	MATERIAL SAFETY DATA SHEET	MSDS No.	M-01
	PROPYLENE GLYCOL MONOMETHYL ETHER ACETATE (PMA)	Effective From	24/03/2020

*According to Regulation (EC) No 1907/2006, Annex II, Amended by
COMMISSION REGULATION (EU) 2015/830, According to REGULATION (EC) No 1272/2008*

SECTION 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

1.1. Product identifier	
Trade Name	METHOXY PROPYL ACETATE (PMA)
Proper Shipping Name	PROPYLENE GLYCOL MONOMETHYL ETHER ACETATE
Other Names	2-methoxy-1-methylethyl acetate/ PMA, 1-methoxypropan-2-yl acetate / 1-methoxy-2-propanol acetate
Other Means Of Identification	CAS : 108-65-6 , UN 3272, EC No.: 203-603-9
REACH Registration Number	01-2119475791-29-XXXX
Molecular Formula	C ₆ H ₁₂ O ₃

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

1.2.1 Identified uses:

F-2: Formulation and (re)packaging of substances and mixtures
 IW-3: Industrial use in coatings (general)
 IW-13: Industrial use in inks
 IW-2: Use as process solvents
 IW-7: Industrial use in cleaning agents
 IW-12: Industrial use in coatings (coil)
 PW-5: Professional use in coatings
 PW-8: Professional use in cleaning agents
 PW-10: Professional use in agrochemicals
 C-6: Consumer use in coatings
 C-9: Consumer use in cleaning products
 C-11: Consumer use in agrochemicals


1.2.2 Uses advised against:

No uses advised against are identified.

Supplier Name	Bloomchemag Private Limited
Address	Unit 106-108, Tower 1, Assotech Business Cresterra (ABC), Sector 135, Noida - 201301 India
Telephone	Phone: +91 120 4659134
Email	info@bloomchemag.com , corporate@bloomchemag.com

Belgium Office Address

Name	Bloomchemag BV
Address	Sint-Antoniusstraat 16 b1. B-2400, Mol, Belgium
Email	info@bloomchemag.com

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SECTION 2: Composition & Information on Ingredients

Component	Concentration (wt. %)	CAS NO	EC no.
2-methoxy 1 – methyl ethyl acetate	>99.5%	108-65-6	203-303-9

SECTION 3: Hazard Identification

Classification according to Regulation (EC) No 1272/2008:

Flammable liquids - Category 3 - H226

Specific target organ toxicity - single exposure - Category 3 - H336

For the full text of the H-Statements mentioned in this Section, see Section 16.

GHS Label element / Labelling according to Regulation (EC) No 1272/2008:

Signal Word	Warning
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Hazard Statement	H226 Flammable liquid and vapour
	H336 May cause drowsiness or dizziness

Precautionary Statements


Prevention

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
P233	Keep container tightly closed.
P240	Ground and bond container and receiving equipment
P241	Use explosion proof (Electrical /ventilating /lighting) equipment
P242	Use non sparking tools
P243	Take action to prevent static discharges
P280	Wear protective gloves / protective clothing/ eye protection / face protection

Response

P303+361+353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower
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Storage

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P403+P235	Store in a well-ventilated place. Keep cool.
Disposal	
P501	Dispose of contents/container in accordance with local/regional/national/international regulations

2.3 Other hazards:

The substance is not PBT / vPvB.

SECTION 3: Composition & Information on Ingredients

Component	Concentration (wt. %)	CAS NO	EC no.
2-methoxy 1 – methyl ethyl acetate	>99.5%	108-65-6	203-303-9

SECTION 4: First Aid Measures

General advice: Immediate medical attention is required Show this safety data sheet to doctor intelligence.

Eye contact: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician if feels uncomfortable.

Skin contact: Take off contaminated clothing and shoes immediately. Wash off with plenty of water for 15 minutes and consult a physician if feels uncomfortable.

Ingestion: Do not induce vomiting. Never give anything by mouth to an unconscious person. Call a physician and control center immediately.

Inhalation: Move victim into fresh air. If breathing is difficult give oxygen. Do not use mouth to mouth resuscitation if victim ingested or inhaled the substance. If not breathing give artificial respiration and consult a physician immediately.

Protecting of First aiders: Ensure that medical personnel are aware of the substance involved. Take precautions to protect themselves and prevent spread of contamination.


