

Safety Data Sheet

Date Issued: 2/9/19

Version: 1.0

1. CHEMICAL PRODUCTS AND COMPANY IDENTIFICATION

Product Names/Trade Names: ProCryl Primer, ProCryl LV Binder, ProCryl HB Binder, ProCryl FX Binder, ProCryl HT Topcoat, ProCryl KT Topcoat, ProCryl UVR Topcoat, ProCryl Cove, ProCryl PC Liquid

Chemical Family: Solution of an acrylic polymer in an acrylic acid ester

Manufacturer's Name: ProREZ Coatings, LLC
PO BOX 153
Cromwell, CT 06416-0153 USA
General No.: (877) 511-3456 (8:00am to 5:00pm Eastern Time)

Company 24 Hour Emergency Response Information: CHEMTEL: 1-800-255-3924

Emergency telephone numbers are to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure, or accident involving chemicals. All non-emergency questions should be directed to customer service.

2. HAZARDS IDENTIFICATION

Emergency Overview: Flammable liquid! Vapors are heavier than air and can form an explosive mixture with air. Vapors can travel to a source of ignition and flash back. Explosive mixtures may occur at temperatures at or above the flashpoint. Remove all sources of ignition. Severe respiratory irritant. Severe skin irritant. Severe eye irritant. May cause long-term health effects.

Electrostatic charge:

The product is normally supplied in a stabilized form. If the permissible storage period and/or storage temperature is exceeded, the product may polymerize with heat evolution.

Classification of the substance

Flammable liquids	Hazard category 2	H225
Acute toxicity (oral)	Hazard category 4	H302
Caustic burning / irritation of skin	Hazard category 2	H315
Skin Sensitization	Hazard category 1 B	H317
Specific Target Organ Toxicity -Single exposure	Hazard category 3	H335
Carcinogenicity	Hazard category 1 B	H350
Hazardous to the aquatic environment – Acute Hazard	Hazard category 3	H402

Label Elements

Hazardous components that must be listed on the label:

Contains methyl methacrylate

Signal word: Danger

Pictograms:



Safety Data Sheet

Hazard Statements:

- H225 Highly flammable liquid and vapor.
- H302 Harmful if swallowed.
- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H335 May cause respiratory irritation.
- H350 May cause cancer.
- H402 Harmful to aquatic life.

Precautionary Statements

- P201 Obtain special instructions before use.
- P202 Do not handle until all safety precautions have been read and understood.
- P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
- P233 Keep container tightly closed.
- P240 Ground/bond container and receiving equipment.
- P241 Use explosion-proof electrical/ ventilating/ lighting/ equipment.
- P242 Use only non-sparking tools.
- P243 Take precautionary measures against static discharge.
- P260 Do not breathe dust/fume/gas/mist/vapors/spray.
- P261 Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.
- P264 Wash hands thoroughly after handling.
- P270 Do not eat, drink or smoke when using this product.
- P271 Use only outdoors or in a well-ventilated area.
- P272 Contaminated work clothing should not be allowed out of the workplace.
- P272 Avoid release to the environment.
- P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell.
- P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing.
Rinse skin with water/shower.
- P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- P308+P313 IF exposed or concerned: Get medical advice/ attention.
- P321 Specific treatment (see supplemental first aid instructions on this label).
- P330 Rinse mouth.
- P333+P313 If skin irritation or rash occurs: Get medical advice/ attention.
- P362+P364 Take off contaminated clothing and wash it before reuse.
- P370+P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.
- P403+P233 Store in a well-ventilated place. Keep container tightly closed.
- P235 Keep cool. (P235)
- P405 Store locked up. (P405)
- P501 Dispose of contents/container according to IAW local, state, and federal regulations.

Safety Notice (General)

- P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

General Information: This product contains carcinogens according to IARC and California Prop 65. Prolonged contact may result in chemical burns and permanent damage. Repeated or prolonged contact causes sensitization, asthma and eczemas.

Read the entire SDS for a more thorough evaluation of the hazards.

Safety Data Sheet

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	% By Weight	CAS Number
methyl methacrylate	60-100	80-62-6
1,4-butanediol dimethacrylate	<5	2082-81-7
N,N-bis-(2-hydroxypropyl)-ptoluidine	1-3	38668-48-3
N,N-dimethyl-p-toluidine*	<1	99-97-8
2-ethylhexyl acrylate	<20	103-11-7

*Suspect of carcinogens according to IARC and California Prop 65. Take extreme caution when handling this material. DO NOT smoke near or around these materials.

This mixture is classified as hazardous according to Regulation 29CFR 1910.1200

4. FIRST-AID MEASURES

General advice: Seek medical advice or medical attention if condition persists.

