

SAFETY DATA SHEET

This Safety Data Sheet has been prepared to conform to EU Regulation No. 1907/2006 and 2015/830.

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

1.1 Product Identifier:

Trade Name: PROSEAL PRO LOK RED PERMANENT 50ML (6)

Part Number: 11720036_N27150

SDS Date of Preparation: March 25, 2016

1.2 Relevant Identified Uses of the Substance or Mixture and Uses Advised Against:

Product Use: This product is for anaerobic thread locking, sealing, joining and fastening metal components.

Uses Advised Against: None known.

1.3 Details of the Supplier of the Safety Data Sheet:

Manufacturer: Pacer Technology
3281 E. Guasti Rd., Suite 260
Ontario, CA 91761

Information Phone Number: (909) 987-0550

E-mail: info@pacertechnology.com

1.4 Emergency Telephone Number:

Emergency Spill Information: CHEMTREC Domestic North America: (800) 424-9300
CHEMTREC International: (703) 527-3887

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the Substance or Mixture:

GHS/CLP Regulation (EC) No 1272/2008:

Physical	Health	Environment
Not Classified	Acute Toxicity Category 4 (H302) Eye Damage Category 1 (H318) Skin Irritant Category 2 (H315) Skin Sensitizer Category 1 (H317)	Aquatic Acute Toxicity Category 1 (H400) Aquatic Chronic Toxicity Category 2 (H411)

2.2 Label Elements:

Danger!



Contains: 2-Hydroxyethyl Methacrylate, Maleic acid

Hazard Phrases

H302	Harmful if swallowed.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H400	Very toxic to aquatic life.
H411	Toxic to aquatic life with long lasting effects.

Precautionary Phrases

P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P103	Read label before use.
P273	Avoid release to the environment.
P280	Wear protective gloves and eye protection.
P305 + P351 + P338 + P310	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.
P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P333 + P313	If skin irritation or rash occurs: Get medical attention.
P501	Dispose of contents and container in accordance with local and national regulations.

2.3 Other Hazards: None known.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixture:

Chemical Name	CAS#	EINECS#	CLP Annex VI Classification	%
2-Hydroxyethyl Methacrylate (stabilized)	868-77-9	212-782-2	Eye Irrit. Cat 2 (H319), Skin Irrit. Cat 2 (H315), Skin Sens. Cat 1 (H317)	>25
Benzoquinone	106-51-4	203-405-2	Acute Tox. Cat 3 (H301, H331), Skin Irrit. Cat 2 (H315), Eye Irrit. Cat 2 (H319), STOT SE Cat 3 (H335), Aquatic Acute Cat 1 (H400) (M-Factor Acute: 10)	<5
Maleic acid	110-16-7	203-742-5	Acute Tox. Cat 4 (H302, H312), Skin Irrit. Cat 2 (H315), Eye Dam. Cat 1 (H318), Skin Sens. Cat 1 (H317), STOT SE Cat 3 (H335)	<5
2,6-di-tert-butyl-p-cresol	128-37-0	204-881-4	Aquatic Acute Cat 1 (H400), Aquatic Chronic Cat 1 (H410) (M-Factor Chronic: 1)	<5
Ethylene glycol	107-21-1	203-473-3	Acute Tox. Cat 4 (H302), STOT RE Cat 2 (H373)	<5
Cumene Hydroperoxide	80-15-9	201-254-7	Org. Perox. Type E (H242), Acute Tox. Cat 4 (H302, H312), Acute Tox. Cat 3 (H331), Skin Corr. Cat 1B (H314), Eye Dam. Cat 1 (H318), STOT RE Cat 2 (H373), Aquatic Chronic Cat 2 (H411)	<1

See Section 16 for further information on GHS Classification.

SECTION 4: FIRST AID MEASURES

4.1 Description of First Aid Measures:

Eye: Immediately flush thoroughly with water for 20 minutes, while holding the eye lids open to be sure the material is washed out. Remove contact lenses if present and easy to do. Get immediate medical attention.