Most important symptoms and effects, both acute and delayed

- Substance accumulation, in the human body, may occur and may cause concern following repeated or
- Long term occupational exposure

Indication of any immediate medical attention and special treatment needed

- Treat symptomatically
- Symptoms may be delayed

SECTION 5: Fire Fighting Measures

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Extinguishing Media

Suitable extinguishing media: Dry chemical, carbon dioxide or alcohol –resistant foam

Unsuitable extinguishing media: Do not use a solid water stream as it may scatter or spread fire

Specific hazards arising from the substance or Mixture

- Will form explosive mixtures with air
- Fire exposed containers may vent contents through pressure relief valves thereby increasing fire intensity and /or vapour concentration.
- Vapours may travel to source of ignition and flash back.
- Liquid and vapours are flammable.
- Containers may explode when heated
- Fire exposed containers may vent contents through pressure relief valves
- May expansion or decompose explosively when heated or involved fire

Advice for Fire-fighters

- As in any fire, wear self-contained breathing apparatus (MSHA/NIOSH approved or equivalent) and full protective gear.
- Fight fire from a safe distance , with adequate cover
- Prevent fire extinguishing water from contaminating surface water or the ground water system

SECTION 6: Accidental Release Measures

Personal Precautions, protective equipment and emergency procedures

- Avoid breathing vapours and contacting with skin and eye.
- Beware of vapours accumulating to form explosive concentrations
- Vapours can accumulate in low areas
- Emergency personnel wear positive pressure self- contained breathing apparatus. Wear protective and anti-static clothing. Wear chemical impermeable gloves
- Ensure adequate ventilation. Remove all source of ignition.
- Evacuate personnel to safe areas. Keep people away from and upwind of spill and leak
- Use personnel protective equipment. Avoid breathing vapours , mist gas or dust


Environmental Precautions

- Prevent further leakage or spillage if safe to do so
- Discharge into the environment must be avoided

Methods and materials for containment and cleaning up

- Absorbed spilled material in dry sand or inert absorbent .In case of large amount of spillage, contain a spill by binding.
- Adhered or collect material should be promptly disposed of in accordance with appropriate laws and regulations.
- Remove all source of ignition. Use spark –proof tools and explosion proof equipment.

SECTION 7: Handling & Storage

	MATERIAL SAFETY DATA SHEET	MSDS No.	M-01
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Precautions for handling

- Avoid inhalation of vapours.
- Use only non –sparking tools.
- To prevent fire caused by electrostatic discharge steam, equipment on all metal parts should be grounded.
- Use explosion proof equipment
- Handling is perform in a well-ventilated place.
- Wear suitable protective equipment
- Avoid contact with skin and eyes
- Keep away from heat / sparks /open flames/ hot surfaces
- Take precautionary actions against static discharges

Precautions for storage

- Keep containers tightly closed
- Keep containers in a dry, cool and well ventilated place.
- Keep away from heat / sparks /open flames/ hot surfaces
- Store away from incompatible materials and foodstuff containers.

SECTION 8: Exposure Control / Personal Protection

Control Parameters


Component	Country/region	Limit- Value Eight hours		Limit value -short terms	
		PPM	Mg/m3	PPM	Mg/m3
2-methoxy - 1 methyl ethyl acetate CAS No. 108-65-6					
	Switzerland	50	275	50	275
	Latvia	50	275	100	550
	Ireland	50	275	100	550
	Germany (AGS)	50	270	50	270
	Denmark	50	275	100	550
	Australia	50	274	100	548

Monitoring methods

- EN14042 workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents
- GBZ /T160.1—GBZ/T160.81-2004 Determination of toxic substance in workplace air (Series standard)

Engineering controls

- Ensure adequate ventilation, especially in confined areas
- Ensure that eye wash stations and safety showers are close to workstation location

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- Use explosion –proof electrical / ventilating / lighting /equipment ,
- Set up emergency exit and necessary risk elimination areas

Personal Protection Equipment

Eye protection: Tightly fitting safety goggles (approved by EN 166 (EU) or NIOSH (US))
Hand Protection: Wear protective gloves (such as butyl rubber), passing the tests according to EN 374(EU), US F739or AS/NZS 2161.1 standard.

Respiratory protection: If exposure limits are exceeded or if irritation or other symptoms are experienced use a full face respirator with multipurpose combination (US) or type AXBEK (EN14387) respirator cartridges

Skin and body protection: Wear fire /flame resistant/retardant clothing and antistatic boots


SECTION 9: Physical & Chemical Properties

Appearance and Odour	: Colourless transparent liquid
Odour threshold	: No information available
Melting point / freezing point (Deg C)	: No information available
Flash point (Deg C) Closed cup	: 42
Flammability	: Not applicable
Vapour Pressure (Mpa)	: 0.5
Relative Density (Water =1)	:0.96
N-octanol/water partition coefficient	: No information available
Decomposition Temperature (Deg C)	: No information available
Particle characteristics	: Not applicable
Odour	: No information available
pH	: No information available
Initial Boiling point and boiling range (Deg C)	: 146
Evaporation rate	: No information available
Upper / lower explosive limit (%v/v)	: Upper limit 7 Lower limit 15
Relative vapour density (Air = 1)	:4.6
Solubility	: Miscible with water
Auto ignition temperature (Deg C)	:354.5
Kinematic viscosity (mm²/s)	: No information available

