CAS No: 78-77-3 MSDS



MATERIAL SAFETY DATA SHEET (MSDS)

SECTION 1: Identification of the substance/mixture and of the company/undertaking

Product identifier		
t form	:	Substance
	:	
	:	201-141-2
)	:	78-77-3
t code	:	2295D
a	:	C4H9Br
ms	:	Isobutyl bromide
	Product identifier t form t code a ms	t form : : : : : : : : : : : : : : : : : : :

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

Use of the substance/mixture

: Industrial;For professional use only

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier	of the safety data sheet	
Labogens Fine Chem Industries		
1st Floor, Above Bank of India, C	uru Vihar Rahon Road	
Ludhiana Pb. (141007)		
+91 9316777775, +91 7707855700		
sales@labogens.com - www.Labogens.com		
sales@laboyelis.comwww.Laboyelis.com		
1.4. Emergency telephone	number	
Emergency number	: +91 7707855700 (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 [CLP] Flammable liquids, H225 Category 2

Full text of classification categories and H statements : see section 16

Classification according to Directive 67/548/EEC or 1999/45/EC Not classified

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Adverse physicochemical, human health and environmental effects

No additional information available

2.2 Label elements

L.L. Euser crements	
Labelling according to Regulation	n (EC) No. 1272/2008 [CLP]
Hazard pictograms (CLP)	
	GHS02
Signal word (CLP)	: Danger
Hazard statements (CLP)	: H225 - Highly flammable liquid and vapour

: P210 - Keep away from heat, hot surfaces, open flames, sparks. - No smoking P370+P378 - In case of fire: Use alcohol resistant foam, foam, sand for extinction P403+P235 - Store in a well-ventilated place. Keep cool

2.3. **Other hazards**

No additional information available

Precautionary statements (CLP)

SECTION 3: Composition/information on ingredients

3.1. **Substance**

Name	Product identifier	%
1-BROMO-2-METHYLPROPANE	(CAS No) 78-77-3 (EC no) 201-141-2	100

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

3.2. **Mixture** Not applicable

SECTION 4: First aid measures	
4.1. Description of first aid measu	res
First-aid measures after inhalation	 Remove person to fresh air and keep comfortable for breathing. Give oxygen or artificial respiration if necessary. Immediately call a POISON CENTER or doctor/physician.
First-aid measures after skin contact	 Gently wash with plenty of soap and water. Remove/Take off immediately all contaminated clothing. If skin irritation occurs: Get medical advice/attention.
First-aid measures after eye contact	: Remove contact lenses, if present and easy to do. Continue rinsing. Rinse cautiously with water for several minutes. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	: Rinse mouth. Do not induce vomiting because of corrosive effects. If you feel unwell, seek medical advice.

4.2. Most important symptoms and effects, both acute and delayed

No additional information available

Indication of any immediate medical attention and special treatment needed 4.3.

Treat symptomatically.

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SECTION 5: Firefighting measures	
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 th	
Fire hazard	: Flammable liquid and vapour.
Hazardous decomposition products in case of fire	: May release flammable gases.
5.3. Advice for firefighters	
Protection during firefighting	: Do not attempt to take action without suitable protective equipment.
SECTION 6: Accidental release measure	es
	e equipment and emergency procedures
6.1.1. For non-emergency personnel	
Emergency procedures	: Evacuate unnecessary personnel.
6.1.2. For emergency responders	
Protective equipment	: Use personal protective equipment as required.
Emergency procedures	: Ventilate area.
6.2. Environmental precautions	
Avoid release to the environment.	
6.3. Methods and material for conta	inment 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	
6.4. Reference to other sections No additional information available	
SECTION 7: Handling and storage	
7.1. Precautions for safe handling	
Precautions for safe handling	: Avoid contact with skin and eyes.
Hygiene measures	: Wash hands and other exposed areas with mild soap and water before eating,
	drinking or smoking and when leaving work.
7.2. Conditions for safe storage, inc	luding any incompatibilities
Storage conditions	: Keep container tightly closed. Store in a dry place.
Incompatible products	: Strong bases.
7.3. Specific end use(s)	
No additional information available	
SECTION 8: Exposure controls/persona	I protection
9.4 Control parameters	
8.1. Control parameters	