Skin: Remove contaminated clothing and shoes. Flush skin thoroughly with water for several minutes. Get medical attention if irritation or rash occurs. Launder clothing before re-use.

Inhalation: Remove victim to fresh air. Get medical attention if irritation or symptoms of exposure persists.

Ingestion: Rinse mouth. Do not induce vomiting unless directed to do so by medical personnel. If you feel unwell, get medical attention.

4.2 Most Important symptoms and effects, both acute and delayed: May cause severe eye irritation or burns with possible eye damage. May cause moderate skin irritation. May cause skin sensitization. Inhalation of vapors or dust from dried material may cause respiratory tract irritation. Harmful if swallowed.

4.3 Indication of any immediate medical attention and special treatment needed: Immediate medical attention is required for eye contact.

SECTION 5: FIRE-FIGHTING MEASURES

5.1 Extinguishing Media: Use water spray, foam, dry chemical, or carbon dioxide when fighting fires involving this material.

5.2 Special Hazards Arising from the Substance or Mixture:

Unusual Fire and Explosion Hazards: None known.

Combustion Products: Oxides of carbon and nitrogen, and irritating organic vapors.

5.3 Advice for Fire-Fighters:

Wear an approved, positive pressure, self-contained breathing apparatus and full protective clothing. Cool fire exposed containers with water. Contain water used in firefighting from entering sewers or natural waterways.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions, Protective Equipment and Emergency Procedures:

Prevent contact with eyes. Avoid contact with skin or clothing. Wear appropriate protective clothing to prevent eye and skin contact including impervious gloves, safety goggles and respirator if needed. Avoid breathing vapors or dust from dried product. Ventilate area.

6.2 Environmental Precautions:

Avoid releases to the environment. Report spills and releases as required to appropriate authorities.

6.3 Methods and Material for Containment and Cleaning Up:

Cover with an inert absorbent material and collect into an appropriate container for disposal.

6.4 Reference to Other Sections:

Refer to Section 8 for Personal Protective Equipment and Section 13 for Disposal information.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for Safe Handling: Avoid breathing vapors or dust from dried product. Use with adequate ventilation. Prevent contact with eyes. Avoid contact with skin or clothing. Wear appropriate protective clothing as described in Section 8. Wash thoroughly after handling. Keep containers closed when not in use.

7.2 Conditions for Safe Storage, Including any Incompatibilities: Store in a container in a cool, dry, well-ventilated location away from incompatible materials. Keep container tightly closed when not in use. Ideal storage temperature 8-38°C (46.4-100.4°F). Keep in original container.

7.3 Specific end use(s): Consumer use.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control Parameters:

Chemical Name	Exposure Limits
2-Hydroxyethyl Methacrylate	None Established
Benzoquinone	0.1 ppm TWA, 0.3 ppm STEL UK WEL 0.1 ppm TWA Belgium OEL
Maleic Acid	None Established
2,6-di-tert-butyl-p-cresol	10 mg/m ³ TWA, 40 mg/m ³ STEL DFG MAK (inhalable fraction and vapor) 10 mg/m ³ TWA UK WEL 2 mg/m ³ TWA Belgium OEL
Ethylene glycol	20 ppm TWA, 40 ppm STEL EU OEL (as vapor) 10 ppm TWA, 20 ppm STEL DFG MAK (inhalable fraction and vapor)

	20 ppm TWA, 40 ppm STEL UK WEL (as vapor) 10 mg/m3 TWA UK WEL (as particulate) 10 ppm TWA, 20 ppm STEL DFG MAK (as particulate) 20 ppm TWA, 40 ppm STEL Belgium OEL (as particulate)
Cumen Hydroperoxide	None Established

8.2 Exposure Controls:

Ventilation: Use with adequate general or local exhaust ventilation to maintain exposure levels below the occupational exposure limits.

Personal Protective Equipment:

Respiratory Protection: In operations where the occupational exposure limits are exceeded, an approved respirator with applicable cartridges or supplied air respirator should be used. Respirator selection and use should be based on contaminant type, form and concentration. Follow applicable regulations and good Industrial Hygiene practice.

