This SDS packet was issued with item: 073233608

The safety data sheets (SDS) in this packet apply to the individual products listed below. Please refer to invoice for specific item number(s).

073232998 073233012 073233020 073233517

MATERIAL SAFETY DATA SHEET

DIRECTCROWN® PRODUCTS CrownBeav LLC 817 N. Central Ave., Ste. B Medford, OR 97501 888-910-4490/541-344-5876

IN EMERGENCY CONTACT: INFOTRAC: 800-535-5053 Outside USA: 352-323-3500

SECTION I

PRODUCT IDENTIFICATION

PRODUCT NAME:	DirectCrown® Powder (DP-M)
GENERIC NAME:	Self Cure Acrylic Powder
CHEMICAL NAME:	Methacrylate Polymer

SECTION II

HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

FOR F ITEM 01 02 03	OLYMER: CHEMICAL NAME Polymer Diethyl Phthalate Benzoyl Peroxide		CAS NUMBE 84-66-2 94-36-0	E R: 9011-14-7		60.0-100 0.0-20.0 > 2.0	0.0	
Persor	ACGIH TLV-TWA 10 mg/m ³ 5 mg/m ³ 5 mg/m ³ H=1 F=1 R=0 H=1 F=1 R=0	TLV-STEL NE NE NE	OSHA PEL TWA 15 mg/m ³ 5 mg/m ³ NE 5 mg/m ³ NE	PEL CEILING NE		pany mmendation 15 mg/m ³ NE NE	SKIN NE	
SECT	ION III	PHYSIC	AL DATA					
ODOR pH: ODOR BOILIN FREEZ VISCO SPECI VAPOI PERCI VAPOI EVAPOI SOLUI	THRESHOLD: NG POINT: LING POINT:	6: c =1):	NA NA NA Insoluble ND	Fine clear to pigm Faint odor in bulk. NA ND NA NA NA NA		r.		
SECT	ION IV	FIRE, EX	KPLOSION AND I	REACTIVITY INF	ORMATION	(
	I POINT: MABLE LIMIT, AIR VC	DL% LOWER: UPPER:	304 °C, 5 NA NA	580 °F				
EXTIN FIRE A	GNITION TEMPERAT GUISHER METHOD: ND EXPLOSION HAZ AL FIRE FIGHTING PI	ARDS:	are appro Avoid ext	ide, dry chemical. dust is combustible. oximately those of c tinguishing methods air producing a fire	oal dust. , which may g	generate dust clou	uds. Water stream o	can disperse
EXPLC	SION HAZARD:		source. Firefighte	ers should wear self			nazaru n exposed	lo ignition
	TIVE TO MECHANICA		apparatu: For Polymer: No. For Polymer: No.	S.				
SECT	ON V	HEALTH	HAZARD INFOR	RMATION				
CARCI	NOGENICITY:			None of the compo ACGIH as carcino		material are listed	d by IARC, NTP, OS	SHA, or

SECTION V HEALTH HAZARD INFORMATION

EMERGENCY AND FIRST AID PROCEDURES INHALATION: Move subject to fresh air. Give oxygen or artificial respiration as required. INGESTION: Induce vomiting and consult physician immediately. EYE CONTACT: Flush eye with water for 15 minutes, consult physician. SKIN CONTACT: Wash skin with soap and water.

HEALTH HAZARDS

THRESHOLD LIMIT VALUE: 100 ppm Acute oral LD₅₀Rats = 7900Mg/Kg EFFECTS OF OVEREXPOSURE: High vapor concentration can induce headache, nausea, smarting of eyes and irritation of respiratory system. Liquid contact with eyes will cause irritation and possible corneal damage.

SECTION VI ENVIRONMENTAL PROTECTION INFORMATION

- STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Eliminate ignition sources. Avoid breathing vapors. Dike and absorb liquid on inert material (sand, soda ash, vermiculite, etc.) and transfer to containers for disposal. Remove saturated clothing, wash affected skin areas with soap and water. Do not flush into sewer systems.
- WASTE DISPOSAL METHOD: Incinerate under controlled conditions in safe open area, or landfill according to federal, state and local regulations. Biological degradation is also possible.

SECTION VII CONTROL MEASURES

RESPIRATORY PROTECTION: Not required if local ventilation keeps vapor concentration below TLV and LEL.

VENTILATION: Yes. Local exhaust and mechanical as needed.

PROTECTIVE GLOVES: Impervious, Neoprene

EYE PROTECTION: Yes

OTHER PROTECTIVE EQUIPMENT: Rubber apron, safety showers. Use explosion proof motors.

SECTION VIII SPECIAL PRECAUTIONS

HANDLING PRECAUTIONS: Use grounding cables on all containers when dispensing. STORAGE PRECAUTIONS: Store at ambient temperatures. Indoor storage should be limited to approved locations.

