

Revision Date: 07/22/2016

SAFETY DATA SHEET

1. Identification

Material name: Tremco PUMA TC Gray - 6 GAL

Material: 470718 805

Recommended use and restriction on use

Recommended use: Coatings Restrictions on use: Not known.

Manufacturer/Importer/Supplier/Distributor Information

Tremco Canadian Sealants 220 Wicksteed Ave Toronto ON M4H 1G7 CA

Contact person:EH&S DepartmentTelephone:1-800-263-6046

Emergency telephone number: 1-800-424-9300 (US); 1-613-996-6666 (Canada)

2. Hazard(s) identification

Hazard Classification

Physical Hazards

Flammable liquids Category 2

Health Hazards

Skin Corrosion/Irritation Category 2
Serious Eye Damage/Eye Irritation Category 2A
Skin sensitizer Category 1

Unknown toxicity - Health

Acute toxicity, oral 26.3 % Acute toxicity, dermal 36.2 % Acute toxicity, inhalation, vapor 67.8 % Acute toxicity, inhalation, dust or mist 100 %

Unknown toxicity - Environment

Acute hazards to the aquatic environment

Chronic hazards to the aquatic environment

100 %

Label Elements

Hazard Symbol:





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Signal Word: Danger

Hazard Statement: Highly flammable liquid and vapor.

Causes skin irritation.

Causes serious eye irritation.

May cause an allergic skin reaction.

Precautionary Statement: Prevention:

Keep away from heat, hot surfaces, sparks, open flames and other ignition

sources. No smoking. Keep container tightly closed. Ground and bond

container and receiving equipment. Use explosion-proof

 $electrical/ventilating/lighting/equipment. \ Use \ only \ non-sparking \ tools. \ Take$

precautionary measures against static discharge. Wear protective gloves/protective clothing/eye protection/face protection. Wash thoroughly

after handling. Avoid breathing dust/fume/gas/mist/vapors/spray.

Contaminated work clothing must not be allowed out of the workplace.

Response: 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. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or rash occurs: Get medical advice/attention. Specific treatment (see this label). Wash contaminated clothing before reuse. In case of fire: Use ... to

extinguish.

Storage: Store in well-ventilated place. Keep cool.

Disposal: Dispose of contents/container to an appropriate treatment and disposal

facility in accordance with applicable laws and regulations, and product

characteristics at time of disposal.

Other hazards which do not result in GHS classification:

Static accumulating flammable liquid can become electrostatically charged even in bonded and grounded equipment. Sparks may ignite liquid and

vapor. May cause flash fire or explosion.

3. Composition/information on ingredients

Mixtures

Chemical Identity	CAS number	Content in percent (%)*
Methyl methacrylate	80-62-6	30 - 60%
2-Propenoic acid, 2-ethylhexyl ester	103-11-7	15 - 40%
Barium sulfate	7727-43-7	7 - 13%

^{*} All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First-aid measures

Ingestion: Call a POISON CENTER/doctor/.../if you feel unwell. Rinse mouth.

Inhalation: Move to fresh air.



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Skin Contact: Take off immediately all contaminated clothing. Get medical attention.

Destroy or thoroughly clean contaminated shoes. Immediately remove contaminated clothing and shoes and wash skin with soap and plenty of water. If skin irritation or an allergic skin reaction develops, get medical

attention.

Eye contact: Immediately flush with plenty of water for at least 15 minutes. If easy to do,

remove contact lenses. Get medical attention.

Most important symptoms/effects, acute and delayed

Symptoms: Respiratory tract irritation. Prolonged or repeated contact with skin may

cause redness, itching, irritation and eczema/chapping.

Indication of immediate medical attention and special treatment needed

Treatment: Get medical attention if symptoms occur.

5. Fire-fighting measures

General Fire Hazards: Use water spray to keep fire-exposed containers cool. Water may be

ineffective in fighting the fire. Fight fire from a protected location. Move

containers from fire area if you can do so without risk.

Suitable (and unsuitable) extinguishing media

Suitable extinguishing

media:

Use fire-extinguishing media appropriate for surrounding materials.

Unsuitable extinguishing

media:

Avoid water in straight hose stream; will scatter and spread fire.

Specific hazards arising from

the chemical:

Vapors may travel considerable distance to a source of ignition and flash back. Vapors may cause a flash fire or ignite explosively. Prevent buildup of

vapors or gases to explosive concentrations.