Skin Protection: Impervious gloves are required for all operations where skin contact can occur. Contact your glove supplier for selection assistance. In Europe follow EN 374.

Eye Protection: Chemical safety goggles recommended to avoid eye contact. In Europe follow EN 166.

Other Protective Equipment: Impervious clothing is required to prevent skin contact and contamination of personal clothing. In Europe follow EN 13034. An eye wash facility and safety shower should be available in the work area.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic Physical and Chemical Properties:

Appearance: Red liquid	Vapor Density: No data available
Odor: Mild odor	Solubility(ies): Poorly soluble in water
Odor Threshold: No data available	Partition Coefficient (Octanol/Water): No data available
pH: 3-6	Auto-ignition Temperature: No data available
Melting Point/Freezing Point: No data available	Decomposition Temperature: No data available
Initial Boiling Point/Range: >148°C (>298.4°F)	Viscosity: 300-500 Centipoise
Flash Point: >93°C (>200°F)	Explosive Properties: Not explosive
Evaporation Rate: No data available	Oxidizing Properties: Not an oxidizer
Flammable Limits: LEL: No data available UEL: No data available	Relative Density: 1.05 g/cm3
Vapor Pressure: <5 mmHg @ 27°C (80°F)	Flammability (solid, gas): Not applicable

9.2 Other Information: None available

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity: Not reactive.

10.2 Chemical Stability: Stable under normal storage and handling conditions.

10.3 Possibility of Hazardous Reactions: Hazardous polymerization may occur when exposed to incompatible materials, excessive heat or when inhibitor depletion or excessive aging of product occurs.

10.4 Conditions to Avoid: Avoid temperatures exceeding 38°C (100.4°F).

10.5 Incompatible Materials: Amines, inert gases, metallic salts, strong oxidizers, and all sources of heat.

10.6 Hazardous Decomposition Products: Combustion will produce oxides of carbon and nitrogen, and irritating organic vapors.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on Toxicological Effects:

Potential Health Effects:

Eye: Causes severe irritation and burns. Permanent eye injury is likely.

Skin: May cause moderate skin irritation. May cause allergic skin reaction (sensitization).

Inhalation: Inhalation of vapors or dust from dried material may cause respiratory tract irritation with coughing and sneezing.

Ingestion: Swallowing may cause gastrointestinal tract irritation.

Chronic Hazards: Prolonged or repeated contact may cause allergic skin reaction (sensitization). A few reports have been published describing the development of weakness of the facial muscles, diminishing hearing, and difficulty with swallowing, during the late stages of severe poisoning from ethylene glycol. Prolonged occupational overexposure may cause effects on the nervous system and lung damage. Ethylene glycol has been shown to cause birth defects in studies with laboratory animals. However, the significance of this finding to humans has not been determined.

Acute Toxicity Values:

Product ATE: 1796 mg/kg (oral), 24855 mg/kg (dermal), 51 mg/L (Inhalation as a vapor), 8 mg/L (Inhalation as a mist)

2-Hydroxyethyl Methacrylate: Oral rat LD50: 5564 mg/kg, Skin rabbit LD50: >5000 mg/kg

Benzoquinone: Oral rat LD50: 130 mg/kg

Maleic Acid: Oral rat LD50: 1030 mg/kg, Skin rabbit LD50: 1560 mg/kg

2, 6-di-tert-butyl-p-cresol: Oral rat LD50: >2930 mg/kg, Skin rat LD50: >2000 mg/kg

Ethylene glycol: Oral rat LD50: 4700 mg/kg

Cumene Hydroperoxide: Oral rat LD50: 382 -1470 mg/kg, Inhalation rat LC50: 220 ppm (1370 mg/m³)/4hr

Skin corrosion/irritation: 2-Hydroxyethyl methacrylate: Slightly irritating to rabbit skin. Cumene Hydroperoxide: Corrosive to rabbit skin. A 10% solution when tested in rabbits for skin irritation, induced erythema on 3 rabbits. A 1% solution when tested on rabbits caused moderate to very slight hyperemia on the ear and abdomen.