OTHER PRECAUTIONS: Some individuals are allergic to liquid monomer and any indication of rash or redness due to exposure should be a signal to avoid any contact and take special precautions.

Form 7.2_11 Rev 2 Issue Date: 12/13/11

MATERIAL SAFETY DATA SHEET

DIRECTCROWN® PRODUCTS CrownBeav LLC 817 N. Central Ave., Ste. B Medford, OR 97501 888-910-4490/541-344-5876 IN EMERGENCY CONTACT: INFOTRAC: 800-535-5053 Outside USA: 352-323-3500

SECTION I PRODUCT IDENTIFICATION

 PRODUCT NAME:
 DIRECTCROWN® LIQUID (DL-M)

 GENERIC NAME:
 Self-Cure Cross Linked Acrylic Monomer

 DOT NAME:
 Methyl Methacrylate Monomer, Inhibited

 Flammable Liquid, UN 1247
 HMIS: H=2 F=3 R=2

SECTION II HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

COMPONENTS	CAS NUMBER	%
Methylmethacrylate	80-62-6	>85
Polymerization Inhibitors: Hydroquinone		
Tertiary Amines		
Colorstable Agent, Ultraviolet light absorber (A	Aromatic ketone)	
Cross Linking agent (Polyfunctional acrylic mo	onomer)	

SECTION III PHYSICAL DATA

VAPOR DENSITY: AIR=1	3.45	
BOILING POINT:	@ 760 mm	214°F
VAPOR PRESSURE (mm Hg): @ 20°C/68°F	29	
SOLUBILITY IN WATER: g/100g @ 68°F	1.6	
EVAPORATION RATE: Butyl Acetate=1	3	
SPECIFIC GRAVITY: H ₂ O=1	0.94	
PERCENT VOLATILE BY VOLUME (%)	100%	
APPEARANCE AND ODOR:	Water clear, o	colorless liquid

SECTION IV FIRE, EXPLOSION AND REACTIVITY INFORMATION

FLASH POINT (AND TEST METHOD):Closed Cup Tag. 50°FFLAMMABLE LIMITS @77°F .1ATM % by volLEL: 2.12UEL: 12.5EXTINGUISHING MEDIA: Foam, dry chemical, carbon dioxide, water fog (by trained personnel)personnel

SPECIAL FIREFIGHTING PROCEDURES: Cool containers that are exposed to heat with cold water spray. Closed containers may overheat and rupture violently. Full protective equipment, including self-contained breathing apparatus, is recommended.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Heat can induce polymerization with rapid release of energy. Vapors may travel along floor to ignition source and flash back.

INCOMPATIBILITY (MATERIALS TO AVOID): Has strong solvent action, will soften paint, swell rubber.

HAZARDOUS DECOMPOSITION OR BYPRODUCTS: Acrid fumes, CO and/or CO₂ STABILITY: Stable: Elevated temperatures, Ignition sources.

HAZARDOUS POLYMERIZATION: May occur. Elevated temperatures. Storage with absence of inhibitor, addition of polymerization catalysts.

SECTION V HEALTH HAZARD INFORMATION

EMERGENCY AND FIRST AID PROCEDURES INHALATION: Move subject to fresh air. Give oxygen or artificial respiration as required. INGESTION: Induce vomiting and consult physician immediately. EYE CONTACT: Flush eye with water for 15 minutes, consult physician. SKIN CONTACT: Wash skin with soap and water.

HEALTH HAZARDS

THRESHOLD LIMIT VALUE: 100 ppm Acute oral LD₅₀Rats = 7900Mg/Kg EFFECTS OF OVEREXPOSURE: High vapor concentration can induce headache, nausea, smarting of eyes and irritation of respiratory system. Liquid contact with eyes will cause irritation and possible corneal damage.

SECTION VI ENVIRONMENTAL PROTECTION INFORMATION

- STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Eliminate ignition sources. Avoid breathing vapors. Dike and absorb liquid on inert material (sand, soda ash, vermiculite, etc.) and transfer to containers for disposal. Remove saturated clothing, wash affected skin areas with soap and water. Do not flush into sewer systems.
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OTHER PROTECTIVE EQUIPMENT: Rubber apron, safety showers. Use explosion proof motors.

