, N.O.S.
Proper Shipping Name (IMDG)	: FLAMMABLE LIQUID, TOXIC, CORROSIVE, N.O.S.
Proper Shipping Name (IATA)	: FLAMMABLE LIQUID, TOXIC, CORROSIVE, N.O.S.

Safety Data Sheet

Proper Shipping Name (ADN) Proper Shipping Name (RID) Transport document description (ADR) Transport document description (IMDG) Transport document description (IATA) Transport document description (ADN)	<ul> <li>FLAMMABLE LIQUID, TOXIC, CORROSIVE, N.O.S.</li> <li>FLAMMABLE LIQUID, TOXIC, CORROSIVE, N.O.S.</li> <li>UN 3286 FLAMMABLE LIQUID, TOXIC, CORROSIVE, N.O.S., 3 (6.1+8), II, (D/E)</li> <li>UN 3286 FLAMMABLE LIQUID, TOXIC, CORROSIVE, N.O.S., 3 (6.1+8), II</li> <li>UN 3286 FLAMMABLE LIQUID, TOXIC, CORROSIVE, N.O.S., 3 (6.1+8), II</li> <li>UN 3286 FLAMMABLE LIQUID, TOXIC, CORROSIVE, N.O.S., 3 (6.1+8), II</li> <li>UN 3286 FLAMMABLE LIQUID, TOXIC, CORROSIVE, N.O.S., 3 (6.1+8), II</li> </ul>
Transport document description (RID)	: UN 3286 FLAMMABLE LIQUID, TOXIC, CORROSIVE, N.O.S., 3 (6.1+8), II
14.3. Transport hazard class(es)	
ADR	
Transport hazard class(es) (ADR)	: 3 (6.1, 8)
Danger labels (ADR)	: 3, 6.1, 8
IMDG	
Transport hazard class(es) (IMDG)	: 3 (6.1, 8)
Danger labels (IMDG)	: 3, 6.1, 8

#### ΙΑΤΑ

Transport hazard class(es) (IATA) Hazard labels (IATA) : 3 (6.1, 8) : 3, 6.1, 8



#### ADN

Transport hazard class(es) (ADN) Danger labels (ADN)

#### RID

Transport hazard class(es) (RID) Danger labels (RID)



: 3 (6.1, 8)

: 3, 6.1, 8



Safety Data Sheet



14.4. Packing group		
Packing group (ADR)	: 11	
Packing group (IMDG)	: 11	
Packing group (IATA)	: 11	
Packing group (ADN)	: 11	
Packing group (RID)	: 11	

#### 14.5. Environmental hazards

Dangerous for the environment	: No
Marine pollutant	: No
Other information	: No supplementary information available

#### 14.6. Special precautions for user

- Overland transport	
Classification code (ADR)	: FTC
Special provision (ADR)	: 274
Limited quantities (ADR)	: 1L
Excepted quantities (ADR)	: E2
Packing instructions (ADR)	: P001, IBC02
Mixed packing provisions (ADR)	: MP19
Portable tank and bulk container instructions (ADR)	: T11
Portable tank and bulk container special provisions (ADR)	: TP2, TP27
Tank code (ADR)	: L4BH
Tank special provisions (ADR)	: TU15
Vehicle for tank carriage	: FL
Transport category (ADR)	: 2
Special provisions for carriage - Loading, unloading and handling (ADR)	: CV13, CV28
Chapiel provisions for corrigge Operation	· 62 622
Special provisions for carriage - Operation (ADR)	. 32, 322
	: 368
(ADR)	
(ÅDR) Hazard identification number (Kemler No.)	: 368
(ÅDR) Hazard identification number (Kemler No.)	368 <b>368</b>
(ÅDR) Hazard identification number (Kemler No.) Orange plates	368 368 3286
(ÅDR) Hazard identification number (Kemler No.) Orange plates Tunnel restriction code (ADR)	368 368 3286 2/E
(ÅDR) Hazard identification number (Kemler No.) Orange plates Tunnel restriction code (ADR) EAC code APP code	: 368 368 3286 : D/E : •3WE
(ÅDR) Hazard identification number (Kemler No.) Orange plates Tunnel restriction code (ADR) EAC code	: 368 368 3286 : D/E : •3WE
(ÅDR) Hazard identification number (Kemler No.) Orange plates Tunnel restriction code (ADR) EAC code APP code - Transport by sea	: 368 368 3286 : D/E : •3WE : A(fl)
(ÅDR) Hazard identification number (Kemler No.) Orange plates Tunnel restriction code (ADR) EAC code APP code - Transport by sea Special provision (IMDG)	: 368 368 3286 : D/E : •3WE : A(fl) : 274
(ÅDR) Hazard identification number (Kemler No.) Orange plates Tunnel restriction code (ADR) EAC code APP code - Transport by sea Special provision (IMDG) Limited quantities (IMDG)	: 368 368 3286 : D/E : •3WE : A(fl) : 274 : 1 L
(ÅDR) Hazard identification number (Kemler No.) Orange plates Tunnel restriction code (ADR) EAC code APP code <b>- Transport by sea</b> Special provision (IMDG) Limited quantities (IMDG) Excepted quantities (IMDG)	: 368 368 3286 : D/E : •3WE : A(fl) : 274 : 1 L : E2

