SAFETY DATA SHEET
Coolant Booster

Revision: 10/09/2015
Supersedes Revision: 02/10/2015

1. Product and Company Identification

Product Code: C53

Product Name: Coolant Booster

Company Name: CYCLO INDUSTRIES, INC.
902 SOUTH US HIGHWAY 1
JUPITER, FL 33477

Phone Number: (800)843-7813

Web site address: www.cyclo.com

Email address: ehs@cyclo.com

Emergency Contact: First Aid Emergency (800)752-7869
CHEMTREC (703) 527-3887 (800)424-9300

Information: First Aid Emergency (Outside U.S.) (312)906-6194

2. Hazards Identification

Acute Toxicity: Oral, Category 4
Skin Corrosion/Irritation, Category 3

GHS Signal Word: **Warning**

GHS Hazard Phrases:
H302: Harmful if swallowed.
H316: Causes mild skin irritation.

GHS Precaution Phrases:
P264: Wash hands thoroughly after handling.
P270: Do not eat, drink or smoke when using this product.

GHS Response Phrases:
P301+330+331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P304+340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P303+361+353: IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.
P363: Wash contaminated clothing before reuse.
P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P309+311: Call a POISON CENTER or doctor/physician if exposed or you feel unwell.

GHS Storage and Disposal Phrases:
P501: Dispose of contents/container in accordance with local/regional/national/international regulation.

Potential Health Effects (Acute and Chronic):

ACUTE EXPOSURE

A subcomponent of C-53 Coolant Boost is Ethylene Glycol. Ethylene Glycol contains 1,2-Ethanediol and 2,2'-oxybis-ethanol. 1,2-Ethanediol Can cause pulmonary edema if aspirated into lungs. May produce symptoms of central nervous system and depression including headache, dizziness, nausea, euphoria, loss of equilibrium, drowsiness, visual disturbances, fatigue, unconsciousness and respiratory arrest.

SKIN: Irritating to the skin. Prolonged or repeated contact may cause dermatitis. May be absorbed through the skin and cause toxic effects similar to those resulting from inhalation exposure.

INHALATION: Can cause pulmonary edema if aspirated into lungs. May produce symptoms of central nervous system depression including headache, dizziness, nausea, euphoria, loss of equilibrium, drowsiness, visual disturbances, fatigue, unconsciousness

and respiratory arrest.

This material is hazardous by OSHA Hazard Communication definition. Harmful or fatal if swallowed. Harmful if inhaled or absorbed through the skin. May cause irritation to skin, eyes and respiratory tract. May cause allergic skin reaction. Affects central nervous system.

EYE: May be irritating to the eyes.

INGESTION: Central nervous system symptoms similar to those by inhalation, followed by rapid breathing,
increased heart rate, possible toxcity to the kidneys, decreased urine volume and severe metabolic acidosis.

CHRONIC HEALTH EFFECTS

1,2-Ethanediol Prolonged or repeated inhalation or ingestion may result in kidney and liver changes. 2,2'-oxybis-ethanol Prolonged or repeated inhalation or ingestion may result in kidney and liver changes. May produce symptoms of central nervous system depression including headache, dizziness, nausea, euphoria, loss of equilibrium, drowsiness, visual disturbances, fatigue, unconsciousness and respiratory arrest. Repeated exposure may cause liver and kidney damage.

LD 50 / LC 50

This substance appears to be of low toxicity, except for possible mild irritant effects in humans. A high dose may produce central nervous system depression, but there are no reports of adverse health effects from occupation exposure.

Sub-component of Ethylene Glycol--1,2-Ethanediol LC50 (Inhl) Rat 10876 MG/KG LD50 (Oral) Rat 4700 MG/KG

ACUTE INHALATION EFFECTS: Minimal evidence for birth defects were detected in the offspring of mice exposed aerosol concentrations up to 2500 mg/m3, 6 hrs/day during gestation.
ACUTE ORAL EFFECTS - Component Ethylene glycol produces birth defects when orally administered to pregnant mice and rats at doses of 500 and 1000 mg/kg/day, respectively during gestation. No-effect levels were 150 and 500 mg/kg/day, respectively, in the mouse and rat.

SKIN EFFECTS: This substance is a mild irritant.

EYE EFFECTS: This product is expected to be a mild eye irritant.

Sub-component of Ethylene Glycol-2,2'-oxybis-ethanol LD50 (Oral) Rat 12.6 G/KG

SKIN EFFECTS - This substance is a mild skin irritant.

