

acc. to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 regulations

Printing date: March 27, 2017 Revision: March 27, 2017

1 Identification

· Product identifier

· Trade name: Pentofrost A2 Prediluted

· Product code: No other identifiers

· Recommended use and restriction on use

· Recommended use: Coolant / Anti-freeze.

· Restrictions on use: No relevant information available.

Details of the supplier of the Safety Data Sheet

· Manufacturer/Supplier:

CRP Industries 35 Commerce Dr. Cranbury, NJ 08512 (609) 578-4100 info@crpindustries.com

· Emergency telephone number:

ChemTel Inc.

(800)255-3924 (North America)

+1 (813)248-0585 (International)

2 Hazard(s) identification

· Classification of the substance or mixture

Acute Tox. 4 H302 Harmful if swallowed.

STOT RE 2 H373 May cause damage to the kidneys through prolonged or repeated exposure. Route of exposure: Oral.

- · Label elements
- · GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS).

Hazard pictograms:





GHS07 GHS08

· Signal word: Warning

· Hazard statements:

H302 Harmful if swallowed.

H373 May cause damage to the kidneys through prolonged or repeated exposure. Route of exposure: Oral.

· Precautionary statements:

P260 Do not breathe mist/vapors/spray. P264 Wash thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.

P330 Rinse mouth.

P314 Get medical advice/attention if you feel unwell.

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P501

Dispose of contents/container in accordance with local/regional/national/international regulations.

· Other hazards There are no other hazards not otherwise classified that have been identified.

3 Composition/information on ingredients

· Chemical characterization: Mixtures

· Components:			
107-21-1	ethylene glycol	STOT RE 2, H373 Acute Tox. 4, H302	40-60%
111-46-6	2,2'-oxybisethanol	STOT RE 2, H373 Acute Tox. 4, H302	1-5%

· Additional information:

For the listed ingredient(s), the identity and/or exact percentage(s) are being withheld as a trade secret. For the wording of the listed Hazard Statements refer to section 16.

4 First-aid measures

- Description of first aid measures
- · General information:

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact:

Immediately remove any clothing soiled by the product.

Immediately rinse with water.

If skin irritation continues, consult a doctor.

· After eye contact:

Remove contact lenses if worn.

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

After swallowing:

Rinse out mouth and then drink plenty of water.

Do not induce vomiting; immediately call for medical help.

· Most important symptoms and effects, both acute and delayed:

Headache

Dizziness

Coughing

Acidosis

Cramp

Nausea

Irritant to skin and mucous membranes.

Causes eye irritation.

Disorientation

Danger:

Harmful if swallowed.

May cause damage to the kidneys through prolonged or repeated exposure. Route of exposure: Oral.

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Indication of any immediate medical attention and special treatment needed:

Contains ethylene glycol. Consult literature for specific antidotes. If medical advice is needed, have product container or label at hand.

5 Fire-fighting measures

- · Extinguishing media
- · Suitable extinguishing agents:

CO2, extinguishing powder or water spray. Fight larger fires with water spray.

- · For safety reasons unsuitable extinguishing agents: None.
- Special hazards arising from the substance or mixture

Formation of toxic gases is possible during heating or in case of fire.

- · Advice for firefighters
- · Protective equipment:

Wear self-contained respiratory protective device.

Wear fully protective suit.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation.

Wear protective equipment. Keep unprotected persons away.

Particular danger of slipping on leaked/spilled product.

- · Environmental precautions Avoid release to the environment.
- Methods and material for containment and cleaning up

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Send for recovery or disposal in suitable receptacles.

Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage

- Handling
- · Precautions for safe handling:

Prevent formation of aerosols.

Use only in well ventilated areas.

- Information about protection against explosions and fires: No special measures required.
- Conditions for safe storage, including any incompatibilities
- · Storage
- · Requirements to be met by storerooms and receptacles:

Avoid storage near extreme heat, ignition sources or open flame.

Information about storage in one common storage facility: Store away from foodstuffs.

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Store away from oxidizing agents.