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Form 7.2_11 Rev 2 Issue Date: 12/13/11

Issued Date: June 1, 2015

Revision Date: June 1, 2015

DirectCrown[®] Products 817 N. Central Ave., Ste. B Medford, OR 97501 888-910-4490/541-622-6115

 SECTION I PRODUCT AND COMPANY IDENTIFICATION

 Product Identifiers
 Product Name:
 Coldpac Ultra-Fast Set Tooth Acrylic Powder

 Product Code:
 TP0165UFS

 Synonyms:
 Self Cure Acrylic Powder

 Recommended Use of the substance or mixture and Restrictions on Use

 Cosmetic Use Only

 Details of the Supplier of the Safety Data Sheet

Supplier Name: Yates Motloid Supplier Address 300 N. Oakley Blvd. Chicago, IL 60612 Website: www.yates-motloid.com E-mail: sales@yates-motloid.com

Emergency Telephone Numbers

Company Phone Number: Emergency Telephone: (312) 226-2473 (During Business Hours, 8:00am - 4:00pm CST) INFOTRAC: 1-800-535-5053 (Outside U.S. 1-352-323-3500)

SECTION II HAZARDS IDENTIFICATION

Classification of the substance or mixture

Hazard Class - *Physical, Health, Environmental* Eye Damage/Irritation Skin Sensitizer Category 2B 1

OSHA Defined Hazards Combustible dust, may form combustible dust concentrations in air, explosion hazard

Label Elements - Pictograms, Signal Word, Hazard Statements, Precautionary Statements, & Supplemental Information



Signal Word Warning

SDS for Coldpac Ultra-Fast Set Tooth Acrylic Powder

Hazards	Statements	Precautiona	ary Statements - Prevention, Response, & Disposal
H317	May cause an allergic skin reaction	P240	Ground and bond container and receiving equipment
H320 Causes eye irritation	P261	Avoid breathing dust/fume/gas/mist/vapours/spray	
		P264	Wash hands and exposed skin thoroughly after handling
		P272	Contaminated work clothing should not be allowed out of the workplace
		P280	Wear protective gloves/protective clothing/eye protection/face protection
		P321	Specific treatment (see on this label)
		P363	Wash contaminated clothing before reuse

Issued Date: June 1, 2015

Revision Date: June 1, 2015

2015	Revision Date	e. Julie 1, 2015
	P302+P352	IF ON SKIN: Wash with soap and water
	P305+P351	IF IN EYES: Rinse continuously with water for several minutes.
	+P338	Remove contact lenses if present and easy to do – continue rinsing
	P333+P313	If skin irritation or a rash occurs: Get medical advice/attention
	P337+P313	Get medical advice/attention
	P501	Dispose of contents/container to an authorized disposal
		facility

SECTION III COMPOSITION ON INGREDIENTS

Chemical Name	Cas No.	Weight-%	GHS Ratings
Polymer	9011-14-7		Eye Damage/Irritation 2B (H320)
Diethyl Phthalate	84-66-2		
Benzoyl Peroxide	94-36-0		Eye Damage/Irritation 2A (H319) Skin Sensitizer 1 (H317)
Polymer	9003-42-3	-	Eye Damage/Irritation 2B (H320)

SECTION IV FIRST AID MEASURES

General Advice

Provide the SDS to medical personnel for treatment.

Inhalation:

Remove victim to fresh air. Seek immediate medical attention.

Eye Contact:

If product gets in the eyes, flush with lukewarm water for at least 15 minutes. If irritation occurs, contact a physician.

Skin Contact:

Rinse thoroughly with lukewarm water, followed by a thorough washing of the affected area with soap and water. If irritation, redness or swelling persists, contact a physician immediately.

Clothing:

Remove contaminated clothing, wash thoroughly before reuse.

Ingestion:

If ingested, do not induce vomiting. If product has been swallowed, drink plenty of water or milk IMMEDIATELY. If the patient is vomiting, continue to offer water or milk. Never give anything by mouth to an unconscious person. Provide an estimate of the time at which the material was ingested and the amount of the substance that was swallowed. Get medical attention immediately.

SECTION V FIRE-FIGHTING MEASURE

Suitable Extinguishing Media

Water, Chemical (alcohol-resistant) foam, dry chemical, or carbon dioxide.

Unsuitable Extinguishing Media

Water may not be effective in extinguishing this fire.

Specific Hazards Arising from the Chemical

Polymers are combustible dusts; care should be taken to avoid creating explosive concentrations in the air. Follow grounding and bonding procedures.

Special Fire Fighting Procedures:

Avoid extinguishing methods, which may generate dust clouds. Water stream can disperse dust into air producing a fire hazard and possible explosion hazard if exposed to ignition source. Firefighters should wear self-contained breathing apparatus.

Protective Equipment and Precautions for Firefighters

Polymer dust is combustible. The explosive limits of the polymer particles suspended in air are approximately those of coal dust. Polymers are sensitive to static discharge, follow grounding and bounding procedures. Polymers are not sensitive to mechanical impacts.

Issued Date: June 1, 2015

Revision Date: June 1, 2015

SECTION VI ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

Personal Precautions

Before cleaning any spill or leak, individuals must wear appropriate Personal Protective Equipment that is specified in section 8. Keep airborne particulates at a minimum when cleaning up spills. Deny entry to all unprotected individuals. Remove any contaminated clothing and wash thoroughly before reuse.

