



SECTION 1 - IDENTIFICATION

Manufacturer:	Isothermal Protective Coatings, Inc.
Address:	1950 O'Day Road, Pearland, TX 77581
Telephone:	800-237-8759
Product Identifier:	Isoclear™ Resin
Recommended Use:	Protective Coating

SECTION 2 - HAZARD IDENTIFICATION

**HAZARD CLASSIFICATION
(EFFECTS OF EXPOSURE):**

<i>Skin:</i>	No irritation hazard in normal industrial use.
<i>Eyes:</i>	No irritation hazard in normal industrial use.
<i>Inhalation:</i>	No irritation hazard in normal industrial use.
<i>Ingestion:</i>	Ingestion of large amounts may cause nausea and/or constipation
<i>Sensitization:</i>	Does not cause sensitization.
Signal Word:	Warning - No hazard in normal industrial use.
Hazard Statements:	<ul style="list-style-type: none"> - Epidemiology studies do not suggest an increased risk of cancer in humans from occupational exposure to this product. - Not considered to be harmful to aquatic life.
Pictograms:	None Necessary
Precautionary Statements	
<i>Prevention:</i>	<ul style="list-style-type: none"> - Do Not handle until all safety precautions have been read and understood. - Do Not breathe dust or spray. - Do Not get in eyes, on skin, or on clothing. - Wash thoroughly after handling. - Do Not eat, drink or smoke when using this product.
<i>Response:</i>	
Skin:	<ul style="list-style-type: none"> - Wash affected areas thoroughly with soap and water. - Wash contaminated clothing before reuse.
Eyes:	<ul style="list-style-type: none"> - Use eyewash to remove substance from eyes. - Get medical advice if irritation develops.
Inhalation:	<ul style="list-style-type: none"> - Call a doctor if spray is inhaled - No toxic effect is known to be associated with inhalation of vapors from this material
Ingestion:	<ul style="list-style-type: none"> - Do Not induce vomiting. - Get Medical advice/attention if you feel unwell. - Rinse mouth.



Storage:

- Store in a cool dry place
- **Do Not** allow this material to freeze.

Disposal:

- Waste disposal should be in accordance with existing federal, state and local environmental control laws.

SECTION 3 - COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	CAS #	Approx %
1,2 Propanediol (Propylene Glycol)	57-55-6	1.0
Ethylene Glycol Monobutyl Ether	111-76-2	0.4
2,2,4-Trimethyl-1,3-Pentanediol Monoisobutyrate	25265-77-4	3.0
Fluoropolymer	Trade secret	41.0
bis(1,2,2,6,6-pentamethyl-4-piperidyl)sebacate	41556-26-7	0.7
Acrylic Copolymer	25085-46-5	27.0
Poly(oxy-1,2-ethanediyl), .alpha.-[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropyl] -.omega.-[3-[3-(2Hbenzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropoxy]-	104810-47-1	0.7
Water	7732-18-5	Balance

SECTION 4 - FIRST AID MEASURES

Skin:

- Wash with soap and water

Eyes:

- Flush with plenty of water to remove any substance in the eyes.
- Remove contact lenses if present.
- Seek medical advice if irritation develops.

Inhalation:

- If mist (over spray) or dust (from sanding) is inhaled, move person to fresh air.
- If person is not breathing, call 911 or an ambulance and then give artificial respiration.
- Call for medical attention.

Ingestion:

- **Do Not** induce vomiting.
- Seek medical attention if symptoms develop.



SECTION 5 - FIRE FIGHTING MEASURES AND PROPERTIES

Flash point:	Non Flammable
Flammable limits:	None Established
Extinguishing media:	- Water spray, foam dry chemical or carbon dioxide. - Use whatever media deemed appropriate for surrounding fire.
Special firefighting procedures:	Persons exposed to products of combustion should wear self-contained breathing apparatus and full protective equipment.
Unusual fire & explosion hazards:	- There may be a possibility of pressure buildup in closed containers when heated. - Water spray may be used to cool the containers.
Decomposition products:	Carbon dioxide, Carbon monoxide, Phosphorous compounds.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Personal precautions:	- Wear safety glasses when handling this product. - No adverse health effects expected from the clean-up of spilled material.
Cleanup procedures:	- Dike if necessary, contain spill with inert absorbent and transfer to containers for disposal. - Keep spilled product out of sewers, watersheds, or water systems.

