

SAFETY DATA SHEET

Revision Date 28-Mar-2024

Revision Number 5

1. Identification

Product Name	Methyl acrylate
Cat No. :	A13128
CAS No	96-33-3
Synonyms	Methyl 2-propenoate
Recommended Use	Laboratory chemicals.
Uses advised against	Food, drug, pesticide or biocidal product use.

Details of the supplier of the safety data sheet

Company

Thermo Fisher Scientific Chemicals, Inc.
30 Bond Street
Ward Hill, MA 01835-8099
Tel: 800-343-0660
Fax: 800-322-4757

Emergency Telephone Number

For information **US** call: 001-800-227-6701 / **Europe** call: +32 14 57 52 11
Emergency Number **US**:001-201-796-7100 / **Europe**: +32 14 57 52 99
CHEMTREC Tel. No. **US**:001-800-424-9300 / **Europe**:001-703-527-3887

2. Hazard(s) identification

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Flammable liquids	Category 2
Acute oral toxicity	Category 4
Acute dermal toxicity	Category 4
Acute Inhalation Toxicity - Dusts and Mists	Category 3
Skin Corrosion/Irritation	Category 2
Serious Eye Damage/Eye Irritation	Category 2
Skin Sensitization	Category 1
Specific target organ toxicity (single exposure)	Category 3
Target Organs - Respiratory system.	

Label Elements

Signal Word
Danger

Hazard Statements

Highly flammable liquid and vapor
Causes skin irritation
Causes serious eye irritation
May cause an allergic skin reaction
Toxic if inhaled
May cause respiratory irritation
Harmful if swallowed or in contact with skin

**Precautionary Statements****Prevention**

Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Wear protective gloves/protective clothing/eye protection/face protection
Avoid breathing dust/fume/gas/mist/vapors/spray
Use only outdoors or in a well-ventilated area
Contaminated work clothing should not be allowed out of the workplace
Keep away from heat/sparks/open flames/hot surfaces. - No smoking
Keep container tightly closed
Ground/bond container and receiving equipment
Use explosion-proof electrical/ventilating/lighting equipment
Use only non-sparking tools
Take precautionary measures against static discharge
Keep cool

Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
Call a POISON CENTER or doctor/physician

Skin

Call a POISON CENTER or doctor/physician if you feel unwell
If skin irritation or rash occurs: Get medical advice/attention
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower
Wash contaminated clothing before reuse

Eyes

IF IN EYES: 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

Ingestion

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
Rinse mouth

Fire

In case of fire: Use CO₂, dry chemical, or foam for extinction

Storage

Store in a well-ventilated place. Keep container tightly closed
Store locked up

Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Harmful to aquatic life with long lasting effects

Other hazards

Stench.

WARNING. Cancer - <https://www.p65warnings.ca.gov/>.

3. Composition/Information on Ingredients

Component	CAS No	Weight %
Methyl acrylate	96-33-3	>95
4-Methoxyphenol	150-76-5	0.001-0.002

4. First-aid measures

Eye Contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.
Skin Contact	Get medical attention. Wash off immediately with plenty of water for at least 15 minutes.
Inhalation	Remove to fresh air. Get medical attention. If not breathing, give artificial respiration.
Ingestion	Do NOT induce vomiting. Get medical attention.
Most important symptoms and effects	Difficulty in breathing. May cause allergic skin reaction. Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting: Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain or flushing
Notes to Physician	Treat symptomatically

5. Fire-fighting measures

Suitable Extinguishing Media	Water spray. Carbon dioxide (CO ₂). Dry chemical. Chemical foam. Water mist may be used to cool closed containers.
Unsuitable Extinguishing Media	No information available
Flash Point	-3 °C / 26.6 °F
Method -	No information available
Autoignition Temperature	463 °C / 865.4 °F
Explosion Limits	
Upper	25%
Lower	2.8%
Sensitivity to Mechanical Impact	No information available
Sensitivity to Static Discharge	No information available

Specific Hazards Arising from the Chemical

Flammable. Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back. Containers may explode when heated. Vapors may form explosive mixtures with air.

Hazardous Combustion Products

Carbon monoxide (CO). Carbon dioxide (CO₂).

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

NFPA

Health
3

Flammability
3

Instability
0

Physical hazards
N/A

6. Accidental release measures

Personal Precautions Remove all sources of ignition. Take precautionary measures against static discharges.
Environmental Precautions Do not flush into surface water or sanitary sewer system.

Methods for Containment and Clean Up Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Prevent product from entering drains. Keep in suitable, closed containers for disposal. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment. Do not flush into surface water or sanitary sewer system.

7. Handling and storage

Handling Avoid contact with skin and eyes. Wear personal protective equipment/face protection. Do not breathe mist/vapors/spray. Take precautionary measures against static discharges. Use spark-proof tools and explosion-proof equipment. Use only non-sparking tools. Keep away from open flames, hot surfaces and sources of ignition. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded.

