

# MATERIAL SAFETY DATA SHEET

## 1. Product and Company Identification

**Material name** Epcon Acrylic 7  
**Version #** 01  
**Revision date** 08-19-2013  
**Product Code** A7  
**Product use** Concrete anchoring adhesive.  
**Manufacturer/Supplier** ITW Red Head  
2171 Executive Drive, Suite 100  
Addison, IL 60101 US  
Telephone Number: (630) 350-0370  
Contact Person: Andrew Rourke  
**Emergency** CHEMTREC: (800) 424-9300

## 2. Hazards Identification

**Physical state** Liquid.  
**Appearance** Paste.  
**Emergency overview** DANGER!  
Highly flammable. Will be easily ignited by heat, spark or flames.  
Contains an organic peroxide and strong oxidizer. Contact with other materials may cause fire. Heat may cause containers to explode.  
Irritating to eyes, respiratory system and skin. May cause sensitization by skin contact. May cause central nervous system effects. Prolonged exposure may cause chronic effects.  
**OSHA regulatory status** This product is considered hazardous under 29 CFR 1910.1200 (Hazard Communication).  
**Potential health effects**  
**Routes of exposure** Inhalation. Ingestion. Skin contact. Eye contact.  
**Eyes** Irritating to eyes. Contact may cause irritation, redness, tearing, blurred vision and/or burns.  
**Skin** Irritating to skin. May cause sensitization by skin contact. Contact may cause irritation, redness and/or drying.  
**Inhalation** Vapors may irritate throat and respiratory system and cause coughing. May cause central nervous system effects.  
**Ingestion** Irritating to mouth, throat, and stomach. Ingestion may cause vomiting, nausea, diarrhea or other systemic effects.  
**Target organs** Eyes. Skin. Respiratory system. Central nervous system. Heart and cardiovascular system. Liver. Kidneys. Reproductive system.  
**Chronic effects** Methyl methacrylate vapor has hypotensive properties which may cause cardiac arrest and other cardiovascular effects. Possible reproductive hazard that may cause adverse reproductive effects based on animal data. May cause damage to the liver and kidneys. Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis.  
**Potential environmental effects** The product contains a substance which is harmful to aquatic organisms.

## 3. Composition / Information on Ingredients

Components	CAS #	Percent
Methyl methacrylate	80-62-6	10 - 90
Benzoyl peroxide	94-36-0	0.1 - 10
Dibutyl phthalate	84-74-2	0.1 - 5

**Composition comments** All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

## 4. First Aid Measures

### First aid procedures

<b>Eye contact</b>	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention.
<b>Skin contact</b>	Immediately flush with plenty of water for at least 15 minutes. If skin rash or an allergic skin reaction develops, get medical attention. Wash contaminated clothing before reuse. Destroy or thoroughly clean contaminated shoes.
<b>Inhalation</b>	Move to fresh air. If breathing is difficult, give oxygen. Get medical attention, if needed.
<b>Ingestion</b>	Rinse mouth thoroughly. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content does not get into the lungs. Get medical attention immediately.

**Notes to physician** Keep victim under observation. In case of shortness of breath, give oxygen. Symptoms may be delayed.

**General advice** Take off contaminated clothing and shoes immediately. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before re-use.

## 5. Fire Fighting Measures

**Flammable properties** Flammable by OSHA criteria. Can be ignited easily and burns vigorously. Strong oxidizer. Contact with combustible material may cause fire. Organic peroxide. Heat may cause the containers to explode.

### Extinguishing media

**Suitable extinguishing media** Water. Water fog. Foam. Dry chemical powder. Carbon dioxide (CO<sub>2</sub>).

**Unsuitable extinguishing media** Do not use a solid water stream as it may scatter and spread fire. Halogenated materials.

### Protection of firefighters

**Specific hazards arising from the chemical** Vapors may form explosive mixtures with air. Vapors are heavier than air and may travel along the floor and in the bottom of containers. Vapors may be ignited by a spark, a hot surface or an ember. Greatly increases the burning rate of combustible materials.

