

CAS No: 79-41-4 MSDS

MATERIAL SAFETY DATA SHEET (MSDS)

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

1.1. Product identifier	
Product form	: Substance
Trade name	: METHACRYLIC ACID FOR SYNTHESIS
EC index no	: 607-088-00-5
EC no	: 201-204-4
CAS No	: 79-41-4
Product code	: 4600A
Product code	: 4600A

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

: For professional use only;Industrial

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

LOBA CHEMIE PVT.LTD. 107 Wode House Road, Jehangir Villa, Colaba 400005 Mumbai - INDIA T +91 22 6663 6663 - F +91 22 6663 6699 info@lobachemie.com - www.lobachemie.com

1.4. Emergency telephone number

Emergency number

: + 91 22 6663 6663 (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]

Skin corrosion/irritation,H314Category 1AH318Serious eye damage/eyeH318irritation, Category 1H312Acute toxicity (dermal),H312Category 4H302Category 4H302

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

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Classification according to Directive 67/548/EEC or 1999/45/EC

Xn; R21/22 C; R35 Full text of R-phrases: see section 16

Adverse physicochemical, human health and environmental effects No additional information available

2.2. Label elements	
Labelling according to Regulation (EC)	No. 1272/2008 [CLP]
Hazard pictograms (CLP)	GHS05 GHS07
Signal word (CLP)	:-
Hazard statements (CLP)	: H302+H312 - Harmful if swallowed or in contact with skin H314 - Causes severe skin burns and eye damage
Precautionary statements (CLP)	 P280 - Wear protective gloves/protective clothing/eye protection/face protection P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing P310 - Immediately call a POISON CENTER or doctor/physician

2.3. Other hazards

No additional information available

SECTION 3: Composition/in		
3.1. Substance		
Name	: METHACRYLIC ACID FOR SYNTHESIS	
CAS No	: 79-41-4	
EC no	: 201-204-4	
EC index no	: 607-088-00-5	

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

3.2. Mix	wixture	ure				9	ixture
Not applicat	able	9					ble

SECTIO	ECTION 4: First aid measures				
4.1.	Description of first aid measures				
First-aid	measures after inhalation	: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.			