EYE EFFECTS - This product is expected to be a mild eye irritant.

REPRODUCTIVE / DEVELOPMENT EFFECTS - In vitro, no evidence of mutagenicity. No in vivo evidence of carcinogenicity or adverse reproductive effects in animal studies.

Medical Conditions Generally Pre-existing liver or kidney disorders.

Aggravated By Exposure:

3. Composition/Information on Ingredients

CAS #	Hazardous Components (Chemical Name)	Concentration
7732-18-5	Water	90.0 -97.0 %
107-21-1	Ethylene glycol	3.0 %
1310-73-2	Sodium hydroxide	0.25 %
7631-99-4	Sodium nitrate	0.1 %
2492-26-4	2(3H)-Benzothiazolethione, Sodium salt	~ 0.1 %
68439-51-0	Alcohols, C12-14, ethoxylated propoxylated	< 1.0 %
25322-68-3	Polyethylene glycol	< 0.001 %
NA	(Trade Secret)	< 0.001 %
126950-60-5	Alcohols, C12-14-secondary	< 0.001 %
9041-33-2	Oxirane, methyl-, polymer with oxirane, mono-2-propenyl ether	< 0.001 %
NA	Dye	0.04 %

4. First Aid Measures

Emergency and First Aid Procedures: If swallowed, do not induce vomiting. If vomiting does occur, have victim lean forward to reduce risk of aspiration. Never give anything by mouth to an unconscious person. If inhaled, immediately remove person to fresh air. If person has stopped breathing, give artificial respiration. If in eyes, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call physician immediately if adverse reaction occurs.

Signs and Symptoms Of Exposure: A subcomponent of C-53 Coolant Boost is Ethylene Glycol. Ethylene Glycol contains 1,2-Ethanediol and can cause pulmonary edema if aspirated into lungs. May produce symptoms of central nervous system and depression including headache, dizziness, nausea, euphoria, loss of equilibrium, drowsiness, visual disturbances, fatigue, unconsciousness and respiratory arrest.

5. Fire Fighting Measures

Flash Pt: > 300.00 F (148.9 C) Method Used: Estimate

Explosive Limits: LEL: No data. UEL: No data.

Autoignition Pt: NA

Suitable Extinguishing Media: No data available.

Fire Fighting Instructions: Wear a NIOSH approved positive pressure self-contained breathing apparatus and firefighter turnout gear. Individuals should perform only those fire-fighting procedures for which they have been trained. Fire fighters should wear self-contained breathing apparatus in the positive pressure mode with a full facepiece when there is a possibility of exposure to smoke, fumes or hazardous decomposition products. Cool tanks and containers exposed to fire with water. Cool containers with flooding quantities of water until well after fire is out.

Flammable Properties and Hazards: A subcomponent of C-53, Ethylene glycol mist in air is a moderate fire and explosion hazard.

Hazardous Combustion Products: Carbon oxides (CO, CO2).

6. Accidental Release Measures

Steps To Be Taken In Case Material Is Released Or Spilled: Contain spill with dike to prevent entry into sewers or waterways. For large spills, dike and pump into properly labeled containers for reclamation or disposal. For small spills, soak up with absorbent material and place in properly labeled containers for disposal. All recovered material should be packaged, labeled, transported and disposed of or reclaimed in conformance with applicable laws and regulations and in conformance with good engineering practices. Reclaim where possible.

7. Handling and Storage

Precautions To Be Taken in Handling: Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. Keep out of the reach of children.

8. Exposure Controls/Personal Protection

CAS #	Partial Chemical Name	OSHA TWA	ACGIH TWA	Other Limits
7732-18-5	Water	No data.	No data.	No data.
107-21-1	Ethylene glycol	No data.	CEIL: 100 mg/m3 (H)	No data.
1310-73-2	Sodium hydroxide	PEL: 2 mg/m3	CEIL: 2 mg/m3	No data.
7631-99-4	Sodium nitrate	No data.	No data.	No data.
2492-26-4	2(3H)-Benzothiazolethione, Sodium salt	No data.	No data.	No data.
68439-51-0	Alcohols, C12-14, ethoxylated propoxylated	No data.	No data.	No data.
25322-68-3	Polyethylene glycol	No data.	No data.	No data.
NA	(Trade Secret)	No data.	No data.	No data.
126950-60-5	Alcohols, C12-14-secondary	No data.	No data.	No data.
9041-33-2	Oxirane, methyl-, polymer with oxirane, mono-2-propenyl ether	No data.	No data.	No data.
NA	Dye	No data.	No data.	No data.