Environmental Precautions

Extinguish all ignition sources. Keep spills and cleaning runoffs out of municipal sewers and open bodies of water. US Regulations (CERCLA) require reporting spills and releases to soil, water and air in excess of reportable quantities. The toll free number for the US Coast Guard National Response Center is (800) 424-8802

Methods and Material for Containment and Cleaning Up

Methods for Containment

Prevent further leakage or spillage if safe to do so. Dike and contain spill with inert material (e.g. sand or earth). May contaminate water supply.

Methods for Cleaning Up

Maximize ventilation (open doors and windows) and secure all sources of ignition. Use good, local ventilation with a minimum capture velocity of 100 ft/min (30m/min) at point of product release. Place into appropriate closed container(s) for disposal in accordance with local, state and federal regulations. Wash all affected areas with plenty of warm water and soap. Not a RCRA Hazardous waste.

SECTION VII HANDLING AND STORAGE

Precautions for Safe Handling

Advice on Safe Handling

Use in well ventilated areas. Avoid contact with skin, eyes and clothing. Avoid breathing dust. Use good personal hygiene and housekeeping. Avoid prolonged contact with the product. Use in a well-ventilated location (e.g., local exhaust ventilation, fans). After use, wash hands and exposed skin with soap and water. Do not eat, drink or smoke while handling product.

Conditions for Safe Storage, Including any Incompatibilities

Storage Conditions

Store containers in a cool, dry location, away from direct sunlight, heat, sparks, flame, other light sources, or sources of intense heat. The temperature should remain at or under 72°F (22°C) at all times. Storing at above recommended temperature will cause product performance issues. Store in accordance with National Fire Protection Association recommendations. Observe all label precautions until the container is cleaned, reconditioned, ordestroyed.

Incompatible Materials

Strong oxidizers, strong oxidizing agents.

SECTION VIII EXPOSURE CONTROLS/PERSONAL PROTECTION

Chemical Name / CAS No.	OSHA Exposure Limits	ACGIH Exposure Limits	Other Exposure Limits
Polymer 9011-14-			
Diethyl Phthalate 84-66-2		5 mg/m3 TWA	NIOSH: 5 mg/m3 TWA
Benzoyl Peroxide 94-36-0	5 mg/m3 TWA	5 mg/m3 TWA	NIOSH: 5 mg/m3 TWA
Polymer 9003-42-			

Engineering Controls

Use local explosion-proof ventilation that is adequate to keep employee exposure to airborne concentrations below exposure limits. Please refer to the ACGIH document, Industrial Ventilation, A Manual of Recommended Practices, most recent edition for details.

Personal Protective Equipment (PPE)

Respiratory Protection

A respirator should be worn whenever workplace conditions warrant use of a respirator. If dust conditions are present, a N95 respirator dust mask is required. None required if airborne concentrations are maintained below any exposure limit that may be

Revision Date: June 1, 2015

Issued Date: June 1, 2015 listed above. If necessary, use only respiratory protection authorized per U.S. OSHA's requirement in 29 CFR §1910.134 or other appropriate governing standard.

Eye/Face Protection

Wear safety glasses, chemical goggles when splashing is possible, when dealing with this material. If necessary, refer to U.S. OSHA 29 CFR §1910.133 or other appropriate governing standard. Ensure that an eyewash station, sink or washbasin is available in case of exposure to eyes.

Skin and Body Protection

Complete suit protecting against chemicals, the type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. 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.

Full Contact: Material: Nitrile Rubber Minimum Layer Thickness: 0.4 mm Break Through Time: 480 min.

Splash Contact: Material: Nitrile Rubber Minimum Layer Thickness: 0.11 mm Break Through Time: 120 min.

General Hygiene Considerations

Handle in accordance with good industrial hygiene and safety practice. Wash thoroughly after handling. An eyewash station and a safety shower are recommended. Food, beverages, and tobacco products should not be carried, stored, or consumed where this material is in use. Wash hands thoroughly before eating, drinking, orsmoking.

SECTION IX PHYSICAL AND CHEMICAL PROPERTIES

SECTION X STABILITY AND REACTIVITY

Appearance: Clear **Odor:** Faint Flammable Limit (Air Volume%, 0% Lower/Upper) Evaporation Rate: No Data Available **Specific Gravity: 0**

Physical State: Powder Flash Point: 577° F 303° C Autoignition Temperature: 80°C Boiling Range (low-high): 295°C

Material Stability

Stable

Incompatible Materials Strong Oxidizers

Hazardous Decomposition Products Methacrylate Monomer and Oxides of Carbon when burned

Possibility of Hazardous Reactions

Hazardous polymerization will not occur

SECTION XI TOXICOLOGICAL INFORMATION

Mixture Toxicity Component Toxicity

Routes of Exposure

Inhalation Eye Contact

Inhalation Eye Contact

Target Organs

Reproductive System Eyes Central Nervous System Skin

Peripheral Nervous System **Respiratory System**

Effects of Overexposure

Overexposure by inhalation of titanium dioxide may include mild and temporary upper respiratory irritation Inhalation with cough and shortness of breath Skin Contact No data found.