**Protective equipment and precautions for firefighters** Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA. Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Move containers from fire area if you can do so without risk. Withdraw immediately in case of rising sound from venting safety device or any discoloration of tanks due to fire. Containers should be cooled with water to prevent vapor pressure build up. Cool containers exposed to flames with water until well after the fire is out. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out. Some of these materials, if spilled, may evaporate leaving a flammable residue.

**Special protective equipment for fire-fighters** Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and face mask.

**Specific methods** In the event of fire and/or explosion do not breathe fumes.

**Hazardous combustion products** Carbon monoxide. Carbon Dioxide.

## 6. Accidental Release Measures

**Personal precautions** Keep unnecessary personnel away. Local authorities should be advised if significant spillages cannot be contained. Keep upwind. Keep out of low areas. Ventilate closed spaces before entering them. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. See Section 8 of the MSDS for Personal Protective Equipment.

**Environmental precautions** Prevent further leakage or spillage if safe to do so. Do not contaminate water.

**Methods for containment** ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Stop leak if you can do so without risk. Dike the spilled material, where this is possible. Prevent entry into waterways, sewers, basements or confined areas.

## Methods for cleaning up

Keep combustibles (wood, paper, oil, etc.) away from spilled material.

Small Spills: Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. Clean surface thoroughly to remove residual contamination.

Large Spills: Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal.

This material and its container must be disposed of as hazardous waste. Should not be released into the environment. Prevent product from entering drains.

## Other information

Clean up in accordance with all applicable regulations.

## 7. Handling and Storage

### Handling

Wear personal protective equipment. Avoid breathing high vapor concentrations. Avoid contact with eyes, skin, and clothing. Do not taste or swallow. Use only with adequate ventilation. Wash thoroughly after handling. DO NOT handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. Take precautionary measures against static discharges. When using, do not eat, drink or smoke.

### Storage

Keep away from heat, sparks and open flame. Keep container tightly closed in a cool, well-ventilated place. For maximum shelf life, store between 4.4°C (40°F) to 26.7°C (80°F). Do not store above 43.3°C (110°F). Do not store near combustible materials. Keep away from food, drink and animal feeding stuffs. Keep out of the reach of children.

## 8. Exposure Controls / Personal Protection

### Occupational exposure limits

#### ACGIH

##### Components

Components	Type	Value
Benzoyl peroxide (94-36-0)	TWA	5 mg/m3
Dibutyl phthalate (84-74-2)	TWA	5 mg/m3
Methyl methacrylate (80-62-6)	STEL	100 ppm
	TWA	50 ppm

#### U.S. - OSHA

##### Components

Components	Type	Value
Benzoyl peroxide (94-36-0)	PEL	5 mg/m3
Dibutyl phthalate (84-74-2)	PEL	5 mg/m3
Methyl methacrylate (80-62-6)	PEL	100 ppm
		410 mg/m3

#### Canada - Alberta

##### Components

Components	Type	Value
Benzoyl peroxide (94-36-0)	TWA	5 mg/m3
Dibutyl phthalate (84-74-2)	TWA	5 mg/m3
Methyl methacrylate (80-62-6)	STEL	100 ppm
		410 mg/m3
	TWA	205 mg/m3
		50 ppm

#### Canada - British Columbia

##### Components

Components	Type	Value
Benzoyl peroxide (94-36-0)	TWA	5 mg/m3
Dibutyl phthalate (84-74-2)	TWA	5 mg/m3
Methyl methacrylate (80-62-6)	STEL	100 ppm
	TWA	50 ppm

#### Canada - Ontario

##### Components

Components	Type	Value
Benzoyl peroxide (94-36-0)	TWA	5 mg/m3
Dibutyl phthalate (84-74-2)	TWA	5 mg/m3
Methyl methacrylate (80-62-6)	STEL	100 ppm
	TWA	50 ppm

**Canada - Quebec****Components**

	<b>Type</b>	<b>Value</b>
Benzoyl peroxide (94-36-0)	TWA	5 mg/m3
Dibutyl phthalate (84-74-2)	TWA	5 mg/m3
Methyl methacrylate (80-62-6)	TWA	50 ppm 205 mg/m3

**Mexico****Components**

	<b>Type</b>	<b>Value</b>
Benzoyl peroxide (94-36-0)	TWA	5 mg/m3
Dibutyl phthalate (84-74-2)	STEL	10 mg/m3
	TWA	5 mg/m3
Methyl methacrylate (80-62-6)	STEL	125 ppm 510 mg/m3
	TWA	410 mg/m3 100 ppm

**Engineering controls**

Use explosion-proof ventilation equipment. Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.