- · Further information about storage conditions: Keep containers tightly sealed.
- · Specific end use(s) No relevant information available.

8 Exposure controls/personal protection

· Control parameters

· Components with limit values that require monitoring at the workplac	:e:
107-21-1 ethylene glycol	

TLV (USA) | Short-term value: NIC-127* NIC-10** mg/m³, NIC-50* ppm

Long-term value: NIC-63.5* mg/m³, NIC-25* ppm

Ceiling limit value: (100) mg/m³

(H); *inh. fraction + vapor, P: **inh. fraction, H

EL (Canada) Short-term value: 20** mg/m³ Long-term value: 10** mg/m³

Ceiling limit value: 100* mg/m³, 50*** ppm

*Aerosol; **Particulate; ***Vapour

EV (Canada) Ceiling limit value: 100 mg/m³ LMPE (Mexico) Ceiling limit value: 100* mg/m³

A4, *solo aerosol

111-46-6 2,2'-oxybisethanol

WEEL (USA) Long-term value: 10 mg/m³

- Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:

The usual precautionary measures for handling chemicals should be followed.

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Do not inhale gases / fumes / aerosols.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

- · Engineering controls: No relevant information available.
- · Breathing equipment:

Not required under normal conditions of use.

Use suitable respiratory protective device in case of insufficient ventilation.

Use suitable respiratory protective device when aerosol or mist is formed.

Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

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· Eye protection:



Safety glasses

- · **Body protection:** Protective work clothing
- Limitation and supervision of exposure into the environment

No relevant information available.

· Risk management measures No relevant information available.

Physical and chemical prope	rties		
Information on basic physical and chemical properties			
Appearance:			
Form:	Liquid		
Color:	Green		
Odor:	Light		
Odor threshold:	Not determined.		
pH-value at 20 °C (68 °F):	7.9		
Melting point/Melting range:	Not determined.		
Boiling point/Boiling range:	Not determined.		
Flash point:	Not applicable.		
Flammability (solid, gaseous):	Not applicable.		
Auto-ignition temperature:	>260 °C (>500 °F)		
Decomposition temperature:	Not determined.		
Danger of explosion:	Product does not present an explosion hazard.		
Explosion limits			
Lower:	Not determined.		
Upper:	Not determined.		
Vapor pressure at 20 °C (68 °F):	0.1 hPa		
Density at 20 °C (68 °F):	1.07 g/cm³ (8.929 lbs/gal)		
Relative density:	Not determined.		
Vapor density:	Not determined.		
Evaporation rate:	Not determined.		
Solubility in / Miscibility with			
Water:	Fully miscible.		
Partition coefficient (n-octanol/water	er): Not determined.		
Viscosity			
Dynamic:	Not determined.		
Kinematic:	Not determined.		





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Other information

No relevant information available.

10 Stability and reactivity

- · **Reactivity:** No relevant information available.
- · Chemical stability: Stable under normal temperatures and pressures.
- · Thermal decomposition / conditions to be avoided:

No decomposition if used and stored according to specifications.

· Possibility of hazardous reactions

Reacts with strong acids and oxidizing agents.

Toxic fumes may be released if heated above the decomposition point.

- · Conditions to avoid Excessive heat.
- · Incompatible materials Oxidizers, strong bases, strong acids
- · Hazardous decomposition products Carbon monoxide and carbon dioxide

11 Toxicological information

- Information on toxicological effects
- · Acute toxicity:

· LD/LC50 values that are relevant for classification:			
ATE (A	cute To	oxicity Estimates)	
Oral	LD50	500 - 1200 mg/kg	
107-21-1 ethylene glycol			

	-	9.,
Dermal	LD50	9530 mg/kg

(rabbit)

111-46-6 2.2'-oxybisethanol

	· -,- ·	- x, x
Oral	LD50	1120 mg/kg (man)
		12565 mg/kg (rat)
Dermal	LD50	12565 mg/kg (rat) 11890 mg/kg (rabbit)

- Primary irritant effect:
- · On the skin: Based on available data, the classification criteria are not met.
- · On the eye: Based on available data, the classification criteria are not met.
- · **Sensitization**: No sensitizing effects known.