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First-aid measures after skin contact	
	: Immediately call a POISON CENTER or doctor/physician. Specific measures (see on this label). Wash with plenty of soap and water. Wash contaminated clothing before reuse. Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.
First-aid measures after ingestion	: Rinse mouth. Call a POISON CENTER or doctor/physician if you feel unwell. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician.
4.2. Most important symptoms and e	effects, both acute and delayed
Symptoms/injuries	: Causes severe skin burns and eye damage.
Symptoms/injuries after skin contact	: Repeated exposure to this material can result in absorption through skin causing significant health hazard. Harmful in contact with skin.
Symptoms/injuries after eye contact	: Causes serious eye damage.
Symptoms/injuries after ingestion	: Swallowing a small quantity of this material will result in serious health hazard.
-	dical attention and special treatment needed
Treat symptomatically.	
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 the	e substance or mixture
No additional information available	
5.3. Advice for firefighters	
No additional information available	
SECTION 6: Accidental release measure	S
	e equipment and emergency procedures
6.1.Personal precautions, protective6.1.1.For non-emergency personnelEmergency procedures	 equipment and emergency procedures Evacuate unnecessary personnel.
6.1.1. For non-emergency personnel	
6.1.1. For non-emergency personnel Emergency procedures	
6.1.1. For non-emergency personnel Emergency procedures6.1.2. For emergency responders	: Evacuate unnecessary personnel.
 6.1.1. For non-emergency personnel Emergency procedures 6.1.2. For emergency responders Protective equipment Emergency procedures 	Evacuate unnecessary personnel.Use personal protective equipment as required.
 6.1.1. For non-emergency personnel Emergency procedures 6.1.2. For emergency responders Protective equipment Emergency procedures 	Evacuate unnecessary personnel.Use personal protective equipment as required.
 6.1.1. For non-emergency personnel Emergency procedures 6.1.2. For emergency responders Protective equipment Emergency procedures 6.2. Environmental precautions 	 Evacuate unnecessary personnel. Use personal protective equipment as required. Ventilate area.
 6.1.1. For non-emergency personnel Emergency procedures 6.1.2. For emergency responders Protective equipment Emergency procedures 6.2. Environmental precautions Avoid release to the environment. 	 Evacuate unnecessary personnel. Use personal protective equipment as required. Ventilate area.
 6.1.1. For non-emergency personnel Emergency procedures 6.1.2. For emergency responders Protective equipment Emergency procedures 6.2. Environmental precautions Avoid release to the environment. 6.3. Methods and material for contain 	 Evacuate unnecessary personnel. Use personal protective equipment as required. Ventilate area. nment and cleaning up Collect spillage. On land, sweep or shovel into suitable containers. Soak up spills
 6.1.1. For non-emergency personnel Emergency procedures 6.1.2. For emergency responders Protective equipment Emergency procedures 6.2. Environmental precautions Avoid release to the environment. 6.3. Methods and material for contai Methods for cleaning up 	 Evacuate unnecessary personnel. Use personal protective equipment as required. Ventilate area. nment and cleaning up Collect spillage. On land, sweep or shovel into suitable containers. Soak up spills
 6.1.1. For non-emergency personnel Emergency procedures 6.1.2. For emergency responders Protective equipment Emergency procedures 6.2. Environmental precautions Avoid release to the environment. 6.3. Methods and material for contai Methods for cleaning up 6.4. Reference to other sections 	 Evacuate unnecessary personnel. Use personal protective equipment as required. Ventilate area. nment and cleaning up Collect spillage. On land, sweep or shovel into suitable containers. Soak up spills
 6.1.1. For non-emergency personnel Emergency procedures 6.1.2. For emergency responders Protective equipment Emergency procedures 6.2. Environmental precautions Avoid release to the environment. 6.3. Methods and material for contai Methods for cleaning up 6.4. Reference to other sections No additional information available SECTION 7: Handling and storage 	 Evacuate unnecessary personnel. Use personal protective equipment as required. Ventilate area. nment and cleaning up Collect spillage. On land, sweep or shovel into suitable containers. Soak up spills
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 6.1.1. For non-emergency personnel Emergency procedures 6.1.2. For emergency responders Protective equipment Emergency procedures 6.2. Environmental precautions Avoid release to the environment. 6.3. Methods and material for contai Methods for cleaning up 6.4. Reference to other sections No additional information available SECTION 7: Handling and storage 7.1. Precautions for safe handling 	 Evacuate unnecessary personnel. Use personal protective equipment as required. Ventilate area. nment and 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. Evacuate unnecessary personnel. Do not breathe dust/fume/gas/mist/vapours/spray. Avoid contact during

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7.2. Conditions for safe stora	age, including any incompatibilities
Technical measures	: Comply with applicable regulations.
Storage conditions	: Store in original container. Keep container tightly closed. Store in a dry place
7.3. Specific end use(s)	
No additional information available	
SECTION 8: Exposure controls/p	ersonal protection
8.1. Control parameters	
No additional information available	
8.2. Exposure controls	
Hand protection	: protective gloves
Eye protection	: Chemical goggles or face shield
Skin and body protection	: Wear suitable protective clothing
Respiratory protection	: Wear appropriate mask
SECTION 9: Physical and chemic	cal properties
9.1. Information on basic phy	ysical and chemical properties
Physical state	: Liquid
Colour	: Clear Colorless.
Odour	: repulsive.
	NI 1.4