Special protective equipment and precautions for firefighters

Special fire fighting

procedures:

No data available.

Special protective equipment

for fire-fighters:

Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in

enclosed spaces, SCBA.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures: Ventilate closed spaces before entering them. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Keep upwind. See Section 8 of the SDS for Personal Protective Equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep unauthorized personnel away.



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Methods and material for containment and cleaning

up:

Dam and absorb spillages with sand, earth or other non-combustible material. Collect spillage in containers, seal securely and deliver for

disposal according to local regulations.

Notification Procedures: In the event of a spill or accidental release, notify relevant authorities in

accordance with all applicable regulations.

Environmental Precautions: Do not contaminate water sources or sewer. Prevent further leakage or

spillage if safe to do so.

7. Handling and storage

Precautions for safe handling:

Avoid contact with eyes. Wash hands thoroughly after handling. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground and bond container and receiving equipment. Take precautionary measures against static discharges. Avoid contact with skin. Avoid contact with eyes, skin, and clothing. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

Conditions for safe storage,

including any incompatibilities:

Store in a well-ventilated place. Store in a cool place.

8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

Chemical Identity	type	Exposure Limit Values		Source	
Methyl methacrylate	TWA	50 ppm		US. ACGIH Threshold Limit Values (2011)	
	STEL	100 ppm		US. ACGIH Threshold Limit Values (2011)	
	PEL	100 ppm	410 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)	
Barium sulfate - Inhalable fraction.	TWA		5 mg/m3	US. ACGIH Threshold Limit Values (02 2014)	
Barium sulfate - Total dust.	PEL	15 mg/m3		US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)	
Barium sulfate - Respirable fraction.	PEL	5 mg/m3		US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)	

Chemical name	type	Exposure Limit Values	Source	
Methyl methacrylate	TWA	50 ppm	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)	
	STEL	100 ppm	Canada. British Columbia OELs.	



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				(Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)	
Methyl methacrylate	TWAEV	50 ppm		Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)	
	STEL	100 ppm		Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)	
Methyl methacrylate	TWA	50 ppm	205 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008)	
Barium sulfate - Total dust.	TWA		10 mg/m3	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)	
Barium sulfate - Respirable fraction.	TWA		3 mg/m3	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)	
Barium sulfate	TWAEV		10 mg/m3	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)	
Barium sulfate - Total dust.	TWA		10 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008)	
Barium sulfate - Respirable dust.	TWA		5 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008)	

Appropriate Engineering Controls

Observe good industrial hygiene practices. Observe occupational exposure limits and minimize the risk of inhalation of vapors and mist. Mechanical ventilation or local exhaust ventilation may be required.

Individual protection measures, such as personal protective equipment

General information: Provide easy access to water supply and eye wash facilities. Good general

ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable

level. Use explosion-proof ventilation equipment.

Eye/face protection: Wear safety glasses with side shields (or goggles).

Skin Protection

Hand Protection: Use suitable protective gloves if risk of skin contact.



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Other: Wear chemical-resistant gloves, footwear, and protective clothing

appropriate for the risk of exposure. Contact health and safety professional

or manufacturer for specific information.

Respiratory Protection: In case of inadequate ventilation use suitable respirator. Seek advice from

local supervisor.

Hygiene measures: Avoid contact with eyes. Observe good industrial hygiene practices. When

using do not smoke. Wash contaminated clothing before reuse. Avoid contact with skin. Wash hands before breaks and immediately after handling the product. Contaminated work clothing should not be allowed

out of the workplace.

9. Physical and chemical properties

Appearance

Physical state: liquid
Form: liquid
Color: Gray

Odor: Mild petroleum/solvent
Odor threshold: No data available.

pH: No data available.

Melting point/freezing point: No data available.

Initial boiling point and boiling range: 100.3 °C 212.5 °F

Flash Point: 11.5 °C 52.7 °F(Closed Cup)

Evaporation rate: Slower than Ether

Flammability (solid, gas):

Upper/lower limit on flammability or explosive limits

Flammability limit - upper (%):

Flammability limit - lower (%):

2.1 %(V)

Explosive limit - upper (%):

Explosive limit - lower (%):

Vapor pressure:

No data available.

No data available.

Vapor density: Vapors are heavier than air and may travel along the floor and

in the bottom of containers.

Relative density: 1.