· IARC (International Agency for Research on Cancer):

None of the ingredients are listed.

NTP (National Toxicology Program):

None of the ingredients are listed.

· OSHA-Ca (Occupational Safety & Health Administration):

None of the ingredients are listed.

· Probable route(s) of exposure:

Ingestion. Inhalation.

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Eye contact. Skin contact.

- · Acute effects (acute toxicity, irritation and corrosivity): Harmful if swallowed.
- · CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
- · Germ cell mutagenicity: Based on available data, the classification criteria are not met.
- · Carcinogenicity: Based on available data, the classification criteria are not met.
- · Reproductive toxicity: Based on available data, the classification criteria are not met.
- · STOT-single exposure: Based on available data, the classification criteria are not met.
- · STOT-repeated exposure:

May cause damage to the kidneys through prolonged or repeated exposure. Route of exposure: Oral.

· Aspiration hazard: Based on available data, the classification criteria are not met.

12 Ecological information

- · Toxicity
- · Aquatic toxicity No relevant information available.
- · Persistence and degradability No relevant information available.
- · Bioaccumulative potential: Does not accumulate in organisms
- · Mobility in soil: No relevant information available.
- Additional ecological information
- · General notes: Avoid release to the environment.
- Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · vPvB: Not applicable.
- · Other adverse effects No relevant information available.

13 Disposal considerations

- · Waste treatment methods
- · Recommendation:

Contact waste processors for recycling information.

The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes.

- Uncleaned packagings
- · Recommendation: Disposal must be made according to official regulations.
- · **Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport information

- · UN-Number
- · DOT, ADR, IMDG, IATA

Not regulated.

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· UN proper shipping name · DOT, ADR, IMDG, IATA	Not regulated.	
· Transport hazard class(es)		
· DOT, ADR, IMDG, IATA · Class	Not regulated.	
· Packing group · DOT, ADR, IMDG, IATA	Not regulated.	
· Environmental hazards · Marine pollutant:	No	
Special precautions for user	Not applicable.	
Transport in bulk according to Annex MARPOL73/78 and the IBC Code	II of Not applicable.	

15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
- · United States (USA)
- ·SARA
- Section 302 (extremely hazardous substances):

None of the ingredients are listed.

· Section 355 (extremely hazardous substances):

None of the ingredients are listed.

· Section 313 (Specific toxic chemical listings):

107-21-1 ethylene glycol

TSCA (Toxic Substances Control Act)

All ingredients are listed.

- · Proposition 65 (California)
- · Chemicals known to cause cancer:

None of the ingredients are listed.

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients are listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients are listed.

· Chemicals known to cause developmental toxicity:

107-21-1 ethylene glycol

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Carcinogenic categories

· EPA (Environmental Protection Agency):

None of the ingredients are listed.

· IARC (International Agency for Research on Cancer):

None of the ingredients are listed.

· NIOSH-Ca (National Institute for Occupational Safety and Health):

None of the ingredients are listed.

Canadian Domestic Substances List (DSL):

All ingredients are listed.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Date of preparation / last revision March 27, 2017 / -

· Abbreviations and acronyms:

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

Acute Tox. 4: Acute toxicity - Category 4

STOT RE 2: Specific target organ toxicity (repeated exposure) - Category 2

· Sources

Website, European Chemicals Agency (echa.europa.eu)

Website, US EPA Substance Registry Services (ofmpub.epa.gov/sor internet/registry/substreg/home/overview/home.do)

Website, Chemical Abstracts Registry, American Chemical Society (www.cas.org)

Patty's Industrial Hygiene, 6th ed., Rose, Vernon, ed. ISBN: 978-0-470-07488-6

Casarett and Doull's Toxicology: The Basic Science of Poisons, 8th Ed., Klaasen, Curtis D., ed., ISBN: 978-0-07-176923-5.

Safety Data Sheets, Individual Manufacturers

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