Storage. To maintain product quality Refrigerator/flammables. Keep container tightly closed. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Incompatible Materials. Acids. Bases. Peroxides.

8. Exposure controls / personal protection

Exposure Guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH	Mexico OEL (TWA)
Methyl acrylate	TWA: 2 ppm Skin	(Vacated) TWA: 10 ppm (Vacated) TWA: 35 mg/m ³ Skin TWA: 10 ppm TWA: 35 mg/m ³	IDLH: 250 ppm TWA: 10 ppm TWA: 35 mg/m ³	TWA: 2 ppm
4-Methoxyphenol	TWA: 5 mg/m ³	(Vacated) TWA: 5 mg/m ³	TWA: 5 mg/m ³	TWA: 5 mg/m ³

Legend

ACGIH - American Conference of Governmental Industrial Hygienists
 OSHA - Occupational Safety and Health Administration
 NIOSH: NIOSH - National Institute for Occupational Safety and Health

Engineering Measures Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location. Use explosion-proof electrical/ventilating/lighting equipment.

Personal Protective Equipment

Eye/face Protection Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin and body protection Wear appropriate protective gloves and clothing to prevent skin exposure.

Respiratory Protection Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Recommended Filter type: Particulates filter conforming to EN 143. Acid gases filter. Type E. Yellow. conforming to EN14387.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Physical State	Liquid
Appearance	Colorless
Odor	Stench
Odor Threshold	No information available
pH	No information available
Melting Point/Range	-75 °C / -103 °F
Boiling Point/Range	80 °C / 176 °F @ 760 mmHg
Flash Point	-3 °C / 26.6 °F
Evaporation Rate	No information available
Flammability (solid,gas)	Not applicable
Flammability or explosive limits	
Upper	25%
Lower	2.8%
Vapor Pressure	No information available
Vapor Density	No information available
Specific Gravity	0.956
Solubility	No information available
Partition coefficient; n-octanol/water	No data available
Autoignition Temperature	463 °C / 865.4 °F
Decomposition Temperature	No information available
Viscosity	Dynamic 0.50 mPa.s at 20 °C
Molecular Formula	C4 H6 O2
Molecular Weight	86.09

10. Stability and reactivity

Reactive Hazard	None known, based on information available
Stability	Light sensitive. Hazardous polymerization does not occur. Hazardous polymerization may occur upon depletion of inhibitor.
Conditions to Avoid	Keep away from open flames, hot surfaces and sources of ignition. Excess heat. Exposure to light. Incompatible products.
Incompatible Materials	Acids, Bases, Peroxides
Hazardous Decomposition Products	Carbon monoxide (CO), Carbon dioxide (CO ₂)
Hazardous Polymerization	Hazardous polymerization may occur upon depletion of inhibitor.
Hazardous Reactions	None under normal processing.

11. Toxicological information

Acute Toxicity

Product Information **Component Information**

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Methyl acrylate	LD50 = 277 mg/kg (Rat)	LD50 = 1243 mg/kg (Rabbit)	LC50 = 3.58 mg/L (Rat) 4 h
4-Methoxyphenol	1600 mg/kg (Rat)	LD50 > 2000 mg/kg (Rabbit)	Not listed

Toxicologically Synergistic Products No information available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Irritation Irritating to eyes, respiratory system and skin

Sensitization May cause sensitization by skin contact

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	CAS No	IARC	NTP	ACGIH	OSHA	Mexico
Methyl acrylate	96-33-3	Group 2B	Not listed	Not listed	X	Not listed
4-Methoxyphenol	150-76-5	Not listed	Not listed	Not listed	Not listed	Not listed

Mutagenic Effects No information available

Reproductive Effects No information available.

Developmental Effects No information available.

Teratogenicity No information available.

STOT - single exposure Respiratory system

STOT - repeated exposure None known

Aspiration hazard No information available

Symptoms / effects, both acute and delayed Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting; Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain or flushing

Endocrine Disruptor Information No information available

Other Adverse Effects The toxicological properties have not been fully investigated.

12. Ecological information

Ecotoxicity

The product contains following substances which are hazardous for the environment. Contains a substance which is: Toxic to aquatic organisms.

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Methyl acrylate	EC50: <= 46.78 mg/L, 96h static (Pseudokirchneriella subcapitata) EC50: = 15 mg/L, 72h (Desmodesmus subspicatus)	LC50: = 1.81 mg/L, 96h semi-static (Oncorhynchus mykiss) LC50: = 2.11 mg/L, 96h flow-through (Pimephales promelas)	EC50 = 260 mg/L 17 h	EC50: = 2.2 mg/L, 48h (Daphnia magna)
4-Methoxyphenol	Not listed	LC50: = 28.5 mg/L, 96h flow-through (Oncorhynchus mykiss) LC50: = 84.3 mg/L, 96h flow-through (Pimephales promelas)	EC50 = 3.66 mg/L 5 min EC50 = 4.30 mg/L 15 min EC50 = 4.61 mg/L 30 min	Not listed

Persistence and Degradability Persistence is unlikely based on information available.

