

OTTO CHEMIE PVT LTD

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 : info@ottokemi.com Web : www.ottokemi.com

Creation Date :- 19-05-2025

Revision Date :- 02-08-2030

MATERIAL SAFETY DATA SHEET (MSDS)

SECTION 1. Product identifiers

Product name: Methyl bromide 25% in toluene
Product Code: M 2773
CAS No : 74-83-9

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

Flammable liquids, (Category 2)

Acute toxicity, (Category 3)

Acute toxicity, (Category 3)

Acute toxicity, (Category 3)

Carcinogenicity, (Category 1A)

Specific target organ toxicity -
single exposure, (Category 1),

Eyes, Central nervous system

Hazardous to the ozone layer,
(Category 1)

H225: Highly flammable liquid and vapor.

H301: Toxic if swallowed.

H331: Toxic if inhaled.

H311: Toxic in contact with skin.

H350: May cause cancer.

H370: Causes damage to organs.

H420: Harms public health and the
environment by destroying ozone in the
upper atmosphere.

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008

Pictogram

Signal Word

Hazard Statements

H225

H301 + H311 + H331

H350

H370

H420

Danger

Highly flammable liquid and vapor.

Toxic if swallowed, in contact with skin or if inhaled.

May cause cancer.

Causes damage to organs (Eyes, Central nervous system).

Harms public health and the environment by destroying ozone
in the upper atmosphere.

Precautionary Statements

P210

Keep away from heat, hot surfaces, sparks, open flames and
other ignition sources. No smoking.

P280

Wear protective gloves/ protective clothing/ eye protection/ face
protection.

P301 + P310

IF SWALLOWED: Immediately call a POISON CENTER/ doctor.

P303 + P361 + P353

IF ON SKIN (or hair): Take off immediately all contaminated
clothing. Rinse skin with water.

P304 + P340 + P311

IF INHALED: Remove person to fresh air and keep comfortable
for breathing. Call a POISON CENTER/ doctor.

P502

Refer to manufacturer or supplier for information on recovery or
recycling.

Supplemental Hazard
Statements

none

Restricted to professional users.

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Reduced Labeling (<= 125 ml)

Pictogram

Signal Word

Hazard Statements

H350

H370

H420

H301 + H311 + H331

Precautionary Statements

P280

P301 + P310

P304 + P340 + P311

P502

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

3.2 Mixtures

Synonyms

: Volatile Organic Compounds Mix 6

Component	Classification	Concentration
Bromomethane		
CAS-No. 74-83-9 EC-No. 200-813-2	Press. Gas Liquefied gas; Acute Tox. 3; Acute Tox. 2; Skin Irrit. 2; Eye Irrit. 2; Muta. 2; STOT SE 3; STOT RE 2; Aquatic Acute 1; Aquatic Chronic 2; Ozone 1; H280, H301, H330, H310, H315, H319, H341, H335, H373, H400, H411, H420	>= 0,1 - < 0,25 %

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. 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

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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: fresh air. Make victim drink ethanol (e.g. 1 drinking glass of a 40% alcoholic beverage). Call a doctor immediately (mention methanol ingestion). Only in exceptional cases, if no medical care is available within one hour, induce vomiting (only in fully conscious persons) and make victim drink ethanol again (approx. 0.3 ml of a 40% alcoholic beverage/kg body weight/hour).

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.

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.

Hygiene measures

Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

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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 government standards such as NIOSH (US) or EN 166(EU). Safety glasses

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

Material: butyl-rubber

Minimum layer thickness: 0,3 mm

Break through time: 480 min

Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0,4 mm

Break through time: 30 min

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 ABEK

The entrepreneur 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

No data available

c) Odor

No data available

d) Melting

No data available

point/freezing point

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e) Initial boiling point and boiling range	No data available
f) Flammability (solid, gas)	No data available
g) Upper/lower flammability or explosive limits	No data available
h) Flash point	9,7 °C - closed cup
i) Autoignition temperature	No data available
j) Decomposition temperature	No data available
k) pH	No data available
l) Viscosity	Viscosity, kinematic: No data available Viscosity, dynamic: No data available
m) Water solubility	No data available
n) Partition coefficient: n-octanol/water	No data available
o) Vapor pressure	No data available
p) Density	No data available
Relative density	No data available
q) Relative vapor density	No data available
r) Particle characteristics	No data available
s) Explosive properties	Not classified as explosive.
t) 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 (room temperature) .

