BIMAX® PTEA

Safety Data Sheet 9054

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Issue date: 07/21/2025 Version: 1.0

SECTION 1: Identification

1.1. Identification

Product name	:	BIMAX® PTEA
Product code	:	9054
Product form	:	Substance
Physical state	:	Liquid
Formula	:	C11H12O2S
Synonyms	:	2-(PHENYLTHIO) ETHYL ACRYLATE 2-PROPENOIC ACID, 2-(PHENYLTHIO)ETHYL ESTER
Chemical name	:	PHENYLTHIOETHYL ACRYLATE

1.2. Recommended use and restrictions on use

Recommended use	:	Laboratory chemicals Manufacture of substances

1.3. Supplier

GELEST, INC.
158 Industrial Road
Glen Rock, PA 17327
USA
T 717-227-1774 - F 717-227-1775 (M-F): 8:00 AM - 5:30 PM EST
CS-Gelest@m-chem.com - www.gelest.com

1.4. Emergency telephone number

Emergency number	:	CHEMTREC: 1-800-424-9300 (USA); +1 703-527-3887 (International)

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Skin corrosion/irritation, Category 2	H315	Causes skin irritation.
Serious eye damage/eye irritation, Category 2	H319	Causes serious eye irritation.
Skin sensitization, Category 1	H317	May cause an allergic skin reaction.
Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation	H335	May cause respiratory irritation.

Full text of H statements : see section 16

2.2. GHS Label elements, including precautionary statements

GHS US labeling

Hazard pictograms (GHS US) :

Signal word (GHS US) : Warning

Hazard statements (GHS US) : H315 - Causes skin irritation
H317 - May cause an allergic skin reaction
H319 - Causes serious eye irritation
H335 - May cause respiratory irritation

Precautionary statements (GHS US) : P261 - Avoid breathing fume, mist, spray, vapors.
P264 - Wash hands thoroughly after handling.
P271 - Use only outdoors or in a well-ventilated area.
P272 - Contaminated work clothing must not be allowed out of the workplace.
P280 - Wear protective gloves, protective clothing, eye and face protection.
P302+P352 - If on skin: Wash with plenty of soap and water.
P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312 - Call a poison center or doctor if you feel unwell.
P333+P313 - If skin irritation or rash occurs: Get medical advice or attention.
P337+P313 - If eye irritation persists: Get medical advice or attention.
P362+P364 - Take off contaminated clothing and wash it before reuse.
P403+P233 - Store in a well-ventilated place. Keep container tightly closed.
P405 - Store locked up.
P501 - Dispose of contents and/or container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulations.

2.3. Hazards not otherwise classified (HNOC)

Other hazards which do not result in classification : Hazardous polymerization may occur.

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances

Name : BIMAX® PTEA
CAS-No. : 95175-38-5

Name	Product identifier	%	GHS US classification
Phenylthioethyl acrylate	CAS-No.: 95175-38-5	≥ 98	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H335
Phenylthioethanol	CAS-No.: 699-12-7	≤ 1	Eye Irrit. 2, H319
mequinol, 4-methoxyphenol, hydroquinone monomethyl ether	CAS-No.: 150-76-5	0.07 – 0.12	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 Skin Sens. 1, H317

Full text of hazard classes and H-statements : see section 16

3.2. Mixtures

Not applicable

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general : Call a poison center/doctor/physician if you feel unwell.
First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor/physician if you feel unwell.
First-aid measures after skin contact : Take off contaminated clothing. Wash skin with plenty of water. If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion : Call a poison center/doctor/physician if you feel unwell.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects after inhalation	:	May cause respiratory irritation.
Symptoms/effects after skin contact	:	Irritation. May cause an allergic skin reaction.
Symptoms/effects after eye contact	:	Eye irritation.
Chronic symptoms	:	Repeated or prolonged skin contact may cause skin irritation and/or dermatitis and sensitization of susceptible persons.

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media	:	Alcohol-resistant foam. Dry chemical. Carbon dioxide.
Unsuitable extinguishing media	:	Avoid the use of streaming water, as this may spread the fire.

5.2. Specific hazards arising from the chemical

Fire hazard	:	No fire hazard.
Explosion hazard	:	No direct explosion hazard.
Reactivity	:	No dangerous reactions known under normal conditions of use.
Hazardous decomposition products in case of fire	:	Toxic fumes may be released. Sulfur oxides (SOx). Carbon oxides (CO, CO2).

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions	:	Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection.
Protection during firefighting	:	Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Stop leak if safe to do so. Absorb spillage to prevent material-damage.

6.1.1. For non-emergency personnel

Protective equipment	:	Wear recommended personal protective equipment.
Emergency procedures	:	Ventilate spillage area. Avoid breathing fume, mist, spray, vapors. Avoid contact with skin and eyes.

