

Section 1. Product and Company Identification

**Product Name** Methyl Acrylate  
**CAS Number** 96-33-3

Covalent Chemical  
6501 Creedmoor Rd, Suite 207  
Raleigh NC 27613  
919-825-1400

EMERGENCY RESPONSE NUMBER  
CHEMTREC  
Toll Free US & Canada:  
800-424-9300/CCN796179

Section 2. Hazards Identification

**Classification of the substance or mixture**

**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**

Flammable liquids (Category 2), H225  
Acute toxicity, Oral (Category 4), H302  
Acute toxicity, Inhalation (Category 3), H331  
Acute toxicity, Dermal (Category 4), H312  
Skin irritation (Category 2), H315  
Eye irritation (Category 2A), H319  
Skin sensitization (Category 1), H317  
Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335  
Acute aquatic toxicity (Category 2), H401  
Chronic aquatic toxicity (Category 3), H412

**GHS Label Elements**

**Pictograms:**



**Signal word:** DANGER

**Hazard and precautionary statements**

**Hazard Statements**

H225 Highly flammable liquid and vapor  
H302 + H312 Harmful if swallowed or in contact with skin  
H315 Causes skin irritation.  
H317 May cause an allergic skin reaction.  
H319 Causes serious eye irritation.

H331 Toxic if inhaled.  
H335 May cause respiratory irritation.  
H401 Toxic to aquatic life.  
H412 Harmful to aquatic life with long lasting effects.

**Precautionary Statements**

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.  
P233 Keep container tightly closed.  
P240 Ground/bond container and receiving equipment.  
P241 Use explosion-proof electrical/ventilating/lighting/equipment.  
P242 Use only non-sparking tools.  
P243 Take precautionary measures against static discharge.  
P261 Avoid breathing dust/fume/gas/mist/vapors/spray.  
P264 Wash skin thoroughly after handling.  
P270 Do not eat, drink, or smoke when using this product.  
P271 Use only outdoors or in a well-ventilated area.  
P272 Contaminated work clothing should not be allowed out of the workplace.  
P273 Avoid release to the environment.  
P280 Wear protective gloves/ eye protection/ face protection.  
P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell. Rinse mouth.  
P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.  
P304 + P340 + P311 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/ physician.  
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.  
P337 + P313 If eye irritation persists: Get medical advice/ attention.  
P362 Take off contaminated clothing and wash before reuse.  
P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.  
P403 + P233 Store in a well-ventilated place. Keep container tightly closed.  
P403 + P235 Store in a well-ventilated place. Keep cool.  
P405 Store locked up.  
P501 Dispose of contents/ container to an approved waste disposal plant.

**Hazards not otherwise classified (HNOC) or not covered by GHS:** Lachrymator.

## Section 3. Composition / Information on Ingredients

**Common Name** Methyl Acrylate  
**Formula** C<sub>4</sub>H<sub>6</sub>O<sub>2</sub>  
**CAS Number** 96-33-3

COMPONENT	CAS NUMBER	CONCENTRATION
Methyl Acrylate	96-33-3	≤ 100%

## Section 4. First Aid Measures

**Description of first-aid measures**

**General Advice:** Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

**Inhalation:** If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**Skin contact:** Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

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

**Ingestion:** Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

**Most important symptoms and effects, both acute and delayed:** The most important known symptoms and effects are described in the labelling and/or in section 11.

**Indication of any immediate medical attention and special treatment needed:** No data available

## Section 5. Firefighting Measures

**Extinguishing media**

**Suitable extinguishing media:** Use water spray, alcohol-resistant foam, dry chemical, or carbon dioxide.

**Special hazards arising from the substance or mixture:** Carbon oxides

**Advice for firefighters:** Wear self-contained breathing apparatus for firefighting if necessary.

**Further information:** Use water spray to cool unopened containers.

## Section 6. Accidental Release Measures

**Personal precautions, protective equipment, and emergency procedures:** Wear respiratory protection. Avoid breathing vapors, mist, or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas. For personal protection see section 8.