10.3 Possibility of hazardous reactions

No data available

10.4 Conditions to avoid

Warming.

10.5 Incompatible materials

Zinc, Strong bases, Acids, Oxidizing agents, Alkali metals, Strong oxidizing agents, Potassium, Iron, Acid chlorides, Acid anhydrides, Reducing agents, Copper, Aluminum, Plastics, Rubber, Chemically active metals, Sodium/sodium oxides, Magnesium, and its alloys

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 Chronic Effects on Humans: Not available.

Special Remarks on other Toxic Effects on Humans: Not available.

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

12.7 Other adverse effects

No data available

Components

Methanol

Toxicity to fish flow-through test LC50 - *Lepomis macrochirus* (Bluegill) - 15.400,0 mg/l - 96 h

(US-EPA)

Toxicity to daphnia and other aquatic invertebrates

semi-static test EC50 - *Daphnia magna* (Water flea) - 18.260 mg/l - 96 h

(OECD Test Guideline 202)

Toxicity to algae static test ErC50 - *Pseudokirchneriella subcapitata* (green algae) - ca. 22.000,0 mg/l - 96 h

(OECD Test Guideline 201)

Toxicity to bacteria static test IC50 - activated sludge - > 1.000 mg/l - 3 h

(OECD Test Guideline 209)

Toxicity to

fish(Chronic toxicity)

NOEC - *Oryzias latipes* (Orange-red killifish) - 7.900 mg/l - 200 h

Remarks: (External MSDS)

Vinyl chloride

Toxicity to fish semi-static test LC50 - *Danio rerio* (zebra fish) - 210 mg/l - 96 h

(OECD Test Guideline 203)

Toxicity to bacteria Remarks: (ECHA)

Chloroethane

Toxicity to daphnia and other aquatic invertebrates

static test EC50 - *Daphnia magna* (Water flea) - 58 mg/l - 48 h

(Directive 67/548/EEC, Annex V, C.2.)

Toxicity to algae static test ErC50 - *Desmodesmus subspicatus* (green algae) - 118 mg/l - 72 h

(Directive 67/548/EEC, Annex V, C.3.)

Toxicity to bacteria static test EC10 - *Pseudomonas putida* - > 140 mg/l - 17 h (DIN 38 412 Part 8)

Bromomethane

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Toxicity to fish LC50 - Oncorhynchus mykiss (rainbow trout) - 3,9 mg/l - 96 h
(US-EPA)

Toxicity to daphnia
and other aquatic
invertebrates

EC50 - Daphnia magna (Water flea) - 2,6 mg/l - 48 h
(US-EPA)

Toxicity to algae IC50 - Chlorella pyrenoidosa - 5 mg/l - 48 h

Remarks: (ECOTOX Database)

methyl chloride

No data available

Toxicity to daphnia
and other aquatic
invertebrates

semi-static test EC50 - Daphnia magna (Water flea) - 200 mg/l
- 48 h

(OECD Test Guideline 202)

Trichlorofluoromethane

No data available

dichlorodifluoromethane

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: 1230

IMDG: 1230

IATA: 1230

14.2 UN proper shipping name

ADR/RID:

METHANOL, SOLUTION

IMDG:

METHANOL, SOLUTION

IATA:

Methanol, SOLUTION

14.3 Transport hazard class(es)

ADR/RID: 3 (6.1)

IMDG: 3 (6.1)

IATA: 3 (6.1)

14.4 Packaging group

ADR/RID: II

IMDG: II

IATA: II

14.5 Environmental hazards

ADR/RID: no

IMDG Marine pollutant: no

IATA: no

14.6 Special precautions for user

Tunnel restriction code :

(D/E)

Further information :

No data available

14.7 Maritime transport in bulk according to IMO instruments

Not applicable for product as supplied.

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

Regulation (EU) No 2024/590 on substances that
deplete the ozone layer

: Bromomethane

methyl chloride

Trichlorofluoromethane

dichlorodifluoromethane

REACH - Restrictions on the manufacture,

placing on the market and use of certain

dangerous substances, mixtures and articles

(Annex XVII)

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: Methanol
Vinyl chloride
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.
H2 ACUTE TOXIC
P5c FLAMMABLE LIQUIDS
22 Methanol
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 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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