Eye contact: Rinse immediately with plenty of water for at least 15 minutes.

Skin contact: Immediately remove any extraneous chemical, if possible without delay. Take off contaminated clothing and shoes immediately. Wash body off with soap and plenty of water.

Ingestion: Rinse mouth. Drink plenty of water. Never give anything by mouth to an unconscious person. If a person vomits when lying on his back, place him in the recovery position and turn victim's head to the side. **Do not induce vomiting.**

Inhalation: Move to fresh air. If breathing has stopped or is labored, give assisted respirations. Supplemental oxygen may be indicated. If the heart has stopped, trained personnel should begin cardiopulmonary resuscitation immediately.

Notes to Physician: No specific treatment. Treat symptomatically. Call the poison control center immediately if large quantities have been ingested. Corticosteroid cream has been effective and treating skin irritation in similar products with similar chemistries.

5. FIRE-FIGHTING MEASURES

Suitable Fire Extinguishing Media: Carbon dioxide (CO₂). Foam. Dry chemical. Water Fog.

Specific hazards: May generate ammonia gas. May generate toxic nitrogen oxide gases. **Do not allow run-off from fire fighting to enter drains or water courses.** Incomplete combustion may form carbon monoxide (CO) and nitrogen oxides (NO_x). Ammonia gas may be liberated at high temperatures. Burning produces noxious and toxic fumes. Downwind personnel must be evacuated.

Special protective equipment for fire-fighters: Avoid contact with the skin. A face shield should be worn. Use personal protective equipment. Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Danger of Explosion: This product can present an explosion hazard

Flammable Limits: Not Available

Explosion Limits: Lower 2.1 %(V) (methyl methacrylate)

Upper 12.5 %(V) (methyl methacrylate)

Auto-Ignition: Not Available

Flash Point: 10 °C (DIN 51755) (methyl methacrylate)

Safety Data Sheet

48 °F (Setaflash Closed Cup) (methyl methacrylate)

Ignition temperature: 430 °C (DIN 51794) (methyl methacrylate)
806 °F (DIN 51794) (methyl methacrylate)

This material vapors are heavier than air and can form an explosive mixture with air. Flammable liquid. Vapors can travel to a source of ignition and flash back. Explosive mixtures may occur at temperatures at or above the flashpoint. Remove all sources of ignition. Also keep emptied containers away from sources of heat and ignition.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).

Environmental Precautions: Water polluting material. May be harmful to the environment if released in large quantities. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform authorities if the product has caused environmental pollution (sewers, drains, waterways or soil).

Methods for Cleaning up: Stop leak if without risk. Move containers from spill area. Approach release from upwind. Contaminated absorbent material may pose the same hazard as the spilled product.

Remove sources of ignition and ventilate area. All equipment used when handling the product must be grounded. Absorb spill with inert material and place in a chemical waste container. Obey relevant local, state, provincial and federal laws and regulations. Larger quantities: Remove mechanically (by pumping). Use explosion-proof equipment!

7. HANDLING AND STORAGE

Handling: Use only trained personnel. Remove contaminated clothing and wash it before reuse. Product is supplied in a stabilized form. Keep locked up. Keep away from heat. Keep away from sparks, flames and other sources of ignition. Use explosion proof equipment. Take precautionary measures against static discharges. Open container carefully as it may be pressurized. Use portable ventilation if necessary at job site. Ground and bond containers when transferring material. The need for grounding and bonding of containers in accordance with OSHA 29 CFR 1910.106 and NFPA 77 should be assessed for all product transfers. Keep container tightly closed. Do not eat, drink, smoke or chew tobacco around material. Use only with adequate ventilation. Avoid breathing vapor or mist. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling.

Container hazardous when empty. Emptied container retains vapor and product residue. Follow all SDS/label precautions even after the container is emptied. Residual vapors might explode on ignition; do not apply heat, cut, drill, grind or weld on or near this container.

Advice on protection against fire and explosion - Keep away from sources of ignition. NO SMOKING. Vapors are heavier than air. Flammable liquid. Vapors can travel to a source of ignition and flash back. Explosive mixtures may occur at temperatures at or above the flashpoint. Take precautionary measures against static discharges. Use only explosion-proof equipment. In the event of fire, cool the endangered containers with water. Fire-fighting must be carried out from a safe distance.

Safety Data Sheet

Storage: Avoid breakage of bagged material or spills of bulk material. Use dustless methods (vacuum) and place into closable container for disposal, or flush with water. Do not dry sweep.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Special Note for Exposure Control: Consult local authorities for acceptable exposure limits.