Issued Date: June 1, 2 Eye Contact Ingestion	2015 No data found. No data found.	Revision Date: June 1, 2015	
Product Component	s Listed as Carcinoger	Nic	
CAS Number None	Description	<u>%Weight</u>	<u>Carcinogen Rating</u> No data available
	SI	ECTION XII ECOLO	GICAL INFORMATION
Component Ecotoxic Diethyl Phthalate		Pimephales pro mg/L [flow-throu LC50 Oncorhyr 36 - 74 mg/L; 4 Desmodesmus mg/L [static]; 96 Desmodesmus	hephales promelas: 17 mg/L [flow-through]; 96 Hr LC50 melas: 16.8 mg/L [static]; 96 Hr LC50 Lepomis macrochirus: 22 lgh]; 96 Hr LC50 Lepomis macrochirus: 16.7 mg/L [static]; 96 Hr lchus mykiss: 12 mg/L [flow-through] 48 Hr EC50 Daphnia magna: 8 Hr EC50 Daphnia magna: 86 mg/L [Static] 72 Hr EC50 subspicatus: 23 mg/L; 72 Hr EC50 Desmodesmus subspicatus: 23 6 Hr EC50 Desmodesmus subspicatus: 21 mg/L; 96 Hr EC50 subspicatus: 21 mg/L [static]; 72 Hr EC50 Pseudokirchneriella - 255 mg/L; 96 Hr EC50 Pseudokirchneriella subcapitata: 2.11 - c]
	SE	CTION XIII DISPOS	AL CONSIDERATIONS
determine at the time	al in accordance with Fe of disposal whether the I	product meets the c	cal regulations. It is the responsibility of the generator to riteria of a hazardous waste. Comply with all applicable federal,

F (state and local regulations. Waste disposal options include landfilling solids at permitted sites. Incinerate in a chemical incinerator equipped with an afterburner and scrubber. Use registered transporters.

Contaminated Packaging

Reuse of empty drums or containers is not recommended. Employees should be advised of the potential hazards, due to residual flammable material, associated with empty containers. Dispose of all empty containers properly, in accordance with Federal, State and Local regulations.

Agency	Proper Shipping Name	UN Number	Packing Group	Hazard Class
DOT	Not Regulated, Polymer, NOS			
ATA	Not Regulated, Polymer, NOS			
IMDG	Not Regulated, Polymer, NOS			

State of California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65) WARNING! This product contains the following chemicals which are listed by the State of California as carcinogenic or a reproductive toxin:

13463-67-7 Titanium Dioxide (CI 77891) 0% Carcinogen

SARA 313

Benzoyl Peroxide 94-36-0

US State Right-to-Know Regulations -None

Country

Regulation Canada DSL EINECS SARA Hazard Categories **TSCA** Inventory

All Components Listed Yes No No Yes

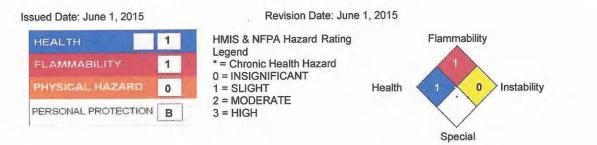
SECTION XVI OTHER INFORMATION

Hazardous Material Information System (HMIS)

National Fire Protection Association (NFPA)

SDS for Coldpac Ultra-Fast Set Tooth Acrylic Powder

Page 6 of 6



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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not considered a warranty or quality specification. This 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.

SDS for Coldpac Ultra-Fast Set Tooth Acrylic Powder

Safety Data Sheet

DIRECTCROWN® PRODUCTS CrownBeav LLC 817 N. Central Ave., Ste. B Medford, OR 97501 888-910-4490/541-622-6115

Issue Date: 01-Mar-2013 Version 1 Revision Date: 20-Jun-2017 **1. IDENTIFICATION Product Identifier Product Name** Ultra-Fast Set Liquid Other means of identification SDS # MOT-001 Synonyms Self-Cure Cross Linked Acrylic Monomer. **UN/ID No** UN1993 Recommended use of the chemical and restrictions on use **Recommended Use** Acrylic temporary crown and bridge material. Details of the supplier of the safety data sheet **Supplier Address** MOTLOID COMPANY/YATES & BIRD 300 North Oakley Blvd Chicago, IL 60612 Emergency Telephone Number **Company Phone Number** 1-312-226-2473 (Business) **Emergency Telephone (24 hr)** INFOTRAC 1-352-323-3500 (International) 1-800-535-5053 (North America) 2. HAZARDS IDENTIFICATION Appearance Clear liquid Physical State Liquid Odor Strong Characteristic acrid Classification Skin corrosion/irritation Category 2 Serious eye damage/eye irritation Category 2 Skin sensitization Category 1 Specific target organ toxicity (single exposure) Category 3 Flammable Liquids Category 2