**Personal protective equipment****Eye / face protection**

Wear approved safety goggles.

**Skin protection**

Wear chemical-resistant gloves, footwear and protective clothing appropriate for risk of exposure. Contact glove manufacturer for specific information.

**Respiratory protection**

In case of insufficient ventilation, wear suitable respiratory equipment. If permissible levels are exceeded use NIOSH mechanical filter / organic vapor cartridge or an air-supplied respirator.

**General hygiene considerations**

Avoid contact with eyes. Avoid contact with skin. Provide eyewash station and safety shower. When using, do not eat, drink or smoke. Handle in accordance with good industrial hygiene and safety practice.

**9. Physical & Chemical Properties**

<b>Appearance</b>	Paste.
<b>Color</b>	Beige/Gray.
<b>Odor</b>	Pungent.
<b>Odor threshold</b>	Not available.
<b>Physical state</b>	Liquid.
<b>Form</b>	Liquid. Paste.
<b>pH</b>	Not available.
<b>Melting point</b>	Not available.
<b>Freezing point</b>	Not available.
<b>Boiling point</b>	> 213 °F (> 100.6 °C)
<b>Flash point</b>	64 °F (17.8 °C)
<b>Evaporation rate</b>	Not available.
<b>Flammability</b>	Not available.
<b>Flammability limits in air, upper, % by volume</b>	12.5 %
<b>Flammability limits in air, lower, % by volume</b>	2.1 %
<b>Vapor pressure</b>	Not available.
<b>Vapor density</b>	> 1
<b>Specific gravity</b>	1.6 (25°C)
<b>Solubility (water)</b>	Insoluble
<b>Partition coefficient (n-octanol/water)</b>	Not available.
<b>Auto-ignition temperature</b>	Not available.
<b>Decomposition temperature</b>	Not available.

**10. Chemical Stability & Reactivity Information**

<b>Chemical stability</b>	Material is stable under normal conditions.
---------------------------	---

<b>Conditions to avoid</b>	Heat, flames and sparks.
<b>Incompatible materials</b>	Strong oxidizing agents. Reducing agents. Strong acids. Combustible material. Polymerization initiators.
<b>Hazardous decomposition products</b>	Thermal decomposition of this product can generate carbon monoxide and carbon dioxide.
<b>Possibility of hazardous reactions</b>	Will not occur at normal temperatures, however, exposure to elevated temperatures may cause hazardous polymerization.

## 11. Toxicological Information

### Toxicological data

Components	Test Results
Methyl methacrylate (80-62-6)	Acute Inhalation LC50 Mouse: 18.5 mg/l 2 Hours Acute Inhalation LC50 Rat: 3750 mg/l 8 Hours Acute Oral LD50 Rabbit: 6000 mg/kg Acute Oral LD50 Rat: 7800 mg/kg Acute Other LD50 Dog: 4500 mg/kg Acute Other LD50 Mouse: 1000 mg/kg Acute Other LD50 Rat: 1328 mg/kg
Dibutyl phthalate (84-74-2)	Acute Dermal LD50 Rabbit: 4200 mg/kg Acute Inhalation LC50 Rat: 15.68 mg/l 4 Hours Acute Oral LD50 Rat: 8000 mg/kg
Benzoyl peroxide (94-36-0)	Acute Oral LD50 Rat: 7710 mg/kg Acute Other LD50 Mouse: 206 - 242 mg/kg

**Local effects** Irritating to eyes, respiratory system and skin. May cause sensitization by skin contact.  
**Sensitization** May cause an allergic skin reaction.

#### ACGIH Sensitizer

Methyl methacrylate (CAS 80-62-6) Sensitiser.