Solubility(ies)

Solubility in water:
Solubility (other):
Partition coefficient (n-octanol/water):
No data available.
No data available.
No data available.
No data available.
Viscosity:
No data available.
No data available.

10. Stability and reactivity

Reactivity: No data available.



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Chemical Stability: Material is stable under normal conditions.

Possibility of hazardous

reactions:

No data available.

Conditions to avoid: Heat, sparks, flames.

Incompatible Materials: Strong acids. Avoid contact with oxidizing agents (e.g. nitric acid, peroxides

and chromates). Strong bases.

Hazardous Decomposition

Products:

Thermal decomposition or combustion may liberate carbon oxides and

other toxic gases or vapors.

11. Toxicological information

Information on likely routes of exposure

Ingestion: May be ingested by accident. Ingestion may cause irritation and malaise.

In high concentrations, vapors, fumes or mists may irritate nose, throat and

mucus membranes.

Skin Contact: Causes skin irritation. May cause an allergic skin reaction.

Eye contact: Causes serious eye irritation.

Information on toxicological effects

Acute toxicity (list all possible routes of exposure)

Oral

Product: ATEmix: 15,790.31 mg/kg

Dermal

Product: ATEmix: 11,706.42 mg/kg

Inhalation

Product: No data available.

Repeated dose toxicity

Product: No data available.

Skin Corrosion/Irritation

Product: No data available.

Specified substance(s):

Methyl methacrylate in vivo (Rabbit): Experimental result, Weight of Evidence study



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2-Propenoic acid, 2-

ethylhexyl ester

in vivo (Rabbit): Experimental result, Key study

Barium sulfate validated "in vitro" test method Read-across from supporting substance

(structural analogue or surrogate), Key study

Serious Eye Damage/Eye Irritation

Product: No data available.

Specified substance(s):

Methyl methacrylate Irritating

2-Propenoic acid, 2ethylhexyl ester

in vivo (Rabbit, 24 - 48 hrs): Not irritating

Barium sulfate in vivo (Rabbit, 24 - 72 hrs): Not irritating

Respiratory or Skin Sensitization

Product: No data available.

Carcinogenicity

Product: No data available.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

No carcinogenic components identified

US. National Toxicology Program (NTP) Report on Carcinogens:

No carcinogenic components identified

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):

No carcinogenic components identified

Germ Cell Mutagenicity

In vitro

Product: No data available.

In vivo

Product: No data available.

Reproductive toxicity

Product: No data available.

Specific Target Organ Toxicity - Single Exposure

Product: No data available.

Specific Target Organ Toxicity - Repeated Exposure

Product: No data available.

Aspiration Hazard



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Product: No data available.

Other effects: No data available.

12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

Fish

Product: No data available.

Specified substance(s):

Methyl methacrylate LC 50 (Fathead minnow (Pimephales promelas), 96 h): 410 mg/l Mortality

2-Propenoic acid, 2-ethylhexyl ester

LC 50 (Carp (Leuciscus idus melanotus), 48 h): 23 mg/l Mortality

Aquatic Invertebrates

Product: No data available.

Specified substance(s):

Methyl methacrylate LC 50 (Water flea (Daphnia magna), 24 h): 1,760 mg/l Mortality

2-Propenoic acid, 2-ethylhexyl ester

LC 50 (Brine shrimp (Artemia salina), 24 h): 72 mg/l Mortality

Barium sulfate EC 50 (Tubificid worm (Tubifex tubifex), 24 h): 34.2 - 57.71 mg/l Intoxication

Chronic hazards to the aquatic environment:

Fish

Product: No data available.

Specified substance(s):

Methyl methacrylate NOAEL (Danio rerio, 35 d): 9.4 mg/l Experimental result, Key study

LOAEL (Danio rerio, 35 d): 18.8 mg/l Experimental result, Key study LC 50 (Danio rerio, 35 d): 33.7 mg/l Experimental result, Key study

Barium sulfate LC 1 (Oncorhynchus mykiss, 28 d): 2,813 µg/l Experimental result,

Supporting study

LC 50 (Oncorhynchus mykiss, 28 d): 42,700 µg/l Experimental result,

Supporting study

LC 10 (Oncorhynchus mykiss, 28 d): 9,543 µg/l Experimental result,

Supporting study

Aquatic Invertebrates

Product: No data available.

Toxicity to Aquatic Plants

Product: No data available.