Bioaccumulation/ Accumulation No information available.

Mobility Will likely be mobile in the environment due to its volatility.

Component	log Pow
Methyl acrylate	0.739
4-Methoxyphenol	1.3

13. Disposal considerations

Waste Disposal Methods Chemical waste generators must determine whether a discarded chemical is classified as a

hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

14. Transport information

DOT

UN-No UN1919
 Proper Shipping Name METHYL ACRYLATE, STABILIZED
 Hazard Class 3
 Packing Group II

TDG

UN-No UN1919
 Proper Shipping Name METHYL ACRYLATE, STABILIZED
 Hazard Class 3
 Packing Group II

IATA

UN-No UN1919
 Proper Shipping Name METHYL ACRYLATE, STABILIZED
 Hazard Class 3
 Packing Group II

IMDG/IMO

UN-No UN1919
 Proper Shipping Name METHYL ACRYLATE, STABILIZED
 Hazard Class 3
 Packing Group II

15. Regulatory information

United States of America Inventory

Component	CAS No	TSCA	TSCA Inventory notification - Active-Inactive	TSCA - EPA Regulatory Flags
Methyl acrylate	96-33-3	X	ACTIVE	-
4-Methoxyphenol	150-76-5	X	ACTIVE	-

Legend:

TSCA US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)

X - Listed

'-' - Not Listed

TSCA - Per 40 CFR 751, Regulation of Certain Chemical Substances & Mixtures, Under TSCA Section 6(h) (PBT) Not applicable

TSCA 12(b) - Notices of Export Not applicable

International Inventories

Canada (DSL/NDL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Japan (ISHL), Australia (AICS), China (IECSC), Korea (KECL).

Component	CAS No	DSL	NDL	EINECS	PICCS	ENCS	ISHL	AICS	IECSC	KECL
Methyl acrylate	96-33-3	X	-	202-500-6	X	X	X	X	X	KE-29592
4-Methoxyphenol	150-76-5	X	-	205-769-8	X	X	X	X	X	KE-23353

KECL - NIER number or KE number (<http://ncis.nier.go.kr/en/main.do>)

U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

Component	CAS No	Weight %	SARA 313 - Threshold Values %	SARA 313 - Reporting thresholds
Methyl acrylate	96-33-3	>95	1.0 %	-

SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

CWA (Clean Water Act) Not applicable

Clean Air Act Not applicable

OSHA - Occupational Safety and Health Administration Not applicable

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

California Proposition 65 This product contains the following Proposition 65 chemicals.

Component	CAS No	California Prop. 65	Prop 65 NSRL	Category
Methyl acrylate	96-33-3	Carcinogen	-	Carcinogen

U.S. State Right-to-Know Regulations

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Methyl acrylate	X	X	X	-	X
4-Methoxyphenol	X	X	X	-	X

U.S. Department of Transportation

Reportable Quantity (RQ): N
 DOT Marine Pollutant N
 DOT Severe Marine Pollutant N

U.S. Department of Homeland Security This product does not contain any DHS chemicals.

Other International Regulations

Mexico - Grade No information available

Authorisation/Restrictions according to EU REACH

Component	CAS No	REACH (1907/2006) - Annex XIV - Substances Subject to Authorization	REACH (1907/2006) - Annex XVII - Restrictions on Certain Dangerous Substances	REACH Regulation (EC 1907/2006) article 59 - Candidate List of Substances of Very High Concern (SVHC)
Methyl acrylate	96-33-3	-	Use restricted. See item 75. (see link for restriction details)	-
4-Methoxyphenol	150-76-5	-	Use restricted. See item 75. (see link for restriction details)	-

REACH links

<https://echa.europa.eu/substances-restricted-under-reach>

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

Component	CAS No	OECD HPV	Persistent Organic Pollutant	Ozone Depletion Potential	Restriction of Hazardous Substances (RoHS)
Methyl acrylate	96-33-3	Listed	Not applicable	Not applicable	Not applicable
4-Methoxyphenol	150-76-5	Listed	Not applicable	Not applicable	Not applicable

Contains component(s) that meet a 'definition' of per & poly fluoroalkyl substance (PFAS)?

Not applicable

Other International Regulations

Component	CAS No	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements	Rotterdam Convention (PIC)	Basel Convention (Hazardous Waste)
Methyl acrylate	96-33-3	500 tonne	2000 tonne	Not applicable	Not applicable
4-Methoxyphenol	150-76-5	Not applicable	Not applicable	Not applicable	Not applicable

16. Other information

Prepared By	Health, Safety and Environmental Department Email: chem.techinfo@thermofisher.com www.thermofisher.com
Revision Date	28-Mar-2024
Print Date	28-Mar-2024
Revision Summary	New emergency telephone response service provider.

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

End of SDS