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1 Identification of the substance/mixture and of the company/undertaking

- · 1.1 Product identifier
- · Trade name: POLARIZED REFRIGERATION OIL ADDITIVE. PRO-A
- · Article number: 19002, 19022, 19005, 19508, 19516, 19528
- · 1.2 Relevant identified uses of the substance or mixture and uses advised against

No further relevant information available.

- · Application of the substance / the preparation Oil additive.
- · 1.3 Details of the supplier of the Safety Data Sheet
- · Manufacturer/Supplier:

Highside Chemicals, Inc. 11114 Reichold Road Gulfport, MS 39503 USA Phone: (228) 896-9220

· 1.4 Emergency telephone number:

ChemTel Inc.

1-800-255-3924, +1 (813)248-0585

2 Hazards identification

- · 2.1 Classification of the substance or mixture
- · Classification according to Regulation (EC) No 1272/2008

The following Hazard Statements are applicable only to the EU regulations and not the US GHS regulation: H412.



GHS07

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2 H319 Causes serious eye irritation. STOT SE 3 H335 May cause respiratory irritation.

Aguatic Chronic 3 H412 Harmful to aguatic life with long lasting effects.

· Classification according to Directive 67/548/EEC or Directive 1999/45/EC



Xi; Irritant

R36/37/38: Irritating to eyes, respiratory system and skin.

Harmful to aquatic organisms.

Information concerning particular hazards for human and environment:

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

· Classification system:

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

The classification is in accordance with the latest editions of international substances lists, and is supplemented by information from technical literature and by information provided by the company.

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- · 2.2 Label elements
- Labelling according to Regulation (EC) No 1272/2008

The following Hazard Statements are applicable only to the EU regulations and not the US GHS regulation: H412.

The product is classified and labelled according to the CLP regulation.

Hazard pictograms



- · Signal word Warning
- · Hazard statements

The following Hazard Statements are applicable only to the EU regulations and not the US GHS regulation: H412.

H315 Causes skin irritation.

H319 Causes serious eve irritation.

H335 May cause respiratory irritation.

H412 Harmful to aquatic life with long lasting effects.

· Precautionary statements

P280 Wear protective gloves / eye protection. P264 Wash thoroughly after handling.

P261 Avoid breathing mist/vapours/spray.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

P501 Dispose of contents/container in accordance with local/regional/national/international

regulations.

- · Hazard description:
- · WHMIS-symbols:

D2B - Toxic material causing other toxic effects



· NFPA ratings (scale 0 - 4)



· HMIS-ratings (scale 0 - 4)



HMIS Long Term Health Hazard Substances

None of the ingredients is listed.

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- · 2.3 Other hazards
- · Results of PBT and vPvB assessment
- PBT: Not applicable.vPvB: Not applicable.

3 Composition/information on ingredients

- · 3.2 Mixtures
- · **Description**: Mixture of substances listed below with nonhazardous additions.

· Dangerous compoi	nents:	
CAS: MIXTURE	Highly Refined Heavy Mineral Base Oils	50-100%
	🗙 Xi R38	
	♦ Skin Irrit. 2, H315	
	Alkenes C12-24 Chloro	10-25%
	Xi R36/37/38	
	♦ Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335	
CAS: 8013-07-8	Epoxidized Stabilizer	2,5-10%
EINECS: 232-391-0	₩ N R51/53	
	Aquatic Chronic 2, H411	

Additional information: For the wording of the listed risk phrases refer to section 16.

4 First aid measures

- · 4.1 Description of first aid measures
- · General information:

Immediately remove any clothing soiled by the product.

Take affected persons out into the fresh air.

· After inhalation:

Supply fresh air; consult doctor in case of complaints.

In case of unconsciousness place patient stably in side position for transportation.

· After skin contact:

Immediately wash with water and soap and rinse thoroughly.

If skin irritation continues, consult a doctor.

· After eye contact:

Remove contact lenses if worn, if possible.

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; call for medical help immediately.

4.2 Most important symptoms and effects, both acute and delayed

Coughing

Acne

Nausea

Cramp

Disorientation

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· Hazards

Danger of impaired breathing.

Danger of convulsion.

Condition may deteriorate with alcohol consumption.

4.3 Indication of any immediate medical attention and special treatment needed

Medical supervision for at least 48 hours.