METHYL METHACRYLATE (CAS: 80-62-6)

Carcinogen designation(s) USA: EPA-NL; IARC-3; TLV-A4

OSHA PEL (TWA): 100 ppm, 410 mg/m³

ACGIH TLV (TWA): 50 ppm; 205 mg/m³

NIOSH REL (TWA): Not Determined

Engineering measures: Work in well-ventilated area. Provide natural or explosion-proof fan to ensure adequate ventilation, especially in confined area. Avoid contact with skin, eyes, and clothing.

Environmental exposure controls: Construct a dike to prevent spreading. Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Hygiene Measures: Wash hands, forearms and face thoroughly after handling chemical products, before eating and drinking, smoking or using the lavatory and at the end of the working period. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Personal Protection:

Respiratory - In case of inadequate ventilation wear respiratory protection. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Eyes – Splash proof safety glasses.

Skin - Rubber or plastic apron. Rubber or plastic gloves. Long sleeved clothing or wear protective sleeves. Remove and wash contaminated clothing before re-use.

Other protective equipment information - Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Neoprene gloves. PVC disposable gloves. Nitrile rubber. Butyl rubber. Impervious gloves. (The breakthrough time of the selected glove(s) must be greater than the intended use period.)

Safety Data Sheet

9. PHYSICAL AND CHEMICAL PROPERTIES

Form:	Liquid
Odor:	Ester-Like
Odor Threshold:	<1ppm, very nuisance
Color:	Sl. Cloudy to purplish
Material Separation	<15 °C (59°F)
PH Value:	Not Determined
Boiling Point:	100°C (212°F)
Melting Point:	<15 °C (59°F)
Vapor Pressure:	40 hPa (= mbar) at 20°C/68°F
Vapor Density:	> 1 (20°C/68°F)
Density (Nominal):	1.00 g/cm ³ at 20°C/68°F
Solubility in water:	20 g/l at 20°C/68°F
Evaporation Rate (Butyl Acetate = 1):	3.1
Volatile Organic Compounds:	90%

10. STABILITY AND REACTIVITY

Chemical stability: Stable under normal conditions.

Conditions to avoid: Direct source of heat. Avoid high temperatures and sources of ignition. Ultraviolet light. The product is normally supplied in a stabilized form. If the permissible storage period and/or storage temperature is exceeded, the product may polymerize with heat evolution.

Materials to avoid: Strong oxidizers, acids and bases.

Peroxides, amines, sulfur compounds, heavy metal ions, alkalis, reducing agents and oxidizing agents.

Reaction with peroxides may result in violent decomposition of peroxide possibly creating an explosion. Polymerization with heat evolution may occur in the presence of radical forming substances (e.g. peroxides), reducing substances, and/or heavy metal ions. Vigorous polymerization is possible when heated /exposed to heat.

Hazardous decomposition products: Carbon monoxide (CO). Carbon dioxide (CO₂). Ammonia. Aldehydes. Flammable hydrocarbon fragments (e.g., acetylene). Nitrogen oxides (NO_x).

Nitrogen oxide can react with water vapors to form corrosive nitric acid.

Hazardous polymerization: Under normal conditions hazardous polymerization will not occur.

11. TOXICOLOGICAL INFORMATION

Acute Oral Toxicity LD50 rat, OECD 401 > 5,000 mg/kg

Acute Inhalational Toxicity LC50 rat, 4 h 29.8 mg/l

Acute Dermal Toxicity LD50 rabbit > 5,000 mg/kg

Contact with skin may cause irritations. Properties of components in summary.

Contact with the eyes may cause irritation. Properties of components in summary.

In humans various types of allergic reactions have been observed (symptoms: headache, eye irritations, skin affections). Related to substance: methyl methacrylate

Safety Data Sheet

Carcinogenicity:

There is evidence of carcinogenic effects. Carcinogen Category 1B (UN-GHS)

Reprotoxicity/Teratogenicity:

No indications of toxic effects were observed in reproduction studies in animals.

Toxicity:

Rat, inhalation, 2 Years NOAEL Findings: Damage to mucous membranes in the nose at 25 ppm 400 ppm

Rat, in drinking water, 2 Years NOAEL Findings: No toxic effects at 2000 ppm

12. ECOLOGICAL INFORMATION

Toxicity effects: METHYL METHACRYLATE (CAS: 80-62-6)

Aquatic toxicity, fish	LC50 Oncorhynchus mykiss, rainbow trout, OECD 203, flow through, GLP, 96 h	> 79 mg/l
Aquatic toxicity, invertebrates	EC50 Daphnia magna, OECD 202, flow through, 48 h Related to substance: methyl methacrylate NOEC Daphnia magna, OECD 202 part 2, flow through, 21 d	69 mg/l 37 mg/l
Aquatic toxicity, algae / aquatic plants	EC3 Scenedesmus quadricauda, DIN 38412 section 9, 8 d	37 mg/l
Toxicity in microorganisms	EC0 Pseudomonas putida	100 mg/l
Biodegradability (analogy)	biodegradable (monomer constituent)	
Bioaccumulation	no evidence for hazardous properties	

13. DISPOSAL CONSIDERATIONS

Waste Disposal: Dispose in accordance with federal, state and local regulations.

