

2-HYDROXYPROPYL METHACRYLATE

 $\mathsf{HO} \underbrace{\hspace{1cm} \mathsf{CH}_3}_{\mathsf{CH}_3} \mathsf{CH}_2$

IUPAC NAME: 2-hydroxypropyl-2-methylprop-2-enoate

CHEMICAL FORMULA: C₇H₁₂O₃

CAS NO: 27813-02-1

MOLECULAR WEIGHT: 144.17 g/mol

PACKING:

PRODUCT DESCRIPTION:

2-Hydroxypropyl Methacrylate (2-HPMA) is an ester of Methacrylic Acid and is used as a raw material in polymer synthesis. 2-Hydroxypropyl Methacrylate (2-HPMA) is a functional hydrophobic-hydroxy monomer, consisting of a cyclic hydrophobic group with characteristic high reactivity of methacrylate. It can form both homopolymers and copolymers. Copolymers of 2-Hydroxypropyl Methacrylate (2-HPMA) can be prepared with (meth)acrylic acid and its salts, amides, and esters, as well as with (meth)acrylates, acrylonitrile, maleic acid esters, vinyl acetate, vinyl chloride, vinylidene chloride, styrene, butadiene, and other monomers.

PROPERTIES:

- Chemical resistance
- Hydrolytic stability
- Hydrophobicity
- Flexibility
- Adhesion
- Shock resistance
- Weather resistance

APPLICATION AREAS:

2-Hydroxypropyl Methacrylate (2-HPMA) is used in the preparation of solid and emulsion polymers, acrylic dispersions in conjunction with other (meth)acrylates, and finds applications in various industries, particularly in textile coatings and garments. Additionally, it is used:

- As a comonomer in the production of acrylic rollers for automotive components, maintenance coatings, and industrial coatings,
- As a comonomer in styrene-based unsaturated polyesters, PMMA-based acrylic resins, and vinyl ester formulations for chemical anchors and chemical fasteners,
- As a hydrophobic hydroxy monomer in vacuum impregnation adhesives for cast aluminum components.

IT IS APPLIED IN THE PRODUCTION OF:

- Automotive coatings
- Architectural coatings
- Industrial coatings
- Plastics
- Hygiene products
- Adhesives and sealants
- Textile finishes
- Modifications
- Photosensitive materials
- Additives for oil production and transportation.



CHEMICAL PROPERTIES		
PURITY	min. 97.0%	
ACID CONTENT	max. 0.2%	
MOISTURE AMOUNT	max. 0.15%	
COLOUR (APHA)	max. 30	
INHIBITOR	200±20 ppm MEHQ	
PHYSİCAL PROPERTIES		
APPEARANCE	Clear, colorless	
PHYSICAL STATE	Liquid	
ODOR	Light acrylic odor.	
MOLECULAR WEIGHT:	144.17 g/mol	
DENSITY	1,029 g/cm3 at 20°C	
BOILING POINT	87 °C	
FREEZING POINT	-58°C	
FLASH POINT	104°C	
VISCOSITY	8.9 mPa · s at 20°C	
VAPOR PRESSURE	0.05 mm Hg at 20°C	



SAFETY INFORMATION	
HAZARD PICTOGRAM(S)	
HAZARD STATEMENT(S)	H315 Causes skin irritation. H317 May cause an allergic skin reaction. H319 Causes serious eye irritation. H335 May cause respiratory irritation. H340 May cause genetic defects. H350 May cause cancer.
PRECAUTIONARY STATEMENT(S)	P201 Obtain special instructions before use. P202 Do not handle until all safety precautions have been read and understood. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P302 + P352 IF ON SKIN: Wash with plenty of water. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P308 + P313 IF exposed or concerned: Get medical advice/ attention.
STORAGE CLASS	Storage class (TRGS 510): 6.1C: Combustible, acute toxic Cat.3 / toxic compounds or compounds which cause chronic effects.
STORAGE CONDITIONS	Tightly closed. Keep in a well-ventilated place. Keep locked up or in an area accessible only to qualified or authorized persons. Recommended storage temperature: 2 - 8 °C
DISPOSAL	No information.
TRANSPORT INFORMATION	UN number: ADR/RID: - IMDG: - IATA: - UN proper shipping name:



- ADR/RID: Not dangerous goods
- IMDG: Not dangerous goods
- IATA: Not dangerous goods

Transport hazard class(es):

- ADR/RID: -
- IMDG: -
- IATA: -

Packaging group:

- ADR/RID: -
- IMDG: -
- IATA: -

Environmental hazards:

- ADR/RID: no
- IMDG Marine pollutant: no
- IATA: no

For more information, check the SAFETY DATA SHEET or get contact with us.