In cases of irritation to the lungs, initial treatment with cortical steroid inhalants.

If necessary oxygen respiration treatment.

5 Firefighting measures

- · 5.1 Extinguishing media
- Suitable extinguishing agents:

Water haze or fog

Alcohol resistant foam

Foam

Fire-extinguishing powder

Gaseous extinguishing agents

Carbon dioxide

· For safety reasons unsuitable extinguishing agents:

Water with full jet

Water spray

· 5.2 Special hazards arising from the substance or mixture

During heating or in case of fire poisonous gases are produced.

- 5.3 Advice for firefighters
- · Protective equipment:

Wear self-contained respiratory protective device.

Wear fully protective suit.

· Additional information Cool endangered receptacles with water fog or haze.

6 Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

Particular danger of slipping on leaked/spilled product.

· 6.2 Environmental precautions:

Inform respective authorities in case of seepage into water course or sewage system.

Do not allow to enter sewers/ surface or ground water.

Prevent from spreading (e.g. by damming-in or oil barriers).

Do not allow to penetrate the ground/soil.

6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Ensure adequate ventilation.

Remove from the water surface (e.g. skim or suck off).

· 6.4 Reference to other sections

See Section 7 for information on safe handling.

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See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage

· 7.1 Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

Avoid the formation of oil haze.

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

Protect from humidity and water.

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

Unsuitable material for receptacle: aluminium.

· Information about storage in one common storage facility:

Store away from oxidizing agents.

Store away from foodstuffs.

Do not store together with acids.

· Further information about storage conditions:

Keep container tightly sealed.

Protect from humidity and water.

· 7.3 Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

- · Additional information about design of technical facilities: No further data; see item 7.
- · 8.1 Control parameters
- Ingredients with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

- · **DNELs** No further relevant information available.
- · PNECs No further relevant information available.
- · Additional information: The lists valid during the making were used as basis.
- · 8.2 Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:

Clean skin thoroughly immediately after handling the product.

The usual precautionary measures are to be adhered to when handling chemicals.

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Do not inhale gases / fumes / aerosols.

Avoid contact with the eyes and skin.

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· Respiratory protection:

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

Use suitable respiratory protective device in case of insufficient ventilation.

NIOSH approved organic vapor respirator equipped with a dust/mist prefilter should be used.

Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

For the permanent contact gloves made of the following materials are suitable:

Neoprene gloves

Fluorocarbon rubber (Viton)

- · Not suitable are gloves made of the following materials: Leather gloves
- · Eye protection:



Safety glasses

- · Body protection: Oil resistant protective clothing
- · Limitation and supervision of exposure into the environment

No further relevant information available.

· Risk management measures

See Section 7 for additional information.

No further relevant information available.

9 Physical and chemical properties

- · 9.1 Information on basic physical and chemical properties
- · General Information
- · Appearance:

Form: Liquid

Colour: Cloudy white to brown

Odour: Petroleum-like
Odour threshold: Not determined.

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pH-value:	Not determined.	
Change in condition		
Melting point/Melting range:	Undetermined.	
Boiling point/Boiling range:	>599°F/> 315 °C	
Flash point:	>352°F/ > 178 °C	
Flammability (solid, gaseous):	Not applicable.	
Ignition temperature:	Not determined.	
Decomposition temperature:	Not determined.	
Self-igniting:	Product is not self-igniting.	
Danger of explosion:	Product does not present an explosion hazard.	
Explosion limits:		
Lower:	Not determined.	
Upper:	Not determined.	
Vapour pressure:	Not determined.	
Density at 20 °C:	0,89 g/cm³	
Relative density	Not determined.	
Vapour density	Not determined.	
Evaporation rate	Not determined.	
Solubility in / Miscibility with		
water:	Not miscible or difficult to mix.	
Partition coefficient (n-octanol/water)	: Not determined.	
· Viscosity:		
Dynamic:	Not determined.	
Kinematic at 20 °C:	22 mm ² /s	
9.2 Other information	No further relevant information available.	

10 Stability and reactivity

- · 10.1 Reactivity
- · 10.2 Chemical stability
- Thermal decomposition / conditions to be avoided:

Keep away from heat and direct sunlight.

No decomposition if used and stored according to specifications.