Eye damage/irritation: 2-Hydroxyethyl methacrylate: Found to be irritating to rabbit eyes. Cumene Hydroperoxide: Severely irritating to rabbit eyes. A 1% solution was applied to the eyes and when washed with water, only caused very slight pain and transient injury.

Respiratory Irritation: This product is classified as a respiratory irritant.

Respiratory Sensitization: No data available.

Skin Sensitization: 2-Hydroxyethyl methacrylate: Not sensitizing in a Buehler test with guinea pigs. Sensitizing in guinea pig maximization test. Maleic Acid: Sensitizing in Mouse local lymphnode assay (LLNA) and Guinea pig maximization test.

Germ Cell Mutagenicity: Ethylene glycol: Two chronic feeding studies, using rats and mice, have not produced any evidence that ethylene glycol causes dose-related increases in tumor incidence or a different pattern of tumors compared with untreated controls. The absence of carcinogenic potential for ethylene glycol has been supported by numerous invitro genotoxicity studies showing that it does not produce mutagenic or clastogenic effects.

Carcinogenicity: None of the components of this product are listed as a carcinogen by the EU CLP.

Reproductive Toxicity: Ethylene Glycol: Ethylene glycol has been shown to produce dose-related teratogenic effects in rats and mice when given by gavage or in drinking water at high concentrations or doses. Also, in a preliminary study to assess the effects of exposure of pregnant rats and mice to aerosols at concentrations 150, 1,000 and 2,500 mg/m³ for 6 hours a day throughout the period of organogenesis, teratogenic effects were produced at the highest concentrations, but only in mice. The conditions of these latter experiments did not allow a conclusion as to whether the developmental toxicity was mediated by inhalation of aerosol, percutaneous absorption of ethylene glycol from contaminated skin, or swallowing of ethylene glycol as a result of grooming the wetted coat. In a further study, comparing effects from high aerosol concentration by whole-body or nose-only exposure, it was shown that nose-only exposure resulted in maternal toxicity (1,000 and 2,500 mg/m³) and developmental toxicity in the fetus with minimal evidence of teratogenicity (2,500 mg/m³). The no-effects concentration (based on maternal toxicity) was 500 mg/m³. In a further study in mice, no teratogenic effects could be produced when ethylene glycol was applied to the skin of pregnant mice over the period of organogenesis. The above observations suggest that ethylene glycol is to be regarded as an animal teratogen; there is currently no available information to suggest that ethylene glycol caused birth defects in humans. Cutaneous application of ethylene glycol is ineffective in producing developmental toxicity; exposure to high aerosol concentration is only minimally effective in producing developmental toxicity; the major route for producing developmental toxicity is orally.

Specific Target Organ Toxicity:

Single Exposure: No data available

Repeat Exposure: Ethylene Glycol: Kidney effects were observed in a rat oral study – NOEL 71 mg/kg/day. Kidney effects were also seen in studies with mice. Cumene Hydroperoxide: Male and female rats were exposed daily (6 hr/day, 5 days/week) to 1, 6, 31 and 124 mg/m³ cumene hydroperoxide delivered as aerosol over a period of 3 months. Inhalation of 124 mg/m³ cumene hydroperoxide for 5 consecutive days resulted in decreased body weight and death of 6/10 males and 3/10 females, therefore exposure of this group was terminated after 5 day and all surviving rats were killed on day 12 of the study. Primary toxicological effects following inhalation of 124 mg/m³ cumene hydroperoxide were consistent with those caused by a primary tissue irritant, other changes were judged by the authors as secondary effects and as caused by stress. These included thymic atrophy, depletion of lymphoid tissue in the germinal centers of some lymph nodes and the spleen, decreased lipid content of the liver and decreased circulating white blood cells.