6.1.2. For emergency responders

Protective equipment	:	Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
Emergency procedures	:	Evacuate unnecessary personnel.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment	:	Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Stop leak, if possible without risk.
Methods for cleaning up	:	Take up liquid spill into absorbent material.
Other information	:	Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed	:	Not expected to present a significant hazard under anticipated conditions of normal use.
Precautions for safe handling	:	Use only outdoors or in a well-ventilated area. Avoid breathing fume, mist, spray, vapors. Avoid contact with skin and eyes. Wear personal protective equipment.
Hygiene measures	:	Do not eat, drink or smoke when using this product. Always wash hands after handling the product. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions	:	Keep container tightly closed in a dry and well-ventilated place. Store locked up.
Incompatible materials	:	Bases. Free radical intiators.
Storage temperature	:	< 25 °C (Recommended)
Packaging materials	:	Store always product in container of same material as original container.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

USA - ACGIH - Occupational Exposure Limits	
Local name	4-Methoxyphenol
ACGIH® TLV® TWA	5 mg/m³
Remark (ACGIH)	TLV® Basis: Eye & Skin dam
Regulatory reference	ACGIH 2025

8.2. Appropriate engineering controls

Appropriate engineering controls	:	Ensure good ventilation of the work station.
Environmental exposure controls	:	Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:
Wear recommended personal protective equipment.

Hand protection:
Protective gloves

Eye protection:
Safety glasses

Skin and body protection:
Wear suitable protective clothing

Respiratory protection:
In case of insufficient ventilation, wear suitable respiratory equipment

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Liquid
Appearance	:	Clear, colorless to light yellow liquid.
Molecular mass	:	208.28 g/mol
Color	:	Light yellow.
Odor	:	No data available
Odor threshold	:	No data available
pH	:	No data available

Relative evaporation rate (butyl acetate=1)	:	No data available
Melting point	:	Not applicable
Freezing point	:	No data available
Boiling point	:	100 °C at 0.05 mmHg
Flash point	:	No data available
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
Flammability (solid, gas)	:	Not applicable.
Vapor pressure	:	No data available
Relative vapor density at 20°C	:	No data available
Relative density	:	No data available
Density	:	≈ 1.126 g/cm³
Solubility	:	No data available
Partition coefficient n-octanol/water (Log Pow)	:	No data available
Partition coefficient n-octanol/water (Log Kow)	:	No data available
Viscosity, kinematic	:	No data available
Viscosity, dynamic	:	No data available
Explosive properties	:	No data available
Oxidizing properties	:	No data available
Explosion limits	:	No data available
Particle characteristics	:	No data available

Phenylthioethyl acrylate	
Particle characteristics	Particle size : Not applicable

Phenylthioethanol	
Particle characteristics	Particle size : Not applicable

mequinol, 4-methoxyphenol, hydroquinone monomethyl ether	
Particle characteristics	No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reactions known under normal conditions of use.

10.2. Chemical stability

Polymerization can occur at elevated temperatures. Contains the following stabilizer(s): MEHQ.

10.3. Possibility of hazardous reactions

Hazardous polymerization may occur.

10.4. Conditions to avoid

Heat and light.

10.5. Incompatible materials

Bases. Free radical intiators.

10.6. Hazardous decomposition products

No data available. In the event of fire: see section 5.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Likely routes of exposure : Skin and eye contact; Inhalation
Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

mequinol, 4-methoxyphenol, hydroquinone monomethyl ether (150-76-5)	
LD50 oral rat	1600 mg/kg Source: HSDB, ChemIDplus, NITE
LD50 dermal rat	> 2000 mg/kg body weight Animal: rat, Guideline: EU Method B.3 (Acute Toxicity (Dermal)), Guideline: other:
LD50 dermal rabbit	> 2000 mg/kg

Skin corrosion/irritation : Causes skin irritation.
Serious eye damage/irritation : Causes serious eye irritation.
Respiratory or skin sensitization : May cause an allergic skin reaction.
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Not classified
STOT-single exposure : May cause respiratory irritation.
STOT-repeated exposure : Not classified

mequinol, 4-methoxyphenol, hydroquinone monomethyl ether (150-76-5)	
LOAEL (oral,rat,90 days)	300 mg/kg body weight Animal: rat, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test), Guideline: other:
NOAEL (oral,rat,90 days)	150 mg/kg body weight Animal: rat, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test), Guideline: other:

Aspiration hazard : Not classified
Potential Adverse human health effects and symptoms : To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.
Symptoms/effects after inhalation : May cause respiratory irritation.
Symptoms/effects after skin contact : Irritation. May cause an allergic skin reaction.
Symptoms/effects after eye contact : Eye irritation.
Chronic symptoms : Repeated or prolonged skin contact may cause skin irritation and/or dermatitis and sensitization of susceptible persons.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

Phenylthioethanol (699-12-7)	
LC50 - Fish [1]	256.648 mg/l Source: Ecological Structure Activity Relationships
EC50 - Crustacea [1]	136.82 mg/l Source: Ecological Structure Activity Relationships
EC50 96h - Algae [1]	55.068 mg/l Source: Ecological Structure Activity Relationships

mequinol, 4-methoxyphenol, hydroquinone monomethyl ether (150-76-5)	
LC50 - Fish [1]	28.5 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)
EC50 - Crustacea [1]	3 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	54.7 mg/l Test organisms (species): Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum)
EC50 72h - Algae [2]	19 mg/l Test organisms (species): Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum)
ErC50 algae	54.7 mg/l Source: EHCA
LOEC (chronic)	1.45 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC (chronic)	0.68 mg/l Test organisms (species): Daphnia magna Duration: '21 d'

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

mequinol, 4-methoxyphenol, hydroquinone monomethyl ether (150-76-5)	
Partition coefficient n-octanol/water (Log Pow)	1.23 Source: ECHA

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods

Regional waste regulation : Disposal must be done according to official regulations.
Sewage disposal recommendations : Do not dispose of waste into sewer.
Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.
Additional information : Do not re-use empty containers.

SECTION 14: Transport information

In accordance with DOT / IMDG / IATA

DOT	IMDG	IATA
14.1. UN number		
UN3532	3532	3532
14.2. Proper Shipping Name		
Polymerizing substance, liquid, stabilized, n.o.s (Phenylthioethyl acrylate)	POLYMERIZING SUBSTANCE, LIQUID, STABILIZED, N.O.S. (PHENYLTHIOETHYL ACRYLATE)	Polymerizing substance, liquid, stabilized, n.o.s. (Phenylthioethyl acrylate)

DOT	IMDG	IATA
Transport document description		
UN3532 Polymerizing substance, liquid, stabilized, n.o.s (Phenylthioethyl acrylate), 4.1, III	UN 3532 POLYMERIZING SUBSTANCE, LIQUID, STABILIZED, N.O.S. (PHENYLTHIOETHYL ACRYLATE), 4.1, III	UN 3532 Polymerizing substance, liquid, stabilized, n.o.s. (Phenylthioethyl acrylate), 4.1, III
14.3. Transport hazard class(es)		
4.1	4.1	4.1
		
14.4. Packing group		
III	III	III
14.5. Environmental hazards		
Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No	Dangerous for the environment: No
No supplementary information available		

14.6. Special precautions for user

DOT

UN-No. (DOT) : UN3532

DOT Special Provisions (49 CFR 172.102)	:	387 - When materials are stabilized by temperature control, the provisions of §173.21(f) of this subchapter apply. When chemical stabilization is employed, the person offering the material for transport shall ensure that the level of stabilization is sufficient to prevent the material as packaged from dangerous polymerization at 50 °C (122 °F). If chemical stabilization becomes ineffective at lower temperatures within the anticipated duration of transport, temperature control is required and is forbidden by aircraft. In making this determination factors to be taken into consideration include, but are not limited to, the capacity and geometry of the packaging and the effect of any insulation present, the temperature of the material when offered for transport, the duration of the journey, and the ambient temperature conditions typically encountered in the journey (considering also the season of year), the effectiveness and other properties of the stabilizer employed, applicable operational controls imposed by regulation (e.g.requirements to protect from sources of heat, including other cargo carried at a temperature above ambient) and any other relevant factors. The provisions of this special provision will be effective until January 2, 2019, unless we terminate them earlier or extend them beyond that date by notice of a final rule in the Federal Register. 421 - This entry will no longer be effective on January 2, 2019 unless we terminate it earlier or extend it beyond that date by notice of a final rule in the Federal Register. IB3 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1 and 31HA2, 31HB2, 31HN2, 31HD2 and 31HH2). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized, except for UN2672 (also see Special Provision IP8 in Table 2 for UN2672). IP19 - For UN identification numbers 3531, 3532, 3533, and 3534, IBCs must be designed and constructed to permit the release of gas or vapor to prevent a build-up of pressure that could rupture the IBCs in the event of loss of stabilization. N92 - Notwithstanding the provisions of §173.24(g) of this subchapter, packagings shall be designed and constructed to permit the release of gas or vapor to prevent a build-up of pressure that could rupture the packagings in the event of loss of stabilization. T7 - 4 178.274(d)(2) Normal..... 178.275(d)(3) TP4 - The maximum degree of filling for portable tanks must not exceed 90%. TP6 - The tank must be equipped with a pressure release device which prevent a tank from bursting under fire engulfment conditions (the conditions prescribed in CGA pamphlet S1.2 (see 171.7 of this subchapter) or alternative conditions approved by the Associate Administrator may be used to consider the fire engulfment condition), taking into account the properties of the hazardous material to be transported.
DOT Packaging Non Bulk (49 CFR 173.xxx)	:	203
DOT Packaging Bulk (49 CFR 173.xxx)	:	241
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)	:	10 L
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)	:	25 L
DOT Vessel Stowage Location	:	D - The material must be stowed ‘‘on deck only’’ on a cargo vessel and on a passenger vessel carrying a number of passengers limited to not more than the larger of 25 passengers or one passenger per each 3 m of overall vessel length, but the material is prohibited on passenger vessels in which the limiting number of passengers is exceeded.
DOT Vessel Stowage Other	:	25 - Protected from sources of heat,52 - Stow ‘‘separated from’’ acids,53 - Stow ‘‘separated from’’ alkaline compounds