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Odour threshold	:	No data available
рН	:	No data available
Relative evaporation rate (butylacetate=1)	:	No data available
Melting point	:	12 - 16
Freezing point	:	No data available
Boiling point	:	163 °C
Flash point	:	77 °C
Auto-ignition temperature	:	365 °C
Decomposition temperature	:	No data available
Flammability (solid, gas)	:	No data available
Vapour pressure	:	0.975 mm Hg (at 20°C)
Relative vapour density at 20 °C	:	2.97
Relative density	:	No data available
Density	:	1.015 g/cm³

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Solubility	: Water: Insoluble 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	: 0.016 - 0.081 vol %					
9.2. Other information						
No additional information available SECTION 10: Stability and reactivity						
10.1. Reactivity Thermal decomposition generates : Corror	sive vapours.					
10.2. Chemical stability						
Stable under normal conditions.						
10.3. Possibility of hazardous reaction	ons					
No additional information available						
10.4. Conditions to avoid						
No additional information available						
10.5. Incompatible materials						
No additional information available						
10.6. Hazardous decomposition proc						
Thermal decomposition generates : Corro	sive vapours.					
SECTION 11: Toxicological information						
11.1. Information on toxicological ef	fects					
Acute toxicity	: Dermal: Harmful in contact with skin. Oral: Harmful if swallowed.					
Skin corrosion/irritation Serious eye damage/irritation	 Causes severe skin burns and eye damage. Causes serious eye damage. 					
Respiratory or skin sensitisation	: Not classified					
Germ cell mutagenicity	: Not classified					
Carcinogenicity	: Not classified					
Reproductive toxicity	: Not classified					
Specific target organ toxicity (single exposure)	: Not classified					
Specific target organ toxicity (repeated exposure)	: Not classified					

Aspiration hazard	: Not classified
Potential adverse human health effects and symptoms	: Harmful if swallowed. Harmful in contact with skin.
SECTION 12: Ecological information	
12.1. Toxicity	
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 asse	ssment
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 recommendations	: Dispose of contents/container to
SECTION 14: Transport information	
In accordance with ADR / RID / IMDG / IA	TA / ADN
14.1. UN number	
UN-No. (ADR)	: 2531
UN-No. (IMDG)	: 2531
UN-No.(IATA)	: 2531
UN-No.(ADN)	: 2531
UN-No. (RID)	: 2531
14.2. UN proper shipping name	
Proper Shipping Name (ADR)	: METHACRYLIC ACID, STABILIZED

 Proper Shipping Name (IATA)
 : METHACRYLIC ACID, STABILIZED

 Proper Shipping Name (ADN)
 : METHACRYLIC ACID, STABILIZED

Proper Shipping Name (IMDG)

: METHACRYLIC ACID, STABILIZED

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Transport document description (ADR)	: UN 2531 METHACRYLIC ACID, STABILIZED, 8, II, (E)
Transport document description (IMDG)	: UN 2531 METHACRYLIC ACID, STABILIZED, 8, II
Transport document description (IATA)	: UN 2531 METHACRYLIC ACID, STABILIZED, 8, II
Transport document description (ADN)	: UN 2531 METHACRYLIC ACID, STABILIZED, 8, II
Transport document description (RID)	: UN 2531 METHACRYLIC ACID, STABILIZED, 8, II

14.3. Transport hazard class(es)

ADR

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



: 8

: 8

IMDG

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

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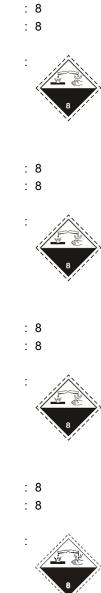
Transport hazard class(es) (IATA) Hazard labels (IATA)

