# Safety Data Sheet

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CONTINENTAL INDUSTRIES GROUP, INC.

www.continental-industries.com

# **1. PRODUCT AND COMPANY IDENTIFICATION**

Product name Synonym(s)	:	Methyl methacrylate (stabilized)
Distributor	:	Continental Industries Group, Inc. 733 Third Avenue FI. 20 NEW YORK, NY 10017 USA 212-752-2020
Emergency Contact Chemtel Phone # International Phone #	:	1-800-255-3924 +01-813-248-0585

# 2. HAZARDS IDENTIFICATION

## **Emergency Overview**

**OSHA Hazards** Flammable liquid, Target Organ Effect, Skin sensitiser, Irritant

## **Target Organs**

Liver, Kidney GHS Label elements, including precautionary statements

Pictogram



Signal word	Danger
Hazard statement(s)	-
H225	Highly flammable liquid and vapour.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H335	May cause respiratory irritation.
Precautionary statement(s)	
P210	Keep away from heat/sparks/open flames/hot surfaces No smoking.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P280	Wear protective gloves.
P302 + P352	IF ON SKIN: Wash with plenty of soap and water
P501	Dispose of contents/ container to an approved waste disposal plant
HMIS Classification	
Health hazard:	2
Chronic Health Hazard:	*
Flammability:	3
Physical hazards:	0
NFPA Rating	
Health hazard:	2
Fire:	3
Reactivity Hazard:	0
Potential Health Effects	
Inhalation	May be harmful if inhaled. Causes respiratory tract irritation.
Skin	May be harmful if absorbed through skin. Causes skin irritation.
Eyes	Causes eye irritation.
Ingestion	May be harmful if swallowed.

## **3. COMPOSITION/INFORMATION ON INGREDIENTS**

Formula	: C <sub>5</sub> H <sub>8</sub> O <sub>2</sub>		
CAS-No.	EC-No.	Index-No.	Concentration
Methyl methacryl	ate		
80-62-6	201-297-1	607-035-00-6	<= 100 %
Mequinol			
150-76-5	205-769-8	604-044-00-7	<= 0.003 %

## 4. FIRST AID MEASURES

#### **General advice**

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

## If inhaled

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

#### In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

#### In case of eye contact

Flush eyes with water as a precaution.

#### If swallowed

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

## **5. FIRE-FIGHTING MEASURES**

## Suitable extinguishing media

For small (incipient) fires, use media such as "alcohol" foam, dry chemical, or carbon dioxide. For large fires, apply water from as far as possible. Use very large quantities (flooding) of water applied as a mist or spray; solid streams of water may be ineffective. Cool all affected containers with flooding quantities of water.

## Specific hazards arising from the chemical

Flash back possible over considerable distance. Container explosion may occur under fire conditions.

#### Special protective equipment for fire-fighters

Wear self contained breathing apparatus for fire fighting if necessary.

#### **Further information**

Use water spray to cool unopened containers.

## 6. ACCIDENTAL RELEASE MEASURES

#### **Personal precautions**

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

#### **Environmental precautions**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

#### 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).

## 7. HANDLING AND STORAGE

## Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapour 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

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. Store in cool place.

Recommended storage temperature: 2 - 8 °C

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Components with workplace control parameters

Components	CAS-No.	Value	Control parameters	Update	Basis
Methyl methacrylate	80-62-6	TWA	50 ppm	2007-01-01	USA. ACGIH Threshold Limit Values (TLV)
Remarks	classifiable a for humans studies do n	Upper Respiratory Tract irritation Eye irritation Pulmonary edema body weight effects Not classifiable as a human carcinogen: Agents which cause concern that they could be carcinogenic for humans but which cannot be assessed conclusively because of a lack of data. In vitro or animal studies do not provide indications of carcinogenicity which are sufficient to classify the agent into one of the other categories. Sensitizer			
		STEL	100 ppm	2007-01-01	USA. ACGIH Threshold Limit Values (TLV)
	Upper Respiratory Tract irritation Eye irritation Pulmonary edema body weight effects Not classifiable as a human carcinogen: Agents which cause concern that they could be carcinogenic for humans but which cannot be assessed conclusively because of a lack of data. In vitro or animal studies do not provide indications of carcinogenicity which are sufficient to classify the agent into one of the other categories. Sensitizer				
		TWA	100 ppm 410 mg/m3	1989-01-19	USA. OSHA - TABLE Z-1 Limits for Air Contaminants - 1910.1000
		TWA	100 ppm 410 mg/m3	1997-08-04	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
	The value in	mg/m3 is	approximate.		

#### Personal protective equipment

#### **Respiratory protection**

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose 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).