Signal Word Warning

Hazard Statements

Causes skin irritation Causes serious eye irritation May cause an allergic skin reaction May cause respiratory irritation. May cause drowsiness or dizziness EXTREMELY FLAMMABLE LIQUID AND VAPOR



Precautionary Statements - Prevention

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

Precautionary Statements - Response

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing Immediately call a poison center or doctor/physician If skin irritation or rash occurs: Get medical advice/attention IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower Wash contaminated clothing before reuse IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing Immediately call a poison center or doctor/physician IN CASE OF FIRE: Use CO2, dry chemical, or foam for extinction

Precautionary Statements - Storage

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

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

WHMIS Classification

B2 - Flammable liquid

Other Hazards

Harmful to aquatic life with long lasting effects Harmful to aquatic life

3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms

Self-Cure Cross Linked Acrylic Monomer.

Chemical Name	CAS No	Weight-%
Methyl Methacrylate	80-62-6	>85
Proprietary Polymerization Inhibitor	Proprietary	5-15
Colorstable Agent, Ultraviolet light absorber (Aromatic Ketone)	Proprietary	<1
Benzenamine, N,N,4-trimethyl-	99-97-8	<5

If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. FIRST-AID MEASURES

First Aid Measures

Eye Contact	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center or doctor/physician.
Skin Contact	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. Get medical attention if symptoms occur.
Inhalation	Remove to fresh air. Keep patient warm and at rest. Seek immediate medical attention/advice.
Ingestion	If ingested, do not induce vomiting. If product has been swallowed, drink plenty of water or milk IMMEDIATELY. If the patient is vomiting, continue to offer water or milk. Never give anything by mouth to an unconscious person. Provide an estimate of the time at which the material was ingested and the amount of the substance that was swallowed. Get medical attention immediately.
Most important symptoms and effe	<u>cts</u>
Symptoms	Causes skin irritation. Causes severe eye irritation. May cause an allergic skin reaction. May cause dermatitis or irritation in some individuals upon prolonged contact. Inhalation may cause respiratory tract irritation. Inhalation may cause drowsiness or dizziness.
Indication of any immediate medica	al attention and special treatment needed
Notes to Physician	Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Carbon dioxide (CO2). Dry chemical. Foam.

Unsuitable Extinguishing Media Water may be ineffective, but can be used to protect firefighter and cool containers.

Specific Hazards Arising from the Chemical

Product is readily igniteable. Highly flammable liquid and vapor. For bulk size >1L- High temperatures, inhibitor depletion, accidental impurities, or exposure to radiation or oxidizers may cause spontaneous polymerizing reaction generating heat/pressure. Closed containers may rupture or explode during a runaway polymerization. Vapors are heavier than air and may travel along ground to ignition sources and flash back.

Hazardous Combustion Products Carbon oxides. Sensitivity to Mechanical Impact No. Sensitivity to Static Discharge Yes.

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. Fight fire from a safe location. Heat/impurities may cause pressure to build and/or rupture closed containers, spreading fire, increasing risk of burns/injuries.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions	Use personal protection recommended in Section 8. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).		
Environmental Precautions	Prevent runoff from entering drains, sewers or streams.		
Methods and material for containm	nent and cleaning up		
Methods for Containment	Prevent further leakage or spillage if safe to do so.		
Methods for Clean-Up	Absorb spillage with non-combustible, absorbent material. Do not use combustible materials, such as saw dust. Use clean non-sparking tools to collect absorbed material. Maximize ventilation by opening doors and windows. Place all clean-up materials in an appropriate closed container in accordance with local, state, and federal regulations. Wash all affected areas with plenty of warm water and soap. Remove contaminated clothing and wash before reuse. In the event of an uncontrolled release of this material, the user should determine if the release is reportable under applicable laws and regulations.		

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on Safe Handling Handle in accordance with good industrial hygiene and safety practice. Use personal protection recommended in Section 8. Wash face, hands, and any exposed skin thoroughly after handling. Wash thoroughly after handling before eating, drinking, smoking, or using toilet facilities. Do not eat, drink or smoke when using this product. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapors/spray. Vapor is heavier than air; beware of pits and confined spaces. Contaminated work clothing should not be allowed out of the workplace. Use only outdoors or in a well-ventilated area. Use non-sparking hand tools and explosion-proof electrical equipment. Take precautionary measures against static discharges. Keep containers closed when not in use. Ground/bond container and receiving equipment. Observe precautions found on the label.