· 10.3 Possibility of hazardous reactions

Reacts with alkali (lyes).

Reacts with strong oxidizing agents.

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

Reacts with strong acids.

Can form explosive mixtures in air if heated above flash point and/or when sprayed or atomised.

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- · 10.4 Conditions to avoid Store away from oxidizing agents.
- 10.5 Incompatible materials: No further relevant information available.
- · 10.6 Hazardous decomposition products:

Halogenated hydrocarbons

Hydrogen chloride (HCI)

Carbon monoxide and carbon dioxide

11 Toxicological information

- · 11.1 Information on toxicological effects
- · Acute toxicity:
- · Primary irritant effect:
- · on the skin: Irritant to skin and mucous membranes.
- on the eye: Irritating effect.
- · Sensitization: No sensitizing effects known.
- · Additional toxicological information:

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

Irritant

At long or repeated contact with skin it may cause dermatitis due to the degreasing effect of the solvent. May cause acne.

Danger through skin adsorption.

· Repeated dose toxicity: May cause damage to organs through prolonged or repeated exposure.

12 Ecological information

- · 12.1 Toxicity
- · Aquatic toxicity: No further relevant information available.
- 12.2 Persistence and degradability Not easily biodegradable
- 12.3 Bioaccumulative potential May be accumulated in organism
- · 12.4 Mobility in soil No further relevant information available.
- · Ecotoxical effects:
- · Remark:

Harmful to fish

The product is oxygen-consuming. The declared action may be partly caused by lack of oxygen.

Due to mechanical actions of the product (e.g. agglutinations) damages may occur.

- · Additional ecological information:
- · General notes:

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Harmful to aquatic organisms

Due to available data on eliminability/decomposition and bioaccumulation potential prolonged term damage of the environment can not be excluded.

- 12.5 Results of PBT and vPvB assessment
- · PBT: Not applicable.

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- · **vPvB:** Not applicable.
- 12.6 Other adverse effects No further relevant information available.

13 Disposal considerations

- · 13.1 Waste treatment methods
- · Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system. Product is recyclable as a waste oil. Deliver unused and/or contaminated product to waste oil collectors. Contact waste processors for recycling information.

- · Uncleaned packaging:
- · Recommendation: Disposal must be made according to official regulations.
- · Recommended cleansing agents: Solvent naphtha

4 Transport information		
· 14.1 UN-Number · DOT, ADR, ADN, IMDG, IATA	N/A	
· 14.2 UN proper shipping name · DOT, ADR, ADN, IMDG, IATA	N/A	
· 14.3 Transport hazard class(es)		
· DOT, ADR, ADN, IMDG, IATA · Class	N/A	
· 14.4 Packing group · DOT, ADR, IMDG, IATA	N/A	
· 14.5 Environmental hazards: · Marine pollutant:	No	
· 14.6 Special precautions for user	Not applicable.	
· 14.7 Transport in bulk according to Ann MARPOL73/78 and the IBC Code	ex II of Not applicable.	
· UN "Model Regulation":	-	

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15 Regulatory information

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- · United States (USA)
- ·SARA
- Section 355 (extremely hazardous substances):

None of the ingredients is listed.

Section 313 (Specific toxic chemical listings):

None of the ingredients is listed.

· TSCA (Toxic Substances Control Act):

All ingredients are listed.

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

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

- · Carcinogenic Categories
- EPA (Environmental Protection Agency)

None of the ingredients is listed.

IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

TLV (Threshold Limit Value established by ACGIH)

None of the ingredients is listed.

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

None of the ingredients is listed.

· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

- · Canada
- · Canadian Domestic Substances List (DSL)

All ingredients are listed.

· Canadian Ingredient Disclosure list (limit 0.1%)

None of the ingredients is listed.

· Canadian Ingredient Disclosure list (limit 1%)

None of the ingredients is listed.

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· 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

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.

· Relevant phrases

H315 Causes skin irritation.

H319 Causes serious eye irritation. H335 May cause respiratory irritation.

H411 Toxic to aquatic life with long lasting effects.

R36/37/38 Irritating to eyes, respiratory system and skin.

R38 Irritating to skin.

R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (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

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

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

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

WHMIS: Workplace Hazardous Materials Information System (Canada)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

· Sources

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