#### Hand 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.

## Eye 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).

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION ... cont'd

#### Skin and 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.

## **Hygiene measures**

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

# 9. PHYSICAL AND CHEMICAL PROPERTIES

#### Appearance

Form	liquid
Colour	colourless

## Safety data

pH Melting point Boiling point	no data available -48 °C (-54 °F) - lit. 100 °C (212 °F) - lit.
Flash point	9 °C (48 °F) - closed cup
Ignition temperature	435 °C (815 °F)
Lower explosion limit	2.12 %(V)
Upper explosion limit	12.5 %(V)
Vapour pressure	51.3 hPa (38.5 mmHg) at 25 °C (77 °F)
Density	0.936 g/cm3 at 25 °C (77 °F)
Water solubility	15 g/l
Partition coefficient: n-octanol/water	log Pow: 1.38
Relative vapour	3.46
density	- (Air = 1.0)

## **10. STABILITY AND REACTIVITY**

## Chemical stability

Stable under recommended storage conditions.

## Possibility of hazardous reactions

Vapours may form explosive mixture with air.

#### Conditions to avoid

Heat. May polymerize on exposure to light. Heat, flames and sparks. Extremes of temperature and direct sunlight.

## Materials to avoid

Oxidizing agents, Peroxides, Amines, Bases, acids, Reducing agents, Halogens

## Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides

Contains the following stabiliser(s): Mequinol (<=0.003 %)

## 11. TOXICOLOGICAL INFORMATION

#### Acute toxicity

LD50 Oral - rat - 7,872 mg/kg Remarks: Behavioral:Muscle weakness. Behavioral:Coma. Respiratory disorder

LC50 Inhalation - rat - 4 h - 78,000 mg/m3

LD50 Dermal - rabbit - > 5,000 mg/kg

Remarks: Prolonged skin contact may cause skin irritation and/or dermatitis.

Skin corrosion/irritation	no data available
Serious eye damage/eye irritation	no data available
Respiratory or skin sensitization	May cause allergic skin reaction.
Germ cell mutagenicity	no data available
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: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
- ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
- 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 (GHS)

May cause respiratory irritation.

Specific target organ toxicity - repeated exposure (GHS) no data available

Aspiration hazard no data available

## Potential health effects

Inhalation	May be harmful if inhaled. Causes respiratory tract irritation.
Ingestion	May be harmful if swallowed.
Skin	May be harmful if absorbed through skin. Causes skin irritation.
Eyes	Causes eye irritation.

## Signs and Symptoms of Exposure

Central nervous system depression, Drowsiness, Irritability, Dizziness, Ataxia., narcosis

#### Additional Information RTECS: OZ5075000

## **12. ECOLOGICAL INFORMATION**

## Toxicity

Toxicity to fish	LC50 - Pimephales promelas (fathead minnow) - 125.5 - 275.0 mg/l - 96 h
Toxicity to daphnia and other aquatic invertebrates.	EC50 - Daphnia magna (Water flea) - 720 mg/l
Toxicity to algae	EC50 - Pseudokirchneriella subcapitata (green algae) - 170 mg/l - 96 h
Persistence and degrada Bioaccumulative potentia Mobility in soil	al no data available no data available
PBT and vPvB assessme	nt no data available
Other adverse effects	no data available

# **13. DISPOSAL CONSIDERATIONS**

## Product

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

#### Contaminated packaging

Dispose of as unused product.

# **14. TRANSPORT INFORMATION**

#### DOT (US)

UN-Number: 1247 Class: 3 Packing group: II Proper shipping name: Methyl methacrylate monomer, stabilized Reportable Quantity (RQ): 1000 lbs Marine pollutant: No Poison Inhalation Hazard: No

#### IMDG

UN-Number: 1247 Class: 3 Packing group: II EMS-No: F-E, S-D Flash point: 8 °C c.c. Proper shipping name: METHYL METHACRYLATE MONOMER, STABILIZED Marine pollutant: No

## ΙΑΤΑ

UN-Number: 1247 Class: 3 Packing group: II Proper shipping name: Methyl methacrylate monomer, stabilized

## **15. REGULATORY INFORMATION**

#### **OSHA Hazards**

Flammable liquid, Target Organ Effect, Skin sensitiser, Irritant

#### DSL Status

All components of this product are on the Canadian DSL list.

#### SARA 302 Components

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

#### SARA 313 Components

Methyl methacrylate	CAS-No. 80-62-6	Revision Date 2007-07-01
SARA 311/312 Hazards Fire Hazard, Acute Health Hazard, Chronic Health Hazard		
Massachusetts Right To Know Components		
Methyl methacrylate	CAS-No. 80-62-6	Revision Date 2007-07-01
Pennsylvania Right To Know Components		
Methyl methacrylate	CAS-No. 80-62-6	Revision Date 2007-07-01
New Jersey Right To Know Components		
Methyl methacrylate	CAS-No. 80-62-6	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.

# **16. OTHER INFORMATION**

## **Further information**

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. Continental Industries Group, Inc. shall not be held liable for any damage resulting from handling or from contact with the above product.