IMDG

Special provision (IMDG)	:	274, 386
Limited quantities (IMDG)	:	0
Excepted quantities (IMDG)	:	E0
Packing instructions (IMDG)	:	P001
Packing provisions (IMDG)	:	PP93
IBC packing instructions (IMDG)	:	IBC03
IBC special provisions (IMDG)	:	B19
Tank instructions (IMDG)	:	T7
Tank special provisions (IMDG)	:	TP4, TP6

EmS-No. (Fire)	:	F-J - FIRE SCHEDULE Juliet - NON-TEMPERATURE-CONTROLLED SELF-REACTIVES AND ORGANIC PEROXIDES
EmS-No. (Spillage)	:	S-G - SPILLAGE SCHEDULE Golf - FLAMMABLE SOLIDS AND SELF-REACTIVE SUBSTANCES
Stowage category (IMDG)	:	D
Stowage and handling (IMDG)	:	SW1
Segregation (IMDG)	:	SG35, SG36
Properties and observations (IMDG)	:	Polymerizes at elevated temperatures or in a fire. Burns vigorously. Immiscible with water. Contact with alkalis or acids may cause dangerous polymerization. The products of combustion or self-accelerating polymerization may be toxic by inhalation.

IATA

PCA Excepted quantities (IATA)	:	E0
PCA Limited quantities (IATA)	:	Forbidden
PCA limited quantity max net quantity (IATA)	:	Forbidden
PCA packing instructions (IATA)	:	459
PCA max net quantity (IATA)	:	10L
CAO packing instructions (IATA)	:	459
CAO max net quantity (IATA)	:	25L
Special provision (IATA)	:	A209
ERG code (IATA)	:	3L

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. US Federal regulations

BIMAX® PTEA (95175-38-5)	
EPA TSCA Regulatory Flag	PMN - PMN - indicates a commenced PMN substance. S - S - indicates a substance that is identified in a final Significant New Use Rule.

Commercial status of components according to the United States Environmental Protection Agency's Toxic Substances Control Act (TSCA):

Name	CAS-No.	Listing	Commercial status	Flags
Phenylthioethyl acrylate	95175-38-5	Present	Active	PMN;S
Phenylthioethanol	699-12-7	Present	Active	
mequinol, 4-methoxyphenol, hydroquinone monomethyl ether	150-76-5	Present	Active	

15.2. International regulations

CANADA

Phenylthioethyl acrylate (95175-38-5)
Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List)

Phenylthioethanol (699-12-7)
Listed on the Canadian NDSL (Non-Domestic Substances List)

mequinol, 4-methoxyphenol, hydroquinone monomethyl ether (150-76-5)
Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

No additional information available

National regulations

mequinol, 4-methoxyphenol, hydroquinone monomethyl ether (150-76-5)
Listed on INSQ (Mexican National Inventory of Chemical Substances)

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

mequinol, 4-methoxyphenol, hydroquinone monomethyl ether (150-76-5)
U.S. - Massachusetts - Right To Know List U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List

SECTION 16: Other information

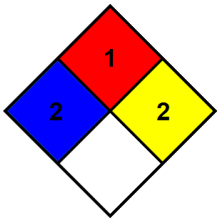
according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Full text of hazard classes and H-statements	
H302	Harmful if swallowed
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H335	May cause respiratory irritation

NFPA health hazard : 2 - Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.

NFPA fire hazard : 1 - Materials that must be preheated before ignition can occur.

NFPA reactivity : 2 - Materials that readily undergo violent chemical change at elevated temperatures and pressures.



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SDS US (GHS HazCom 2012) - Custom

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