Aspiration Hazard: Components are not aspiration hazards.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity:

Benzoquinone: 96 hr LC₅₀ Fathead minnow: 0.045 mg/L (M-Factor Acute: 10)

2,6-di-tert-butyl-p-cresol: 96 hr LC₅₀ Zebra fish: >0.57 mg/L, 48 hr EC₅₀ Daphnia magna: 0.48 mg/L (M-Factor Chronic: 1)

Cumene Hydroperoxide: 96 hr LC₅₀ Rainbow trout: 3.9 mg/L, 48 hr EC₅₀ Daphnia magna: 18.84 mg/L

This product is classified as very toxic to the aquatic environment and toxic to the aquatic environment with long-term adverse effects. Releases to the environment should be avoided.

12.2 Persistence and Degradability: 2,6-di-tert-butyl-p-cresol: Not readily biodegradable – 4.5% in 28 days. Cumene Hydroperoxide: Not readily biodegradable- 3% after 28 days.

12.3 Bioaccumulative Potential: No data available

12.4 Mobility in Soil: 2,6-di-tert-butyl-p-cresol: Low potential for mobility in soil. Cumene Hydroperoxide: Highly mobile in soil.

12.5 Results of PBT and vPvB Assessment: No data available

12.6 Other Adverse Effects: Not applicable

SECTION 13: DISPOSAL CONSIDERATIONS
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13.1 Waste Treatment Methods:

Dispose in accordance with all local, state and federal regulations.

SECTION 14: TRANSPORTATION INFORMATION

	14.1 UN Number	14.2 UN Proper Shipping Name	14.3 Hazard Class(s)	14.4 Packing Group	14.5 Environmental Hazards
EU ADR/RID	None	Not Regulated	None	None	Not applicable
IMDG	UN3082	Environmentally hazardous substance, liquid, n.o.s. (2,6-di-tert-butyl-p-cresol)	9	III	Marine Pollutant
IATA/ICAO	UN3082	Environmentally hazardous substance, liquid, n.o.s. (2,6-di-tert-butyl-p-cresol)	9	III	Yes

Note: Inner packages with less than 5 liters of liquid/ 5 kg of solid are exempt from Marine Pollutant per IMDG Code 2.10.2.7 and ICAO Special Provision A197.

14.6 Special Precautions for User: Not applicable

14.7 Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code: Not applicable

SECTION 15: REGULATORY INFORMATION

15.1 Safety, Health and Environment Regulations/Legislation Specific for the Substance or Mixture:

EUROPEAN REGULATIONS

REACH: These products comply with REACH regulation as applicable. For more information, contact Pacer Technology.

SVHC: This product contains the following Substances of Very High Concern (SVHCs): None.

15.2 Chemical Safety Assessment: No data available

SECTION 16: OTHER INFORMATION

Date of Current Revision: March 25, 2016

Revision Summary: New SDS

Date of Previous Revision: None

GHS Classification for Reference (See Sections 3):

Acute Tox. Cat 3 Acute Toxicity Category 3

Acute Tox. Cat 4 Acute Toxicity Category 4

Aquatic Acute Cat 1 Aquatic Acute Toxicity Category 1

Aquatic Chronic Cat 1 Aquatic Chronic Toxicity Category 1

Aquatic Chronic Cat 2 Aquatic Chronic Toxicity Category 2

Eye Dam. Cat 1 Eye Damage Category 1

Eye Irrit. Cat 2 Eye Irritant Category 2

Org. Perox. Type E Organic Peroxides Type E

Skin Corr. Cat 1A Skin Corrosion Category 1

Skin Irrit. Cat 2 Skin Irritant Category 2

Skin Sens. Cat 1 Skin Sensitizer Category 1

STOT RE Cat 2 Specific Target Organ Toxicity Repeated Exposure Category 2

STOT SE Cat 3 Specific Target Organ Toxicity Single Exposure Category 3

H242 Heating may cause a fire.

H302 Harmful if swallowed.

H312 Harmful in contact with skin.

H314 Causes severe skin burns and eye damage.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

H331 Toxic if inhaled.

H335 May cause respiratory irritation.

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

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

H411 Toxic to aquatic life with long lasting effects.

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This above information is believed to be correct but does not propose to be all inclusive and shall be used only as a guide. Pacer Technology shall not be held liable for any damage resulting from handling or from contact with the above product.