**Environmental precautions:** Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

**Methods and materials for containment and cleaning up:** Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).

**Reference to other sections:** For disposal see section 13.

Section 7. Handling and Storage
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**Precautions for safe handling:** Avoid contact with skin and eyes. Avoid inhalation of vapor or mist. Use explosion-proof equipment. Keep away from sources of ignition - No smoking. Take measures to prevent the build-up of electrostatic charge.

**Conditions for safe storage, including any incompatibilities:** Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Light sensitive. Recommended storage temperature 2 - 8°C  
 Storage class (TRGS 510): Flammable liquids

Section 8. Exposure Controls / Personal Protection
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**Control parameters**

**Components with workplace control parameters**

Component	CAS Number	Value	Control Parameters	Basis
Methyl Acrylate	96-33-3	TWA	2.000000 ppm	USA ACGIH Threshold Limit Values (TLV)
	Remarks	Eye irritation Eye damage Skin & Upper Respiratory Tract Not classifiable as a human carcinogen Danger of cutaneous absorption Sensitizer		
		TWA	10.000000 ppm 35.000000 mg/m <sup>3</sup>	USA. NIOSH Recommended Exposure Limits
		Potential for dermal absorption		
		TWA	10.000000 ppm 35.000000 mg/m <sup>3</sup>	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
		Skin designation The value in mg/m <sup>3</sup> is approximate.		
		TWA	2 ppm	USA ACGIH Threshold Limit Values (TLV)
		Dermal Sensitization Upper Respiratory Tract irritation Eye irritation Eye damage Skin irritation 2014 Adoption Not classifiable as a human carcinogen Danger of cutaneous absorption		

		TWA	10 ppm 35 mg/m <sup>3</sup>	USA. NIOSH Recommended Exposure Limits
		Potential for dermal absorption		

### Exposure controls

**Appropriate engineering controls:** Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

### Personal protective equipment

**Eye/face protection:** Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin protection:** Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

**Body Protection:** Complete suit protecting against chemicals, Flame retardant antistatic protective clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection:** Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multipurpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Control of environmental exposure:** Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

## Section 9. Physical and Chemical Properties

### Information on basic physical and chemical properties

**Appearance:** Clear, liquid

**Color:** Colorless

**Odor:** No data available

**Odor Threshold:** No data available

**pH:** No data available

**Melting point/range:** -75°C (-103°F) - lit.

**Initial boiling point and boiling range:** 80°C (176°F) - lit.

**Flash point (Closed Cup):** -2.99°C (26.62°F)

**Evaporation rate:** No data available

**Flammability (solid, gas):** No data available

### Upper/lower flammability or explosive limits

**Upper explosion limit:** 14.5% (V)

**Lower explosion limit:** 2.1% (V)

**Vapor pressure:** 115.5 hPa (86.6 mmHg) at 25°C (77°F)

**Vapor density:** 2.97 - (Air = 1.0)

**Relative density:** 0.956 g/cm<sup>3</sup> at 25°C (77°F)

**Water solubility:** ca.50 g/l at 20°C (68°F)

**Partition coefficient (n-Octanol/water):** log Pow: 0.74

**Auto-ignition temperature:** No data available

**Decomposition temperature:** No data available

**Viscosity:** No data available

**Explosive properties:** No data available

**Oxidizing properties:** No data available

#### **Other safety information**

**Surface tension:** 24.2 mN/m at 20°C (68°F)

**Relative vapor density:** 2.97 - (Air = 1.0)

#### Section 10. Stability and Reactivity

**Reactivity:** No data available

**Chemical stability:** Stable under recommended storage conditions.

Contains the following stabilizer(s): Mequinol (<= 0.01 %)

**Possibility of hazardous reactions:** Vapors may form explosive mixture with air.

**Conditions to avoid:** Heat, flames and sparks.

**Incompatible materials:** Oxidizing agents, Peroxides

#### **Hazardous decomposition products**

**Other decomposition products:** No data available

In the event of fire: see section 5

#### Section 11. Toxicological Information

#### **Information on toxicological effects**

##### **Acute toxicity**

LD50 Oral - Rat - 768 mg/kg

(OECD Test Guideline 401)

LC50 Inhalation - Rat - 4 h - < 10.832 mg/l

LD50 Dermal - Rabbit - 1,243 mg/kg

##### **Skin corrosion/irritation**

Skin - Rabbit

Result: Skin irritation

(OECD Test Guideline 404)

**Serious eye damage/eye irritation**

Eyes - Rabbit

Result: Irritating to eyes.