SECTION 7 - HANDLING AND STORAGE

Precautions for Safe Handling:	- No special handling instructions due to toxicity. - This product contains limited amounts of residual monomer. Under normal handling and use conditions the residual monomer should not present a hazard. - In storage the monomer will migrate from the emulsion and establish an equilibrium between the headspace in the storage container and the liquid emulsion. - Levels in excess of acceptable exposures can accumulate in non-vented headspaces above the emulsion.
Recommendations on the conditions for safe storage:	Store in a cool, dry place.

SECTION 8 - EXPOSURE CONTROL / PERSONAL PROTECTION

Exposure limits:

Chemical Name	PEL	TWA
1,2 Propanediol (Propylene Glycol)	N/A	WEEL 10 mg/m ³ (aerosol)
Ethylene Glycol Monobutyl Ether	240 mg/m ³ 50 ppm Skin	ACGIH 20 ppm

Engineering controls:

- No exposure limits exist for the constituents of this product.
- No engineering controls are likely to be required to maintain operator comfort under normal conditions of use.

Inhalation protection:

- No respiratory protection required under normal conditions of use.
- Respirators should be selected by and used following requirements found in OSHA's respirator standard (29 CFR 1910.134).

Eye protection:

- Wear safety glasses when handling this product.

Skin and body protections:

- Not normally considered a skin hazard.
- Where use can result in skin contact, practice good personal hygiene.
- Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work.

Other hygienic practices and protective equipment: Use nitrile gloves if conditions warrant.



SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Partially Non-Newtonian liquid
Physical state:	Liquid
Color:	White liquid - dries clear
Odor:	Slight ammonia odor
Odor threshold:	None established
pH:	9.5
Melting point/freezing point:	32°F Freezing point
Initial boiling point and boiling range:	212°F Boiling point
Flash point:	Non Flammable
Evaporation rate:	1.0 (water = 1)
Flammability:	Non Flammable
Upper/lower flammability or explosive limits:	None Established
Vapor pressure:	23 hPa (17 mmHg) @ 20°C (68°F)
Vapor density:	1.24 g/cm ³ @ 20°C (68°F)
Relative density:	1.09 kg/lit
Solubility:	Soluble with water
Partition coefficient: n-octanol/water:	None established
Auto-ignition temperature:	None established
Decomposition temperature:	200°C (392°F)
Viscosity:	50 kreb units @ 20°C (68°F)

SECTION 10 - STABILITY AND REACTIVITY

Reactivity:	Will not occur.
Chemical Stability:	Stable under normal conditions.
Incompatibility:	Not established
Hazardous Decompositions Products:	Phosphorus compounds, carbon monoxide, carbon dioxide, hydrogen fluoride

SECTION 11 - TOXICOLOGICAL INFORMATION

The following information regarding health hazards is based upon third-party research studies. Effects of Acute Exposure:

<i>Inhalation:</i>	Inhalation of dust or mist can cause irritation of the eyes, nose, throat, and lungs.
<i>Eye Contact:</i>	Like any foreign body, particles can cause mechanical irritation.
<i>Skin Contact:</i>	- This material can cause irritation if not promptly washed from the skin. - This product is not expected to be absorbed through intact skin.
<i>Ingestion:</i>	This material is not expected to produce adverse effects.

Numerical measures of toxicity:

Chemical Name	Oral LD50 (rat)	Dermal LD50 (rabbit)	Inhalation LC50 (rat)
Fluoropolymer	>2,500 mg/kg	N/A	N/A
1,2 Propanediol (Propylene Glycol)	>20,000 mg/kg	>2,000 mg/kg	317.042 mg/lit (2 hr., aerosol) (rabbit)
Ethylene Glycol Monobutyl Ether	1,746 mg/kg	2,270 mg/kg (rat)	700 ppm (7 hr. vapor)
2,2,4-Trimethyl-1,3-Pentanediol Monoisobutyrate	>3,200 mg/kg	>15,200 mg/kg	>2.73 mg/lit (6 hr)

SECTION 12 - ECOLOGICAL INFORMATION

Data from toxicity test:

Chemical Name	Algae/Aquatic Plants (EC50)	Fish (LC50)	Toxicity to Microorganism	Crustacea (LC50) (Aquatic Invertebrates)
2,2,4-Trimethyl-1,3-Pentanediol Monoisobutyrate	72 h: > 57 mg/l (Pseudokirchneriella subcapitata (algae))	96 h: 33 mg/l (Fathead Minnow)	N/A	EC50 - 48 h: 147.8 mg/l (Water Flea)
Ethylene Glycol Monobutyl Ether	72 h: 911 mg/l (Selenastrum capricornutum), biomass growth inhibition	96 h: 820 - 1,490 mg/l (bluegill - Lepomis macrochirus)	IC50; bacteria: > 1,000 mg/l	835 mg/l (water flea Daphnia magna)
1,2 Propanediol (Propylene Glycol)	96 h: 19,000 mg/l (Pseudokirchneriella subcapitata (green algae), Growth rate inhibition)	96 h: 40,613 mg/l (Oncorhynchus mykiss (rainbow trout), static test)	18 h: > 20,000 mg/l (Pseudomonas putida); NOEC, no data available	48 h: 18,340 mg/l (Ceriodaphnia Dubia (water flea), static test)

Biodegradation:

Chemical Name	
2,2,4-Trimethyl-1,3-Pentanediol Monoisobutyrate	> 77 % (28 d, Ready Biodegradability: CO ₂ Evolution Test) Readily biodegradable
Ethylene Glycol Monobutyl Ether	Material is readily biodegradable. Passes OECD test(s) for ready biodegradability Chemical Oxygen Demand: 2.21 mg/g; Theoretical Oxygen Demand: 2.30 mg/mg
1,2 Propanediol (Propylene Glycol)	Material is readily biodegradable. Passes OECD test(s) for ready biodegradability. Biodegradation may occur under anaerobic conditions (in the absence of oxygen) Chemical Oxygen Demand: 1.53 mg/mg; Theoretical Oxygen Demand: 1.68 mg/mg

Bioaccumulation potential:

Chemical Name	
2,2,4-Trimethyl-1,3-Pentanediol Monoisobutyrate	N/A
Ethylene Glycol Monobutyl Ether	potential is low (BCF less than 100 or log Pow less than 3)
1,2 Propanediol (Propylene Glycol)	potential is low (BCF < 100 or Log Pow < 3)

Mobility in soil:

Chemical Name	
2,2,4-Trimethyl-1,3-Pentanediol Monoisobutyrate	Log Koc - log Koc: 1.5 - 2.8
Ethylene Glycol Monobutyl Ether	Potential for mobility in soil is high (Koc between 50 and 150)
1,2 Propanediol (Propylene Glycol)	Potential for mobility in soil is very high (Koc between 0 and 50)

SECTION 13 - DISPOSAL CONSIDERATIONS

- To the best of our knowledge, this product does not meet the definition of hazardous waste under the U.S. EPA Hazardous Waste Regulations 40 CFR 261.
- Solidify and dispose of in an approved landfill.
- Consult state, local or provincial authorities for more restrictive requirements.

SECTION 14 - TRANSPORT INFORMATION

UN #	N/A
UN proper shipping name:	Paint
Hazard class:	N/A
Packing group:	N/A
Environmental hazards:	N/A
Guidance on transport in bulk:	N/A

Transport labels required: This product is not regulated by the D.O.T.

SECTION 15: REGULATORY INFORMATION

U.S. Federal Regulations:

SARA 311/312 Hazard Categories:

None of the ingredients of this product are subject to SARA 311-312

SARA 313:

Chemical Name	CAS #
Ethylene Glycol Monobutyl Ether	111-76-2

US State Right to Know Regulations: New Jersey, Massachusetts, Pennsylvania, Rhode Island

Chemical Name	CAS #
Ethylene Glycol Monobutyl Ether	111-76-2
1,2 Propanediol (Propylene Glycol)	57-55-6

CA Prop 65: None Listed

Canada: None Listed

SECTION 16 - OTHER INFORMATION (HMIS RATING)

Health	1
Flammability	0
Physical Hazard	0
Personal Protection	B

Disclaimer: Isothermal Protective Coatings, Inc. believes, to the best of its knowledge, information and belief, the information contained herein to be accurate and reliable as of the issue date of this Safety Data Sheet (SDS). However, because the conditions of handling, use, and storage of these materials are beyond Isothermal Protective Coatings, Inc. control, we assume no responsibility or liability for personal injury or property damage incurred by the use of these materials and make no warranty, expressed or implied, regarding the accuracy or reliability of the data or results obtained from their use. All materials may present unknown hazards and should be used with caution. The information and recommendations contained in the SDS are offered for the users' consideration and examination. It is the responsibility of the user to determine the final suitability of this information and data and to comply with all applicable international, federal, state and local laws and regulations.