**Chronic effects** Prolonged exposure may cause chronic effects. May cause damage to the liver and kidneys. Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis.

**Carcinogenicity** This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

#### ACGIH Carcinogens

Benzoyl peroxide (CAS 94-36-0) A4 Not classifiable as a human carcinogen.

Methyl methacrylate (CAS 80-62-6) A4 Not classifiable as a human carcinogen.

#### IARC Monographs. Overall Evaluation of Carcinogenicity

Benzoyl peroxide (CAS 94-36-0) 3 Not classifiable as to carcinogenicity to humans.

Methyl methacrylate (CAS 80-62-6) 3 Not classifiable as to carcinogenicity to humans.

**Epidemiology** This product is not reported to cause epidemiological effects in humans.

**Mutagenicity** This product is not reported to cause mutagenic effects in humans.

**Neurological effects** Methyl methacrylate vapor has hypotensive properties which may cause cardiac arrest and other cardiovascular effects.

**Reproductive effects** Possible reproductive hazard that may cause adverse reproductive effects based on animal data.

**Teratogenicity** Components in this product have been shown to cause teratogenic effects in laboratory animals.

## 12. Ecological Information

### Ecotoxicological data

Components	Test Results
Methyl methacrylate (80-62-6)	LC50 Fathead minnow ( <i>Pimephales promelas</i> ): 125.5 - 190.7 mg/l 96 hours
Dibutyl phthalate (84-74-2)	EC50 Water flea ( <i>Daphnia magna</i> ): 2.99 mg/l 48 hours LC50 Yellow perch ( <i>Perca flavescens</i> ): 0.28 - 0.44 mg/l 96 hours

**Ecotoxicity** Contains a substance which causes risk of hazardous effects to the environment.

**Environmental effects** Harmful to aquatic organisms. An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

<b>Persistence and degradability</b>	Not available.
<b>Bioaccumulation / Accumulation</b>	No data available.
<b>Partition coefficient (n-octanol/water)</b>	Not available.
<b>Mobility in environmental media</b>	No data available.

### 13. Disposal Considerations

<b>Waste codes</b>	D001: Waste Flammable material with a flash point <140 °F
<b>Disposal instructions</b>	Dispose of contents/container in accordance with local/regional/national/international regulations. This material and its container must be disposed of as hazardous waste. Incinerate the material under controlled conditions in an approved incinerator. Do not incinerate sealed containers. If discarded, this product is considered a RCRA ignitable waste, D001. Do not contaminate ponds, waterways or ditches with chemical or used container.

### 14. Transport Information

<b>Product Specific Note:</b>	This product meets the limited quantities exception requirements for the below listed transportation agencies. Under DOT and TDG regulations, this product may be reclassified as a Consumer Commodity (ORM-D). Please see the specific regulations for the shipping and packaging requirements.
-------------------------------	--

#### DOT

##### Basic shipping requirements:

<b>Proper shipping name</b>	Consumer commodity
<b>Hazard class</b>	ORM-D
<b>Subsidiary hazard class</b>	None
<b>Labels required</b>	None

##### Additional information:

<b>Packaging exceptions</b>	156, 306
<b>Packaging non bulk</b>	156, 306
<b>Packaging bulk</b>	None

#### IATA

##### Basic shipping requirements:

<b>UN number</b>	3108
<b>Proper shipping name</b>	Organic peroxide type E, solid
<b>Hazard class</b>	5.2

#### IMDG

##### Basic shipping requirements:

<b>UN number</b>	3108
<b>Proper shipping name</b>	ORGANIC PEROXIDE TYPE E, SOLID
<b>Hazard class</b>	5.2
<b>Environmental hazards</b>	
<b>Marine pollutant</b>	No
<b>EmS No.</b>	F-J, S-R

#### TDG

##### Basic shipping requirements:

<b>Proper shipping name</b>	Consumer commodity
<b>Hazard class</b>	ORM-D
<b>Subsidiary hazard class</b>	None
<b>Labels required</b>	None

##### Additional information:

<b>Packaging exceptions</b>	156, 306
<b>Packaging non bulk</b>	156, 306
<b>Packaging bulk</b>	None



IATA



IMDG

## 15. Regulatory Information

### US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

All components are on the U.S. EPA TSCA Inventory List.