Conditions for safe storage. including any incompatibilities

Storage Conditions	Keep container tightly closed and store in a cool, dry and well-ventilated place. Keep away from heat/sparks/open flames/hot surfaces. — No smoking. Store locked up. Storage temperature should preferably not exceed 25°C/77°F. Methacrylate stored in bulk must be
	kept in contact with air (oxygen). Monomer vapors are uninhibited and may form polymers in vent or flame arresters, resulting in blockage of vents. Avoid excessive heat in storage to maintain product quality. Temperatures above 21°C (70°F), localized heat sources (example: drum or band heaters), oxidizing conditions, freezing conditions, direct sunlight, ultraviolet radiation, inert gas blanketing.
Packaging Materials	Keep in original container.

Incompatible Materials

Strong oxidizers, strong reducers, free radical initiators, inert gases, oxygen scavengers. Material has strong solvent properties and can soften paint and rubber.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Methyl Methacrylate	STEL: 100 ppm	TWA: 100 ppm	IDLH: 1000 ppm
80-62-6	TWA: 50 ppm	TWA: 410 mg/m ³	TWA: 100 ppm
		(vacated) TWA: 100 ppm	TWA: 410 mg/m ³
		(vacated) TWA: 410 mg/m ³	C C

Appropriate engineering controls

Engineering Controls Apply technical measures to comply with the occupational exposure limits. Use appropriate engineering controls such as process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Where such systems are not effective, wear suitable personal protective equipment, which perform satisfactorily and meet OSHA or other recognized standards. Consult with local procedures for selection, training, inspection and maintenance of personal protective equipment. Eyewash stations. Showers.

Individual protection measures. such as personal protective equipment

Eye/Face Protection	Depending on the use of this product, safety glasses or goggles may be worn. If necessary, refer to U.S. OSHA 29CFR SS1910.133. Canadian standards, or the European Standard EN 166. Ensure that an eyewash station, sink or washbasin is available in case of exposure to eyes.
Skin and Body Protection	Skin: Wear appropriate gloves to prevent skin exposure; chemical impervious gloves (eg: Nitrile or Neoprene). Refer to US OSHA 29 CFR 1910.138.
	Body/Clothing: Wear appropriate protective clothing to prevent skin exposure.
Respiratory Protection	Follow OSHA respirator regulations (29 CFR 1910.134) and, if necessary, wear a MSHA/NIOSH-approved respirator.

General Hygiene Considerations Wash contaminated clothing before reuse. Wash face, hands and any exposed skin thoroughly after handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical State Appearance	Liquid Clear liquid	Odor	Strong Characteristic acrid
Color	Not determined	Odor Threshold	Not determined
Property pH Melting Point/Freezing Point Boiling Point/Boiling Range Flash Point Evaporation Rate Flammability (Solid, Gas)	Values Not determined Not determined 101°C/214°F 11.5°C/52.7°F 3.1 Liquid-not applicable	Remarks • Method Tag Closed Cup (butyl acetate = 1)	
Upper Flammability Limits Lower Flammability Limit	12.5% @ 421°C/790°F 2.12% @ 421°C/790°F		

Vapor Pressure	28 mmHg @ 20°C/68°F	
Vapor Density	3.5 @ 15.5°C/60°F	(Air=1)
Specific Gravity	0.94	(1=Water)
Water Solubility	1.6 wt% @ 20°C/68°F	
Solubility in other solvents	Not determined	
Partition Coefficient	Not determined	
Auto-ignition Temperature	Not determined	
Decomposition Temperature	Not determined	
Kinematic Viscosity	Like water	
Dynamic Viscosity	Like water	
Explosive Properties	Not determined	
Oxidizing Properties	Not determined	
Density	0.949 g/ml @ 15.5°C/60°F	

10. STABILITY AND REACTIVITY

Reactivity

Reactive upon depletion of inhibitor.

Chemical Stability

Unstable upon depletion of inhibitor.

Possibility of Hazardous Reactions

None under normal processing.

Hazardous Polymerization Hazardous polymerization may occur.

Conditions to Avoid

Temperatures above 21°C (70°F), localized heat sources (example: drum or band heaters), oxidizing conditions, freezing conditions, direct sunlight, ultraviolet radiation, inert gas blanketing.

Incompatible Materials

Strong oxidizers, strong reducers, free radical initiators, inert gases, oxygen scavengers. Material has strong solvent properties and can soften paint and rubber.

Hazardous Decomposition Products

Oxides of Carbon when burned.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information	
Eye Contact	Avoid contact with eyes. Causes serious eye irritation.
Skin Contact	Avoid contact with skin. Causes skin irritation. May cause an allergic skin reaction.
Inhalation	May cause respiratory irritation. May cause drowsiness or dizziness.
Ingestion	Ingestion may cause irritation of the mucous membranes, esophagus, and stomach.

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Methyl Methacrylate	= 7872 mg/kg (Rat)	> 5 g/kg (Rabbit)	= 4632 ppm (Rat) 4 h = 400 ppm
80-62-6			(Rat)1h
Proprietary Polymerization Inhibitor	= 3300 mg/kg (Rat)	-	-
Benzenamine, N,N,4-trimethyl-	= 1650 mg/kg (Rat)	-	= 1400 mg/m ³ (Rat) 4 h
99-97-8			

Information on physical, chemical and toxicological effects

Symptoms

Please see section 4 of this SDS for symptoms.