The generation of waste should be avoided or minimized wherever possible. Empty containers should be taken to an approved waste handling site for recycling or disposal. Incineration is the preferred method. Landfill should only be considered when recycling is not feasible. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Refer to 40 CFR § 261.7 (residues of hazardous waste in empty containers).

DO NOT HEAT OR CUT THE EMPTY CONTAINER WITH ELECTRIC OR GAS TORCH.

Contaminated packages must be emptied as good as possible and properly clean before recycling. Packages that cannot be cleaned must be disposed of in the same way as the substance. Uncontaminated packaging may be taken for recycling.

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Safety Data Sheet

14. TRANSPORT INFORMATION

Regulatory Information	UN Number	Classes	Packing Group	Proper Shipping Name
DOT	UN1866	3	II	RESIN SOLUTION
IATA	UN2735	3	II	RESIN SOLUTION
IMDG	UN2735	3	II	RESIN SOLUTION
TDG	UN2735	3	II	RESIN SOLUTION

15. REGULATORY INFORMATION

Country	Regulatory List	Notification
USA	TSCA	Included on Inventory
EU	EINECS	Included on Inventory
Canada	DSL	Included on Inventory
China	SEPA	Included on Inventory
Japan	ENCS	Included on Inventory

OSHA: This material is classified as hazardous in accordance with OSHA 29 CFR 1910.1200.

Section 311 AND 312 - This product has been reviewed according to the EPA “Hazard Categories” promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories: ACUTE, CHRONIC, FIRE

SARA Section 313 - This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372: methyl methacrylate 80-62-6

Right-To-Know (RTK)

methyl methacrylate 80-62-6

New Jersey, Pennsylvania, and Massachusetts

California Safe Drinking Water & Toxic Enforcement Act (Proposition 65) - This product does contain any chemicals known to State of California to cause cancer, birth defects or any other reproductive harm.

N,N-dimethyl-p-toluidine 99-97-8

Canadian WHMIS – D1A, B2, D2B

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations.

Safety Data Sheet

16. OTHER INFORMATION

Relevant H phrases

methyl methacrylate

H225 Highly flammable liquid and vapor.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H335 May cause respiratory irritation.

H402 Harmful to aquatic life.

N,N-bis-(2-hydroxypropyl)-p-toluidine

H300 Fatal if swallowed.

H319 Causes serious eye irritation.

H412 Harmful to aquatic life with long lasting effects.

N,N-dimethyl-p-toluidine

H301 Toxic if swallowed.

H311 Toxic in contact with skin.

H331 Toxic if inhaled.

H350 May cause cancer.

H373 May cause damage to organs through prolonged or repeated exposure.

H412 Harmful to aquatic life with long lasting effects.

Hazardous Material Information System (HMIS):

<i>Scale 0-4</i>		<i>NFPA</i>	<i>HMIS</i>
4=Severe Hazard	Health	2	2*
3=Serious Hazard	Flammability	3	3
2=Moderate Hazard	Reactivity	2	2
1=Slight Hazard			
0=Minimal Hazard			

* = chronic health hazard

THE INFORMATION AND RECOMMENDATIONS PRESENTED HEREIN ARE ACCURATE TO THE BEST OF OUR KNOWLEDGE. USER MUST CONDUCT THEIR OWN TESTS TO DETERMINE THE SUITABILITY OF THESE PRODUCTS FOR THEIR PARTICULAR PURPOSES AND USAGE. BECAUSE OF NUMEROUS FACTORS AFFECTING RESULTS, PROREZ COATINGS, LLC AND ITS AFFILIATION MAKES NO WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING THOSE OF MERCHANTABILITY AND FITNESS FOR PURPOSE, OTHER THAN MATERIAL CONFORMS TO OUR APPLICABLE CURRENT SPECIFICATIONS. PROREZ COATINGS, LLC ASSUMES NO LEGAL RESPONSIBILITY FOR USE OR RELIANCE ON THE INFORMATION CONTAINED IN THIS SAFETY DATA SHEET.