SECTION 10: Stability & Reactivity information

Reactivity: Contact with incompatible substance can cause decomposition or other chemical reactions

Chemical stability: Stable under proper operation and storage condition

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Possibility of hazardous reaction: No information available

Conditions to avoid: Incompatible materials, heat, flame and spark

Incompatible materials: No information available

Hazardous decomposition products: Under normal conditions of storage and use hazardous decomposition products should not be produced.

SECTION 11: Toxicological Information

Acute Toxicity:

Component	CAS No	LD 50 (Oral)	LD 50 (Dermal)	LD 50 (Inhalation,4h)
2-methoxy-1 methyl ethyl acetate	108-65-6	8532mg/kg(rat)	>5000mg/kg(rabbit)	No information available

Skin corrosion / Irritation : No information available

Serious eye damage / irritation : No information available

Skin sensitisation : No information available

Respiratory sensitisation : No information available

Germ cell mutagenicity : No information available

Carcinogenicity

ID	CAS No	Component	IARC	NTP
1.	108-65-6	2-methoxy -1 methyl ethyl acetate	Not Listed	Not Listed

Reproductive toxicity : No information available

Reproductive toxicity (additional) : No information available

STOT Single exposure : No information available


STOT Repeated exposure : No information available

Aspiration Hazard : No information available

SECTION 12: Ecological Information

Acute Toxicity

Component	CAS No	Fish	Crustaceans	Algae
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2-methoxy -1 methyl ethyl acetate	108-65-6	LC 50 :>100 mg/L(96) (Fish)	EC 50 : 370 mg /L (48 h)	ErC 50 :>1000 mg/L(72h)
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Chronic Aquatic Toxicity

Component	CAS No	Fish	Crustaceans	Algae
2-methoxy -1 methyl ethyl acetate	108-65-6	No information available	NOEC :>1000 mg/L	NOEC :>1000 mg/L

Persistence and degradability

: No information available

Bio accumulative potential

: No information available

Mobility in soil

: No information available

Results of PBT and vPVB Assessment: 2-methoxy -1 methyl ethyl acetate does not meet the criteria for PBT and PvB according to regulation (EC) No 1907 /2006, annex XIII

SECTION 13: Disposable Consideration

Waste chemicals: Before disposal should refer to the relevant national and local laws and regulation. Recommend the use of incineration disposal.

Contaminated packaging: Containers may still present chemical hazard when empty. Keep away from hot and ignition source of fire. Return to supplier for recycling if possible.

Disposal Recommendation: Refer to section 13.1 and 13.2

SECTION 14: Transportation Information

Transporting Label:



Marine Pollutant: None

UN number: 3272

UN proper shipping name: ESTERS, NOS


Transport Hazard Class: 3

Transport Subsidiary Hazard Class: None

Packing Group: III

SECTION 15: Regulatory Information

International chemical inventory

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Component	EINECS	TSCA	DSL	IECSC	NZIOC	PICCS	KECI	AICS	ENCS
z-methoxy - 1 methyl									
ethyl acetate	✓	✓	✓	✓	✓	✓	✓	✓	X

[EINECS]	: European Inventory of existing commercial chemical substance
[TSCA]	: United States Toxic Substances Control Act Inventory
[DSL]	: Canadian Domestic Substances List
[IECSC]	: China Inventory of Existing Chemical Substances
[NZIOC]	: New Zealand Inventory of Chemicals
[PICCS]	: Philippines Inventory of Chemicals and Chemical substance
[KECI]	: Existing and Evaluated Chemical Substance
[AICS]	: Australia Inventory of Chemical Substance
[ENCS]	: Existing and New Chemical Substance

Note

✓ : Indicates that the substance included in the regulations

X : That no data or included in the regulations

SECTION 16: Additional Information

Creation Date: September 1st 2018

Revision Date: September 1st 2018

Reason for Revision:

Disclaimer: This safety data sheet was prepared according to UN GHS (the 7th revised edition). The data included was derived from international authoritative database and provided by the enterprise. Other information was based on the present state of our knowledge. We try to ensure the correctness of all information. However, due to diversity of information sources and the limitations of our knowledge this document is only for user's reference. Users should make their independent judgement suitability of this information for their particular purposes. We do not assume responsibility of loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product.

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