Delayed and immediate effects as well as chronic effects from short and long-termexposure

Skin corrosion/irritation	Prolonged or repeated contact can result in defatting and drying of the skin which may result in skin irritation and dermatitis (rash).
Carcinogenicity	The table below indicates whether each agency has listed any ingredient as a carcinogen. However, the product as a whole has not been tested.

Chemical Name	ACGIH	IARC	NTP	OSHA
Methyl Methacrylate		Group 3		
80-62-6				

Legend

IARC (International Agency for Research on Cancer)

Group 3 IARC components are "not classifiable as human carcinogens"

STOT - single exposure

Causes damage to the following organs through prolonged or repeated exposure:.nose. Liver. Kidneys.

Numerical measures of toxicity

Not determined

12. ECOLOGICAL INFORMATION

Ecotoxicity

Harmful to aquatic life with long lasting effects.

Component Information

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Methyl Methacrylate 80-62-6	170: 96 h Pseudokirchneriella subcapitata mg/L EC50	243 - 275: 96 h Pimephales promelas mg/L LC50 flow- through 125.5 - 190.7: 96 h Pimephales promelas mg/L LC50 static 170 - 206: 96 h Lepomis macrochirus mg/L LC50 flow-through 153.9 - 341.8: 96 h Lepomis macrochirus mg/L LC50 static 79: 96 h Oncorhynchus mykiss mg/L LC50 flow- through 79: 96 h Oncorhynchus mykiss mg/L LC50 static 326.4 - 426.9: 96 h Poecilia reticulata mg/L LC50 static		69: 48 h Daphnia magna mg/L EC50
Benzenamine, N,N,4- trimethyl- 99-97-8		42 - 50.5: 96 h Pimephales promelas mg/L LC50 flow- through		

Persistence/Degradability

Not readily biodegradable. Chemical Oxygen Demand (COD): 88% (28 days). Inherent Biodegradation: Dissolved Organic Carbon Removal (DOC Removal): >95% (28 days).

Bioaccumulation

Not determined.

<u>Mobility</u>

Potential for mobility in soil is very high

Chemical Name	Partition Coefficient
Methyl Methacrylate 80-62-6	0.7
Benzenamine, N,N,4-trimethyl- 99-97-8	2.81

Other Adverse Effects

Not determined

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Disposal of Wastes	Disposal should be in accordance with applicable regional, national and local laws and regulations.
Contaminated Packaging	Disposal should be in accordance with applicable regional, national and local laws and regulations.

US EPA Waste Number

Chemical Name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Methyl Methacrylate	U162	Included in waste stream:		U162
80-62-6		F039		

California Hazardous Waste Status

Chemical Name		California Hazardous Waste Status		
Methyl Methacrylate 80-62-6		Toxic Ignitable		
	14 TDANSDOD	TINFORMATION		
	14. TRANSPOR			
<u>Note</u>	Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.			
DOT				
UN/ID No	UN1993			
Proper Shipping Name	Flammable liquids, n.o.s. (Methyl methacrylate monomer, stabilized, N,N-dimethyl-p- toludine)			
Hazard Class	3			
Packing Group	ll			
Reportable Quantity (RQ)	1000 lb			
IATA				
UN/ID No	UN1993			
Proper Shipping Name	Flammable liquid, n.o.s. (Methyl methacrylate, stabilized, N,N-dimethyl-p-toludine)			
Hazard Class	3			
Packing Group	II			

IMDG

UN/ID No	UN1993
Proper Shipping Name	Flammable liquid, n.o.s. (Methyl methacrylate, stabilized, N,N-dimethyl-p-toludine)
Hazard Class	3
Packing Group	II

15. REGULATORY INFORMATION

International Inventories

TSCA	Listed
DSL	Listed

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

US Federal Regulations

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Methyl Methacrylate	1000 lb		RQ 1000 lb final RQ
80-62-6			RQ 454 kg final RQ

<u>SARA 313</u>

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

Chemical Name	CAS No	Weight-%	SARA 313 - Threshold Values %
Methyl Methacrylate - 80-62-6	80-62-6	>85	1.0

CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Component	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Methyl Methacrylate 80-62-6 (>85)	1000 lb			Х

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Methyl Methacrylate	Х	Х	Х
80-62-6			

16. OTHER INFORMATION				
<u>NEPA</u>	Health Hazards	Flammability 3	Instability 2	Special Hazards Not determined Personal
HMIS	Health Hazards 2	Flammability 3	Physical Hazards 2	Protection Gloves and safety glasses or chemical splash goggles
Issue Date:	01-Mar-	2013		
Revision Date:	20-Jun-	2013		

New format

Disclaimer

Revision Note:

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 Safety Data Sheet