END OF DATA SHEET

Safety Data Sheet

Date Issued: 1/25/17

Version: 1.0

1. CHEMICAL PRODUCTS AND COMPANY IDENTIFICATION

Product Names/Trade Names: ProCryl Initiator**Chemical Family:** Organic Peroxides/Diacyl Peroxides**Manufacturer's Name:** ProREZ Coatings, LLC

PO BOX 153

Cromwell, CT 06416-0153 USA

General No.: (877) 511-3456 (8:00am to 5:00pm Eastern Time)

Company 24 Hour Emergency Response Information: CHEMTEL: 1-800-255-3924

Emergency telephone numbers are to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure, or accident involving chemicals. All non-emergency questions should be directed to customer service.

2. HAZARDS IDENTIFICATION

Emergency Overview: DANGER! White granules with a slight odor. ORGANIC PEROXIDE.
HEAT OR CONTAMINATION MAY CAUSE HAZARDOUS DECOMPOSITION.

MAY CAUSE EYE, SKIN AND RESPIRATORY TRACT IRRITATION.

MAY CAUSE ALLERGIC SKIN REACTION.

Toxic and flammable vapors may be produced under combustion. Isolate from sources of ignition.

Classification of the substance

Organic peroxides, Type D

Serious eye damage/eye irritation, Category 2B

Skin sensitization, Category 1

Reproductive toxicity, Category 2

Acute aquatic toxicity, Category 1

Chronic aquatic toxicity, Category 3

Label Elements

Hazardous components that must be listed on the label:

Contains Dibenzoyl peroxide

Signal Word: Danger**Pictograms:**

Safety Data Sheet

Hazard Statements:

- H242 Heating may cause a fire.
H317 May cause an allergic skin reaction.
H320 Causes eye irritation.
H361 Suspected of damaging fertility or the unborn child.
H400 Very toxic to aquatic life.
H412 Harmful to aquatic life with long lasting effects.

Precautionary Statements

- P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P220 Keep away from dirt, rust, chemicals in particular.
P234 Keep only in original packaging.
P235 Keep cool.
P273 Avoid release to the environment.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

Skin and eye contact are the primary routes of exposure to this product.
No toxic effects are expected to be caused by inhalation of fumes or vapors.
Inhalation of powder, dust or fumes may be irritating to the upper respiratory system.
Skin contact may cause mild irritation and/or an allergic skin reaction in sensitive individuals.
Eye contact may cause mild to moderate irritation.
This product has a low order of toxicity. No significant toxic effects are expected.

General Information: This product contains no listed carcinogens according to IARC, ACGIH, NTP and/or OSHA in concentrations of 0.1 percent or greater. Prolonged contact may result in chemical burns and permanent damage. Repeated or prolonged contact causes sensitization, asthma and eczemas.

Read the entire SDS for a more thorough evaluation of the hazards.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	% By Weight	CAS Number
Dibenzoyl peroxide	50	94-36-0
Dicyclohexyl phthalate	50	84-61-7

4. FIRST-AID MEASURES

General advice: Seek medical advice or medical attention if condition persists.

Eye contact: Rinse immediately with plenty of water for at least 15 minutes.

Skin contact: Immediately remove any extraneous chemical, if possible without delay. Take off contaminated clothing and shoes immediately. Wash body off with soap and plenty of water.

Ingestion: Rinse mouth. Drink plenty of water. Never give anything by mouth to an unconscious person. If a person vomits when lying on his back, place him in the recovery position and turn victim's head to the side. **Do not induce vomiting.**

Inhalation: Move to fresh air. If breathing has stopped or is labored, give assisted respirations. Supplemental oxygen may be indicated. If the heart has stopped, trained personnel should begin cardiopulmonary resuscitation immediately.

Safety Data Sheet

Notes to Physician: No specific treatment. Treat symptomatically. Call the poison control center immediately if large quantities have been ingested. Corticosteroid cream has been effective and treating skin irritation in similar products with similar chemistries.

5. FIRE-FIGHTING MEASURES

Suitable Fire Extinguishing Media: Carbon dioxide (CO₂). Foam. Dry chemical. Water Fog.

Specific hazards: May generate ammonia gas. May generate toxic nitrogen oxide gases. **Do not allow run-off from fire fighting to enter drains or water courses.** Incomplete combustion may form carbon monoxide (CO) and nitrogen oxides (NO_x). Ammonia gas may be liberated at high temperatures. Burning produces noxious and toxic fumes. Downwind personnel must be evacuated.

Special Protective Equipment for Fire-Fighters: Avoid contact with the skin. A face shield should be worn. Use personal protective equipment. Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Danger of Explosion: Not an explosion hazard

Flammable Limits: Not Available

Explosion Limits: Not Available

Auto-Ignition: Not Available

Flash Point: Not Available)

Ignition temperature: Not Available

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Use personal protective equipment.

Avoid dust formation.

Avoid breathing dust.

Ensure adequate ventilation.

Remove all sources of ignition.

Environmental Precautions: Prevent product from entering drains.