### US EPCRA (SARA Title III) Section 313 - Toxic Chemical: De minimis concentration

Benzoyl peroxide (CAS 94-36-0)	1.0 %
Dibutyl phthalate (CAS 84-74-2)	1.0 %
Methyl methacrylate (CAS 80-62-6)	1.0 %

### US EPCRA (SARA Title III) Section 313 - Toxic Chemical: Listed substance

Benzoyl peroxide (CAS 94-36-0)	Listed.
Dibutyl phthalate (CAS 84-74-2)	Listed.
Methyl methacrylate (CAS 80-62-6)	Listed.

### CERCLA (Superfund) reportable quantity (lbs)

Methyl methacrylate 1000

Dibutyl phthalate 10

### Superfund Amendments and Reauthorization Act of 1986 (SARA)

**Hazard categories**  
 Immediate Hazard - Yes  
 Delayed Hazard - Yes  
 Fire Hazard - Yes  
 Pressure Hazard - No  
 Reactivity Hazard - No

**Section 302 extremely hazardous substance** No

**Section 311 hazardous chemical** No

**Drug Enforcement Agency (DEA)** Not controlled

### Canadian regulations

This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

### WHMIS status

Controlled

### WHMIS classification

B2 - Flammable/Combustible  
 C - Oxidizing  
 D2A - Other Toxic Effects-VERY TOXIC  
 D2B - Other Toxic Effects-TOXIC  
 F - Reactive

### WHMIS labeling



### Inventory status

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes

Country(s) or region	Inventory name	On inventory (yes/no)*
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

**State regulations** WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

**US - California Hazardous Substances (Director's): Listed substance**

Benzoyl peroxide (CAS 94-36-0) Listed.  
Dibutyl phthalate (CAS 84-74-2) Listed.  
Methyl methacrylate (CAS 80-62-6) Listed.

**US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance**

Dibutyl phthalate (CAS 84-74-2) Listed.

**US - California Proposition 65 - CRT: Listed date/Developmental toxin**

Dibutyl phthalate (CAS 84-74-2) Listed: December 2, 2005 Developmental toxin.

**US - California Proposition 65 - CRT: Listed date/Female reproductive toxin**

Dibutyl phthalate (CAS 84-74-2) Listed: December 2, 2005 Female reproductive toxin.

**US - California Proposition 65 - CRT: Listed date/Male reproductive toxin**

Dibutyl phthalate (CAS 84-74-2) Listed: December 2, 2005 Male reproductive toxin.

**US - Massachusetts RTK - Substance: Listed substance**

Benzoyl peroxide (CAS 94-36-0) Listed.  
Dibutyl phthalate (CAS 84-74-2) Listed.  
Methyl methacrylate (CAS 80-62-6) Listed.

**US - New Jersey Community RTK (EHS Survey): Reportable threshold**

Benzoyl peroxide (CAS 94-36-0) 500 LBS  
Dibutyl phthalate (CAS 84-74-2) 500 LBS  
Methyl methacrylate (CAS 80-62-6) 500 LBS

**US - New Jersey RTK - Substances: Listed substance**

Benzoyl peroxide (CAS 94-36-0) Listed.  
Dibutyl phthalate (CAS 84-74-2) Listed.  
Methyl methacrylate (CAS 80-62-6) Listed.

**US - Pennsylvania RTK - Hazardous Substances: Listed substance**

Benzoyl peroxide (CAS 94-36-0) Listed.  
Dibutyl phthalate (CAS 84-74-2) Listed.  
Methyl methacrylate (CAS 80-62-6) Listed.

**16. Other Information**

<b>Further information</b>	HMIS® is a registered trade and service mark of the NPCA.
<b>HMIS® ratings</b>	Health: 2* Flammability: 3 Physical hazard: 1
<b>NFPA ratings</b>	Health: 2 Flammability: 3 Instability: 1
<b>Disclaimer</b>	The information in the sheet was written based on the best knowledge and experience currently available.
<b>Issue date</b>	08-19-2013