ADN

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

RID

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



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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)	:	C3
Limited quantities (ADR)	:	1L
Excepted quantities (ADR)	:	E2
Packing instructions (ADR)	:	P001, IBC02, LP01
Mixed packing provisions (ADR)	:	MP15
Portable tank and bulk container instructions (ADR)	:	Τ7
Portable tank and bulk container special provisions (ADR)	:	TP2, TP18, TP30
Tank code (ADR)	:	L4BN
Vehicle for tank carriage	:	AT
Transport category (ADR)	:	2
Hazard identification number (Kemler No.)	:	89
Orange plates	:	89 2531
Tunnel restriction code (ADR)	:	_
EAC code	:	3W
- Transport by sea		
- Transport by sea Limited quantities (IMDG)	:	1 L
		1 L E2
Limited quantities (IMDG)	:	
Limited quantities (IMDG) Excepted quantities (IMDG)	:	E2
Limited quantities (IMDG) Excepted quantities (IMDG) Packing instructions (IMDG)	:	E2 P001
Limited quantities (IMDG) Excepted quantities (IMDG) Packing instructions (IMDG) IBC packing instructions (IMDG)	::	E2 P001 IBC02
Limited quantities (IMDG) Excepted quantities (IMDG) Packing instructions (IMDG) IBC packing instructions (IMDG) Tank instructions (IMDG)	::	E2 P001 IBC02 T7
Limited quantities (IMDG) Excepted quantities (IMDG) Packing instructions (IMDG) IBC packing instructions (IMDG) Tank instructions (IMDG) Tank special provisions (IMDG)	: : : : : : : : : : : : : : : : : : : :	E2 P001 IBC02 T7 TP2, TP18, TP30
Limited quantities (IMDG) Excepted quantities (IMDG) Packing instructions (IMDG) IBC packing instructions (IMDG) Tank instructions (IMDG) Tank special provisions (IMDG) EmS-No. (Fire) EmS-No. (Spillage) Stowage category (IMDG)	: : : : : : : : : : : : : : : : : : : :	E2 P001 IBC02 T7 TP2, TP18, TP30 F-A S-B
Limited quantities (IMDG) Excepted quantities (IMDG) Packing instructions (IMDG) IBC packing instructions (IMDG) Tank instructions (IMDG) Tank special provisions (IMDG) EmS-No. (Fire) EmS-No. (Spillage)	: : : : : : : : : : : : : : : : : : : :	E2 P001 IBC02 T7 TP2, TP18, TP30 F-A S-B
Limited quantities (IMDG) Excepted quantities (IMDG) Packing instructions (IMDG) IBC packing instructions (IMDG) Tank instructions (IMDG) Tank special provisions (IMDG) EmS-No. (Fire) EmS-No. (Spillage) Stowage category (IMDG)	· · · · · · · · · · · · · · · · · · ·	E2 P001 IBC02 T7 TP2, TP18, TP30 F-A S-B C
Limited quantities (IMDG) Excepted quantities (IMDG) Packing instructions (IMDG) IBC packing instructions (IMDG) Tank instructions (IMDG) Tank special provisions (IMDG) EmS-No. (Fire) EmS-No. (Spillage) Stowage category (IMDG) Stowage and handling (IMDG) MFAG-No	· · · · · · · · · · · · · · · · · · ·	E2 P001 IBC02 T7 TP2, TP18, TP30 F-A S-B C SW2
Limited quantities (IMDG) Excepted quantities (IMDG) Packing instructions (IMDG) IBC packing instructions (IMDG) Tank instructions (IMDG) Tank special provisions (IMDG) EmS-No. (Fire) EmS-No. (Spillage) Stowage category (IMDG) Stowage and handling (IMDG) MFAG-No - Air transport		E2 P001 IBC02 T7 TP2, TP18, TP30 F-A S-B C SW2 153P
Limited quantities (IMDG) Excepted quantities (IMDG) Packing instructions (IMDG) IBC packing instructions (IMDG) Tank instructions (IMDG) Tank special provisions (IMDG) EmS-No. (Fire) EmS-No. (Spillage) Stowage category (IMDG) Stowage and handling (IMDG) MFAG-No - Air transport PCA Excepted quantities (IATA)		E2 P001 IBC02 T7 TP2, TP18, TP30 F-A S-B C SW2 153P E2
Limited quantities (IMDG) Excepted quantities (IMDG) Packing instructions (IMDG) IBC packing instructions (IMDG) Tank instructions (IMDG) Tank special provisions (IMDG) EmS-No. (Fire) EmS-No. (Spillage) Stowage category (IMDG) Stowage and handling (IMDG) MFAG-No - Air transport	· · · · · · · · · · · · · · · · · · ·	E2 P001 IBC02 T7 TP2, TP18, TP30 F-A S-B C SW2 153P
Limited quantities (IMDG) Excepted quantities (IMDG) Packing instructions (IMDG) IBC packing instructions (IMDG) Tank instructions (IMDG) Tank special provisions (IMDG) EmS-No. (Fire) EmS-No. (Fire) EmS-No. (Spillage) Stowage category (IMDG) Stowage and handling (IMDG) MFAG-No - Air transport PCA Excepted quantities (IATA) PCA Limited quantity max net quantity		E2 P001 IBC02 T7 TP2, TP18, TP30 F-A S-B C SW2 153P E2 Y840
Limited quantities (IMDG) Excepted quantities (IMDG) Packing instructions (IMDG) IBC packing instructions (IMDG) Tank instructions (IMDG) Tank special provisions (IMDG) EmS-No. (Fire) EmS-No. (Spillage) Stowage category (IMDG) Stowage and handling (IMDG) MFAG-No - Air transport PCA Excepted quantities (IATA) PCA Limited quantities (IATA) PCA limited quantity max net quantity (IATA)		E2 P001 IBC02 T7 TP2, TP18, TP30 F-A S-B C SW2 153P E2 Y840 0.5L