If the product contaminates rivers and lakes or drains inform respective authorities.

Methods for cleaning up / Methods for containment: Keep wetted with water.

Soak up with inert absorbent material and dispose of as hazardous waste.

Confinement must be avoided.

Pick up and arrange disposal without creating dust.

Keep in suitable, closed containers for disposal.

Never return spills in original containers for re-use.

Safety Data Sheet

7. HANDLING AND STORAGE

Advice on safe handling: For personal protection see section 8.

Avoid formation of respirable particles.

Keep away from heat/sparks/open flames/hot surfaces - No smoking.

Persons with a history of skin sensitization problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used.

Smoking, eating and drinking should be prohibited in the application area.

Open drum carefully as content may be under pressure. Dispose of rinse water in accordance with local and national regulations.

Avoid contact with skin, eyes and clothing.

Advice on protection against fire and explosion: Use explosion protected equipment.

Provide appropriate exhaust ventilation at places where dust is formed.

Keep away from sources of ignition - No smoking.

No sparking tools should be used.

Keep away from reducing agents (e.g. amines), acids, alkalis and heavy metal compounds (e.g. accelerators, driers, metal soaps).

Do not cut or weld on or near this container even when empty. Keep away from combustible material.

Temperature class: It is recommended to use electrical equipment of temperature group T3. However, autoignition can never be excluded.

Storage: Requirements for storage areas and containers: Prevent unauthorized access.

No smoking.

Keep in a dry place.

Electrical installations / working materials must comply with the technological safety standards.

Store at room temperature in the original container.

Keep only in original container.

Store away from other materials.

Maximum storage temperature: Ideal storage: 25 °C (77 °F)

Other data

Critical: Do not allow material to dry out.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Special Note for Exposure Control: Consult local authorities for acceptable exposure limits.

OSHA PEL (TWA): 5 mg/m³

ACGIH TLV (TWA): 5 mg/m³

NIOSH REL (TWA): 5 mg/m³

Engineering measures: Work in well-ventilated area. Provide natural or explosion-proof fan to ensure adequate ventilation, especially in confined area. Avoid contact with skin, eyes, and clothing.

Environmental exposure controls: Construct a dike to prevent spreading. Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Safety Data Sheet

Hygiene Measures: Wash hands, forearms and face thoroughly after handling chemical products, before eating and drinking, smoking or using the lavatory and at the end of the working period. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Personal Protection:

Respiratory - In case of inadequate ventilation wear respiratory protection. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Eyes – Splash proof safety glasses.

Skin - Rubber or plastic apron. Rubber or plastic gloves. Long sleeved clothing or wear protective sleeves. Remove and wash contaminated clothing before re-use.

Other protective equipment information - Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Neoprene gloves. PVC disposable gloves. Nitrile rubber. Butyl rubber. Impervious gloves. (The breakthrough time of the selected glove(s) must be greater than the intended use period.)

9. PHYSICAL AND CHEMICAL PROPERTIES

Form:	Powder
Odor:	Faint/Musty
Odor Threshold:	Not Applicable
Color:	White
Material Separation	Not Applicable
PH Value:	Not Determined
Boiling Point:	Not Applicable
Melting Point:	Not Applicable
Vapor Pressure:	Not Applicable
Vapor Density:	Not Applicable
Density (Nominal):	1.23 at 20 °C
Solubility in water:	20°C Insoluble
Evaporation Rate (Butyl Acetate = 1):	Not Applicable
Volatile Organic Compounds:	Not Determined

Decomposition temperature: SADT - (Self accelerating decomposition temperature) is the lowest temperature at which self-accelerating decomposition may occur with a substance in the packaging as used in transport. A dangerous self-accelerating decomposition reaction and, under certain circumstances, explosion or fire can be caused by thermal decomposition at and above the SADT. Contact with incompatible substances can cause decomposition below the SADT.

Self-Accelerating decomposition temperature (SADT): 55 °C

Explosive properties: Not explosive

Oxidizing properties: Not classified as oxidizing.

Active Oxygen Content: 3.3 %

Organic peroxides: 49 - 51 %

Safety Data Sheet

10. STABILITY AND REACTIVITY

Chemical stability: Stable under normal conditions.

Conditions to avoid: Do not allow to dry out.

Confinement must be avoided. Heat, flames and sparks.

For safety, store below: 25°C (77°F)

Materials to avoid: Use only stainless steel 316, PP, polyethylene or glass-lined equipment. Acids and bases, Iron, Copper, Reducing agents, Heavy metals, Rust.

Hazardous decomposition products: Benzoic acid, Carbon monoxide (CO). Carbon dioxide (CO₂).

Hazardous polymerization: Under normal conditions hazardous polymerization will not occur.