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Persistence and Degradability

Biodegradation

Product: No data available.

BOD/COD Ratio

Product: No data available.

Bioaccumulative Potential

Bioconcentration Factor (BCF)

Product: No data available.

Partition Coefficient n-octanol / water (log Kow)

Product: No data available.

Specified substance(s):

Methyl methacrylate Log Kow: 1.38

Mobility in Soil: No data available.

Other Adverse Effects: No data available.

13. Disposal considerations

Disposal instructions: Dispose of waste at an appropriate treatment and disposal facility in

accordance with applicable laws and regulations, and product

characteristics at time of disposal.

Contaminated Packaging: No data available.

14. Transport information

TDG:

UN1866, RESIN SOLUTION, 3, PG II

CFR / DOT:

UN1866, Resin solution, 3, PG II

IMDG:

UN1866, RESIN SOLUTION, 3, PG II

Further Information:

The above shipping description may not be accurate for all container sizes and all modes of transportation. Please refer to Bill of Lading.



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15. Regulatory information

US Federal Regulations

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

None present or none present in regulated quantities.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

None present or none present in regulated quantities.

CERCLA Hazardous Substance List (40 CFR 302.4):

<u>Chemical Identity</u> <u>Reportable quantity</u>

Methyl methacrylate 1000 lbs. Barium sulfate 1000 lbs.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Fire Hazard

Immediate (Acute) Health Hazards

SARA 302 Extremely Hazardous Substance

None present or none present in regulated quantities.

SARA 304 Emergency Release Notification

<u>Chemical Identity</u> <u>Reportable quantity</u>

Methyl methacrylate 1000 lbs. Barium sulfate 1000 lbs.

SARA 311/312 Hazardous Chemical

<u>Chemical Identity</u> <u>Threshold Planning Quantity</u>

Methyl methacrylate 500 lbs 2-Propenoic acid, 2-500 lbs

ethylhexyl ester

Barium sulfate 500 lbs

SARA 313 (TRI Reporting)

Chemical Identity

Methyl methacrylate

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)

None present or none present in regulated quantities.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):

None present or none present in regulated quantities.

US State Regulations

US. California Proposition 65

No ingredient regulated by CA Prop 65 present.



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US. New Jersey Worker and Community Right-to-Know Act

Chemical Identity

Methyl methacrylate 2-Propenoic acid, 2-ethylhexyl ester Barium sulfate

US. Massachusetts RTK - Substance List

Chemical Identity

Methyl methacrylate 2-Propenoic acid, 2-ethylhexyl ester Barium sulfate

US. Pennsylvania RTK - Hazardous Substances

Chemical Identity

Methyl methacrylate 2-Propenoic acid, 2-ethylhexyl ester Barium sulfate

US. Rhode Island RTK

Chemical Identity

Methyl methacrylate

Other Regulations:

When appropriately mixed with the other part, product has a VOC less water and exempt solvent of:

0 g/l

Inventory Status:

Australia AICS: All components in this product are listed on or

exempt from the Inventory.

Canada DSL Inventory List: One or more components in this product are

not listed on or exempt from the Inventory.

EINECS, ELINCS or NLP: One or more components in this product are

not listed on or exempt from the Inventory.

Japan (ENCS) List: One or more components in this product are

not listed on or exempt from the Inventory.

China Inv. Existing Chemical Substances: All components in this product are listed on or

exempt from the Inventory.

Korea Existing Chemicals Inv. (KECI): All components in this product are listed on or

exempt from the Inventory.

Canada NDSL Inventory:

One or more components in this product are

not listed on or exempt from the Inventory.

Philippines PICCS: One or more components in this product are



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not listed on or exempt from the Inventory.

US TSCA Inventory:

All components in this product are listed on or

exempt from the Inventory.

New Zealand Inventory of Chemicals:

One or more components in this product are

not listed on or exempt from the Inventory.

Japan ISHL Listing:

One or more components in this product are

not listed on or exempt from the Inventory.

Japan Pharmacopoeia Listing:

One or more components in this product are

not listed on or exempt from the Inventory.

16.Other information, including date of preparation or last revision

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Version #: 1.1

Further Information: No data available.

Disclaimer: For Industrial Use Only. Keep out of Reach of Children. The hazard

information herein is offered solely for the consideration of the user, subject to their own investigation of compliance with applicable regulations, including

the safe use of the product under every foreseeable condition.