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CAO packing instructions (IATA)	: 855
CAO max net quantity (IATA)	: 30L
ERG code (IATA)	: 8L
 Inland waterway transport 	
Classification code (ADN)	: C3
Limited quantities (ADN)	: 1L
Excepted quantities (ADN)	: E2
Carriage permitted (ADN)	: T
Equipment required (ADN)	: PP, EP
Number of blue cones/lights (ADN)	: 0
- Rail transport	
Classification code (RID)	: C3
Limited quantities (RID)	: 1L
Excepted quantities (RID)	: E2
Packing instructions (RID)	: P001, IBC02, LP01
Mixed packing provisions (RID)	: MP15
Portable tank and bulk container instructions (RID)	: T7
Portable tank and bulk container special provisions (RID)	: TP2, TP18, TP30
Tank codes for RID tanks (RID)	: L4BN
Transport category (RID)	: 2
Colis express (express parcels) (RID)	: CE8
Hazard identification number (RID)	: 89
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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

METHACRYLIC ACID FOR SYNTHESIS is not on the REACH Candidate List METHACRYLIC ACID FOR SYNTHESIS is not on the REACH Annex XIV List

15.1.2. National regulations

Germany	
AwSV/VwVwS Annex reference	: Water hazard class (WGK) 1, slightly hazardous to water (Classification according to VwVwS, Annex 2; WGK No 1252)
12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV	: Is not subject of the 12. BlmSchV (Hazardous Incident Ordinance)
Denmark	
Class for fire hazard	: Class III-1

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Store unit	: 50 liter
Classification remarks	: Flammable according to the Danish Ministry of Justice; Emergency management guidelines for the storage of flammable liquids must be followed
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. 4 (Dermal)	Acute toxicity (dermal), Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Skin Corr. 1A	Skin corrosion/irritation, Category 1A
H302	Harmful if swallowed
H312	Harmful in contact with skin
H314	Causes severe skin burns and eye damage
H318	Causes serious eye damage
R21/22	Harmful in contact with skin and if swallowed
R35	Causes severe burns
С	Corrosive
Xn	Harmful

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