Decomposition temperature: SADT - (Self accelerating decomposition temperature) is the lowest temperature at which self-accelerating decomposition may occur with a substance in the packaging as used in transport. A dangerous self-accelerating decomposition reaction and, under certain circumstances, explosion or fire can be caused by thermal decomposition at and above the SADT. Contact with incompatible substances can cause decomposition below the SADT.

Self-Accelerating decomposition temperature (SADT): 55 °C

11. TOXICOLOGICAL INFORMATION

Acute Oral Toxicity LD50 rat > 5,000 mg/kg

Acute Inhalational Toxicity LC50 rat 24.3 mg/l

Exposure time: 4 h, vapor

The substance or mixture has no acute inhalation toxicity

Acute Dermal Toxicity: No data available

Skin irritation: slight irritation

Eye irritation: Irritation to eyes, reversing within 7 days

Germ cell mutagenicity:

Genotoxicity in vitro: No evidence of genotoxic effects in vitro.

Genotoxicity in vivo: No evidence of genotoxic effects in vivo.

Carcinogenicity: Not classified due to data, which are conclusive, although insufficient for classification.

Reproductive toxicity/Fertility:

Species: Rat, male

Application Route: Oral

General Toxicity Parent: NOAEL (No observed adverse effect level): 1,000 mg/kg body weight/day

Method: OECD Test Guideline 422

Species: Rat, females

Application Route: Oral

General Toxicity Parent: NOAEL (No observed adverse effect level): 500 mg/kg body weight/day Method: OECD

Test Guideline 422

Safety Data Sheet

Target Organ Systemic Toxicant - Single exposure

Routes of exposure: Ingestion

The substance or mixture is not classified as specific target organ toxicant, single exposure.

Target Organ Systemic Toxicant - Repeated exposure

Routes of exposure: Ingestion

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Component: Dicyclohexyl phthalate

Acute oral toxicity: LD50 (Rat): > 2,000 mg/kg

Acute dermal toxicity: LD50 (Rat): > 2,000 mg/kg

Skin irritation: No skin irritation

Eye irritation: No eye irritation

Sensitization:

Species: Mouse

Classification: May cause sensitization by skin contact.

Repeated dose toxicity:

Species: Rat

Application Route: Oral

Exposure time: 90 d ()

NOEL: 50 mg/kg

Germ cell mutagenicity:

Genotoxicity in vitro: No evidence of genotoxic effects in vitro.

Genotoxicity in vivo: No data available

Carcinogenicity: No data available

Routes of exposure: Ingestion

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Carcinogenicity:

There is no evidence of carcinogenic effects.

Reprotoxicity/Teratogenicity:

No indications of toxic effects were observed in reproduction studies in animals.

Hazard Summary

Inhalation: Thermal decomposition can lead to release of irritating gases and vapors.

Product dust may be irritating to respiratory system.

Skin: Product dust may be irritating to skin. May cause an allergic skin reaction. May cause skin irritation.

Eyes: Causes serious eye irritation.

Ingestion: May cause irritation of the mucous membranes.

Safety Data Sheet

12. ECOLOGICAL INFORMATION

Ecotoxicology Assessment:

Component: Dibenzoyl peroxide

Acute aquatic toxicity: Very toxic to aquatic organisms.

Chronic aquatic toxicity: This product has no known ecotoxicological effects.

Component: Dicyclohexyl phthalate

Acute aquatic toxicity: Harmful to aquatic life.

Chronic aquatic toxicity: Harmful to aquatic life with long lasting effects.

Test result:

Component: Dibenzoyl peroxide ecotoxicity effects

Toxicity to fish: LC50: 0.06 mg/l, 96 h

Toxicity to daphnia and other aquatic invertebrates: EC50: 0.11 mg/l, 48 h

Species: Daphnia magna (Water flea)

Toxicity to algae: EC50: 0.06 mg/l, 72 h

Species: algae

M-Factor: 10

Toxicity to bacteria: EC50: 35 mg/l

Species: Bacteria

Elimination information (persistence and degradability)

Bioaccumulation: Bioconcentration factor (BCF): 66.6

Biodegradability: Inherently biodegradable.

Component: Dicyclohexyl phthalate ecotoxicity effects

Toxicity to fish: LC50: > 2 mg/l, 96 h

Species: Oryzias latipes (Orange-red killifish) No toxicity at the limit of solubility.

Toxicity to daphnia and other aquatic invertebrates: EC50: > 2 mg/l, 48 h

No toxicity at the limit of solubility.

Toxicity to algae: ErC50: > 2 mg/l, 72 h

Species: Pseudokirchneriella subcapitata (green algae)

Test Type: Growth inhibition Method: OECD Test Guideline 201, No toxicity at the limit of solubility.