**Respiratory or skin sensitization**

in vivo assay - Mouse

May cause allergic skin reaction.

(OECD Test Guideline 429)

**Germ cell mutagenicity**

Chromosome aberration test in vitro

Other cell types

Result: positive

Result: Not mutagenic in Ames Test

Mouse

Result: negative

Micronucleus test

**Carcinogenicity**

This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP, or EPA classification.

**IARC:** 3 - Group 3: Not classifiable as to its carcinogenicity to humans (Methyl acrylate)

**NTP:** No component of this product, present at levels greater than or equal to 0.1%, is identified as a known or anticipated carcinogen by NTP.

**OSHA:** No component of this product, present at levels greater than or equal to 0.1%, is identified as a carcinogen or potential carcinogen by OSHA.

**Reproductive toxicity:** No data available

**Specific target organ toxicity - single exposure:** Inhalation - May cause respiratory irritation.

**Specific target organ toxicity - repeated exposure:** No data available

**Aspiration hazard:** No data available

**Additional Information**

**RTECS:** AT2800000

Cough, Shortness of breath, Headache, Nausea, Vomiting, prolonged or repeated exposure can cause: Lung irritation; Stomach - Irregularities - Based on Human Evidence (Mequinol)

Section 12. Ecological Information
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**Toxicity**

Toxicity to fish LC50 - *Oncorhynchus mykiss* (rainbow trout) - 5.2 mg/l - 96h

Toxicity to daphnia and other aquatic invertebrates

EC50 - Daphnia magna (Water flea) - 8.74 mg/l - 48h  
NOEC - Daphnia (water flea) - 0.19 mg/l - 21 d  
Toxicity to algae EC50 - Pseudokirchneriella subcapitata - 5.2 mg/l - 72h

**Persistence and degradability**

Biodegradability Result: 90 - 100 % - Readily biodegradable  
(OECD Test Guideline 310)

**Bioaccumulative potential:** No data available

**Mobility in soil:** No data available

**Results of PBT and vPvB assessment:** PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

**Other adverse effects:** An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Toxic to aquatic life.

Section 13. Disposal Considerations

**Waste Treatment Methods:** Dispose of product and contaminated packaging in accordance with all local, state, and federal environmental control regulations.

Section 14. Transport Information

**DOT (US)**

**UN number:** 1919

**Class:** 3

**Packing group:** II

**Proper shipping name:** Methyl acrylate, stabilized

**Reportable Quantity (RQ):**

**Poison Inhalation Hazard:** No

**IMDG**

**UN number:** 1919

**Class:** 3

**Packing group:** II

**EMS-No:** F-E, S-D

**Proper shipping name:** Methyl acrylate, stabilized

**IATA**

**UN number:** 1919

**Class:** 3

**Packing group:** II

**Proper shipping name:** Methyl acrylate, stabilized



Section 15. Regulatory Information

**SARA 302 Components:** No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components**

The following components are subject to reporting levels established by SARA Title III, Section 313:  
Methyl acrylate (CAS-No. 96-33-3)  
Revision Date: 2007-07-01

**SARA 311/312 Hazards:** Fire Hazard, Acute Health Hazard

**Massachusetts Right To Know Components**

Methyl acrylate (CAS-No. 96-33-3)  
Revision Date: 2007-07-01

**Pennsylvania Right to Know Components**

Methyl acrylate (CAS-No. 96-33-3)  
Revision Date: 2007-07-01

**New Jersey Right To Know Components**

Methyl acrylate (CAS-No. 96-33-3)  
Revision Date: 2007-07-01

**California Prop. 65 Components:** This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

Section 16. Other Information

**Disclaimer:** The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product.