Safety Data Sheet

Callety Data Cheet	
Tank instructions (IMDG)	: T11
Tank special provisions (IMDG)	: TP2, TP13, TP27
EmS-No. (Fire)	: F-E
EmS-No. (Spillage)	: S-C
Stowage category (IMDG)	: B
Stowage and handling (IMDG)	: SW2
Segregation (IMDG)	: SG5, SG8
MFAG-No	: 131
- Air transport	
PCA Excepted quantities (IATA)	: E2
PCA Limited quantities (IATA)	: Y340
PCA limited quantity max net quantity (IATA)	: 0.5L
PCA packing instructions (IATA)	: 352
PCA max net quantity (IATA)	: 00_ : 1L
CAO packing instructions (IATA)	: 363
CAO max net quantity (IATA)	: 5L
ERG code (IATA)	: 3CP
- Inland waterway transport	FTO
Classification code (ADN)	: FTC
Special provisions (ADN)	: 274, 802
Limited quantities (ADN)	: 1L
Excepted quantities (ADN)	: E2
Carriage permitted (ADN)	
Equipment required (ADN)	: PP, EP, EX, TOX, A
Ventilation (ADN)	: VE01, VE02
Number of blue cones/lights (ADN)	: 2
- Rail transport	
Classification code (RID)	: FTC
Special provision (RID)	: 274
Limited quantities (RID)	: 1L
Excepted quantities (RID)	: E2
Packing instructions (RID)	: P001, IBC02
Mixed packing provisions (RID)	: MP19
Portable tank and bulk container instructions (RID)	: T11
Portable tank and bulk container special provisions (RID)	: TP2, TP27
Tank codes for RID tanks (RID)	: L4BH
Special provisions for RID tanks (RID)	: TU15
Transport category (RID)	: 2
Special provisions for carriage – Loading and unloading (RID)	: CW13, CW28
Colis express (express parcels) (RID)	: CE7
Hazard identification number (RID)	: 368

#### 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

Safety Data Sheet

#### SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

Contains no substances with Annex XVII restrictions Contains no REACH candidate substance

Contains no REACH Annex XIV substances.

#### 15.1.2. National regulations

<b>Germany</b> AwSV/VwVwS Annex reference 12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV	<ul> <li>Water hazard class (WGK) 1, slightly hazardous to water (Classification according to AwSV, Annex 1)</li> <li>Is not subject of the 12. BlmSchV (Hazardous Incident Ordinance)</li> </ul>
Denmark	
Class for fire hazard	: Class I-1
Store unit	: 1 liter
Classification remarks	: F <flam. 2="" liq.="">; Emergency management guidelines for the storage of flammable liquids must be followed</flam.>
Recommendations Danish Regulation	: Young people below the age of 18 years are not allowed to use the product Pregnant/breastfeeding women working with the product must not be in direct contact with the product

#### 15.2. Chemical safety assessment

No additional information available

#### **SECTION 16: Other information**

#### Full text of R-, H- and EUH-phrases:

Acute Tox. 3 (Dermal)	Acute toxicity (dermal), Category 3
Acute Tox. 3 (Inhalation)	Acute toxicity (inhal.), Category 3
Acute Tox. 3 (Oral)	Acute toxicity (oral), Category 3
Flam. Liq. 2	Flammable liquids, Category 2
STOT SE 1	Specific target organ toxicity — single exposure, Category 1
H225	Highly flammable liquid and vapour
H301	Toxic if swallowed
H311	Toxic in contact with skin

Safety Data Sheet

H331	Toxic if inhaled
H370	Causes damage to organs
R11	Highly flammable
R23/24/25	Toxic by inhalation, in contact with skin and if swallowed
R39/23/24/25	Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed
F	Highly flammable
Т	Тохіс

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product