Toxicity to bacteria: NOEC: > 100 mg/l, 3 h

Species: activated sludge

Test Type: Respiration inhibition

Method: Domestic OECD Guideline 209

Elimination information (persistence and degradability)

Bioaccumulation: Bioaccumulation is not expected.

Biodegradability: Result: Readily biodegradable.

Additional ecological information:

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Very toxic to aquatic life with long lasting effects.

Harmful to aquatic life with long lasting effects.

Safety Data Sheet

13. DISPOSAL CONSIDERATIONS

Waste Disposal: Dispose in accordance with federal, state and local regulations.

The generation of waste should be avoided or minimized wherever possible. Empty containers should be taken to an approved waste-handling site for recycling or disposal. Incineration is the preferred method. Landfill should only be considered when recycling is not feasible. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Refer to 40 CFR § 261.7 (residues of hazardous waste in empty containers).

DO NOT HEAT OR CUT THE EMPTY CONTAINER WITH ELECTRIC OR GAS TORCH.

Contaminated packages must be emptied as good as possible and properly clean before recycling. Packages that cannot be cleaned must be disposed of in the same way as the substance. Uncontaminated packaging may be taken for recycling.

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

14. TRANSPORT INFORMATION

Regulatory Information	UN Number	Classes	Packing Group	Proper Shipping Name
DOT	UN3106	5.2	Not Assigned	ORGANIC PEROXIDE TYPE D, SOLID (Dibenzoyl peroxide)
IATA	UN3106	5.2	Not Assigned	ORGANIC PEROXIDE TYPE D, SOLID (Dibenzoyl peroxide)
IMDG	UN3106	5.2	Not Assigned	ORGANIC PEROXIDE TYPE D, SOLID (Dibenzoyl peroxide)
TDG	UN3106	5.2	Not Assigned	ORGANIC PEROXIDE TYPE D, SOLID (Dibenzoyl peroxide)

***This material is considered environmentally hazard and marine pollutant.**

15. REGULATORY INFORMATION

Country	Regulatory List	Notification
USA	TSCA	Included on Inventory
EU	EINECS	Included on Inventory
Canada	DSL	Included on Inventory
China	SEPA	Included on Inventory
Japan	ENCS	Included on Inventory

Safety Data Sheet

OSHA: This product is considered to be a hazardous chemical under 29 CFR 1910.1200.

SARA Section 311 AND 312 - This product has been reviewed according to the EPA “Hazard Categories” promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories: ACUTE, CHRONIC

SARA Section 313 - This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372: Dibenzoyl peroxide 94-36-0

Right-To-Know (RTK)

Dibenzoyl peroxide 94-36-0

New Jersey, Pennsylvania, and Massachusetts

California Safe Drinking Water & Toxic Enforcement Act (Proposition 65) - This product does not contain any chemicals known to State of California to cause cancer, birth defects or any other reproductive harm.

Canadian WHMIS – C; D-2B; F

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations.

16. OTHER INFORMATION

Relevant H phrases

- H241 Heating may cause a fire or explosion.
- H242 Heating may cause a fire.
- H317 May cause an allergic skin reaction.
- H320 Causes eye irritation.
- H361 Suspected of damaging fertility or the unborn child.
- H400 Very toxic to aquatic life.
- H402 Harmful to aquatic life.
- H412 Harmful to aquatic life with long lasting effects.

Hazardous Material Information System (HMIS):

<i>Scale 0-4</i>		<i>NFPA</i>	<i>HMIS</i>
4=Severe Hazard	Health	2	2
3=Serious Hazard	Flammability	2	2
2=Moderate Hazard	Reactivity	2	2
1=Slight Hazard			
0=Minimal Hazard			

* = chronic health hazard

THE INFORMATION AND RECOMMENDATIONS PRESENTED HEREIN ARE ACCURATE TO THE BEST OF OUR KNOWLEDGE. USER MUST CONDUCT THEIR OWN TESTS TO DETERMINE THE SUITABILITY OF THESE PRODUCTS FOR THEIR PARTICULAR PURPOSES AND USAGE. BECAUSE OF NUMEROUS FACTORS AFFECTING RESULTS, PROREZ COATINGS, LLC AND ITS AFFILIATION MAKES NO WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING THOSE OF MERCHANTABILITY AND FITNESS FOR PURPOSE, OTHER THAN MATERIAL CONFORMS TO OUR APPLICABLE CURRENT SPECIFICATIONS. PROREZ COATINGS, LLC ASSUMES NO LEGAL RESPONSIBILITY FOR USE OR RELIANCE ON THE INFORMATION CONTAINED IN THIS SAFETY DATA SHEET.

END OF DATA SHEET