No additional information available

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8.2. Exposure controls	
Hand protection	: protective gloves
Eye protection	: Chemical goggles or safety glasses
Skin and body protection Respiratory protection	: Wear suitable protective clothing : Wear respiratory protection
SECTION 9: Physical and chemical prop	
9.1. Information on basic physical a	
Physical state	: Liquid
Molecular mass Colour	: 137.02 g/mol : Colorless to pale yellow.
Odour	: No data available
Odour threshold	: No data available
рН	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: 90 - 92 °C
Flash point	: 18 °C
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: 1.26
Solubility	: No data available
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.ReactivityNo additional information available	
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10.2 Chamical stability		
10.2. Chemical stability		
Stable under normal conditions.		
0.3. Possibility of hazardous reactions		
No additional information available		
10.4. Conditions to avoid		
Direct sunlight. Overheating. Open flame.	Heat. Sparks.	
10.5. Incompatible materials		
Strong bases.		
10.6. Hazardous decomposition pro	ducts	
No additional information available		
SECTION 11: Toxicological information	1	
11.1. Information on toxicological e	ffects	
Acute toxicity	: Not classified	
Skin corrosion/irritation	: Not classified	
Serious eye damage/irritation	: Not classified	
Respiratory or skin sensitisation	: Not classified	
Germ cell mutagenicity	: Not classified	
Carcinogenicity	: Not classified	
Reproductive toxicity	: Not classified	
Specific target organ toxicity (single	: Not classified	
exposure)		
Specific target organ toxicity (repeated exposure)	: Not classified	
Aspiration hazard	: Not classified	

SECTION 12: Eco	logical information
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12.1.	Toxicity
No addi	tional information available

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

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12.4. Mobility in soil	
No additional information available	
12.5. Results of PBT and vPvB asses	ssment
No additional information available	
12.6. Other adverse effects	
No additional information available	
SECTION 13: Disposal considerations	
13.1. Waste treatment methods	
No additional information available	
SECTION 14: Transport information	
In accordance with ADR / RID / IMDG / IA	TA / ADN
14.1. UN number	
UN-No. (ADR)	: 2342
UN-No. (IMDG)	: 2342
UN-No.(IATA)	: 2342
UN-No.(ADN)	: Not regulated
UN-No. (RID)	: Not regulated
14.2. UN proper shipping name	
Proper Shipping Name (ADR)	: BROMOMETHYLPROPANES
Proper Shipping Name (IMDG)	: BROMOMETHYLPROPANES
Proper Shipping Name (IATA)	: BROMOMETHYLPROPANES
Proper Shipping Name (ADN)	: Not regulated
Proper Shipping Name (RID)	: Not regulated
Transport document description (ADR)	: UN 2342 BROMOMETHYLPROPANES, 3, II, (D/E)
Transport document description (IMDG)	: UN 2342 BROMOMETHYLPROPANES, 3, II
Transport document description (IATA)	: UN 2342 BROMOMETHYLPROPANES, 3, II
14.3. Transport hazard class(es)	
ADR	
Transport hazard class(es) (ADR)	: 3
Danger labels (ADR)	: 3
IMDG	
Transport hazard class(es) (IMDG)	: 3
Danger labels (IMDG)	: 3

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IATA Transport hazard class(es) (IATA)	: 3
Hazard labels (IATA)	: 3
ADN	
Transport hazard class(es) (ADN)	: Not regulated
RID	
Transport hazard class(es) (RID)	: Not regulated
14.4. Packing group	
Packing group (ADR)	: 11
Packing group (IMDG)	: 11
Packing group (IATA)	: 11
Packing group (ADN)	: Not regulated
Packing group (RID)	: Not regulated
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)	: F1
Limited quantities (ADR)	: 1L
Excepted quantities (ADR)	: E2
Packing instructions (ADR)	: P001, IBC02, R001
Mixed packing provisions (ADR)	: MP19
Portable tank and bulk container instructions (ADR)	: T4
Portable tank and bulk container special provisions (ADR)	: TP1
Tank code (ADR)	: LGBF
Vehicle for tank carriage	: FL
Transport category (ADR)	: 2
Special provisions for carriage - Operation (ADR)	: S2, S20
Hazard identification number (Kemler No.)	: 33
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Tunnel restriction code (ADR)	: D/E
EAC code	: 2YE
- Transport by sea	
Limited quantities (IMDG)	:1L
Excepted quantities (IMDG)	: E2
Packing instructions (IMDG)	: P001
IBC packing instructions (IMDG)	: IBC02
Tank instructions (IMDG)	: T4
Tank special provisions (IMDG)	: TP1
EmS-No. (Fire)	: F-E
EmS-No. (Spillage)	: S-D
Stowage category (IMDG)	: B
- Air transport	
PCA Excepted quantities (IATA)	: E2
PCA Limited quantities (IATA)	: Y341
PCA limited quantity max net quantity (IATA)	: 1L
PCA packing instructions (IATA)	: 353
PCA max net quantity (IATA)	: 5L
CAO packing instructions (IATA)	: 364
CAO max net quantity (IATA)	: 60L
ERG code (IATA)	: 3L
- Inland waterway transport	

- Inland waterway transport

Not regulated

- Rail transport

Not regulated

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

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

No REACH Annex XVII restrictions

1-BROMO-2-METHYLPROPANE is not on the REACH Candidate List 1-BROMO-2-METHYLPROPANE is not on the REACH Annex XIV List

15.1.2. National regulations

Germany

12th Ordinance Implementing the Federal : Is not subject of the 12. BlmSchV (Hazardous Incident Ordinance) Immission Control Act - 12.BImSchV

Denmark

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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.>

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

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

Flam. Liq. 2	Flammable liquids, Category 2
H225	Highly flammable liquid and vapour

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