Respiratory Equipment (Specify Type): A respiratory protection program that meets OSHA's 29 CFR 1910.134 or ANSI Z88.2 requirements must be followed whenever workplace conditions warrant respirator use. Where unknown concentrations are encountered or during an emergency, use NIOSH approved supplied air respirators.

Eye Protection: Wear safety glasses as minimum protection. Conditions may warrant the use of chemical goggles and possibly a face shield. Consult your standard operating procedure or safety professional for advice. Use protective eye and face devices that comply with ANSI Z87.1-1987.

Protective Gloves: Wear chemical resistant gloves such as rubber, neoprene or vinyl. Appropriate protective clothing should be worn to prevent skin contact.

Other Protective Clothing: No data available.

Engineering Controls (Ventilation etc.): Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposures limits. Emergency shower and eyewash facility should be in close proximity (ANSI Z358.1)

9. Physical and Chemical Properties

Physical States:	[ ] Gas [X] Liquid [ ] Solid
Appearance and Odor:	Dark green liquid with slight sweet odor.
pH:	12.2
Melting Point:	No data.
Boiling Point:	No data.
Flash Pt:	> 300.00 F (148.9 C) Method Used: Estimate
Evaporation Rate:	No data.
Flammability (solid, gas):	No data available.
Explosive Limits:	LEL: No data. UEL: No data.
Vapor Pressure (vs. Air or mm Hg):	No data.
Vapor Density (vs. Air = 1):	No data.
Specific Gravity (Water = 1):	1.011
Density:	8.43 LB/GA
Solubility in Water:	No data.
Percent Volatile:	0.0 % by weight.
Autoignition Pt:	NA

10. Stability and Reactivity

Stability:	Unstable [ ] Stable [X]
Conditions To Avoid - Instability:	No data available.
Incompatibility - Materials To Avoid:	Oxidizing agents. Acids. Bases.
Hazardous Decomposition or Byproducts:	Carbon monoxide and Carbon dioxide.
Possibility of Hazardous Reactions:	Will occur [ ] Will not occur [X]
Conditions To Avoid - Hazardous Reactions:	No data available.

11. Toxicological Information

Toxicological Information:

This substance appears to be of low toxicity, except for possible mild irritant effects in humans. A high dose may produce central nervous system depression, but there are no reports of adverse health effects from occupation exposure.
Sub-component of Ethylene Glycol--
1,2-Ethanediol LC50 (Inhl) Rat 10876 MG/KG LD50 (Oral) Rat 4700 MG/KG

ACUTE INHALATION EFFECTS - Minimal evidence for birth defects were detected in the offspring of mice exposed aerosol concentrations up to 2500 mg/m3, 6 hrs/day during gestation.

ACUTE ORAL EFFECTS - Component Ethylene glycol produces birth defects when orally administered to pregnant mice and rats at doses of 500 and 1000 mg/kg/day, respectively during gestation. No-effect levels were 150 and 500 mg/kg/day, respectively, in the mouse and rat.

SKIN EFFECTS - This substance is a mild irritant.

EYE EFFECTS - This product is expected to be a mild eye irritant.

Sub-component of Ethylene Glycol-
2,2'-oxybis-ethanol LD50 (Oral) Rat 12.6 G/KG

SKIN EFFECTS - This substance is a mild skin irritant.

EYE EFFECTS - This product is expected to be a mild eye irritant.

REPRODUCTIVE / DEVELOPMENT EFFECTS - In vitro, no evidence of mutagenicity. No in vivo evidence of carcinogenicity or adverse reproductive effects in animal studies.
CAS# 7732-18-5:
Other Studies:, TDLo, Oral, Species: Rabbit, 3502. GM/KG, 2 W.
Results:
Behavioral: Convulsions or effect on seizure threshold.
Behavioral: Muscle weakness.
Related to Chronic Data - death.
- Journal of Pharmacology and Experimental Therapeutics, Williams & Wilkins Co., 428 E. Preston St., Baltimore, MD 21202, Vol/p/yr: 29,135, 1926

Acute toxicity, TDLo, Oral, Infant, 333.0 GM/KG.
Results:
Behavioral: Convulsions or effect on seizure threshold.
Gastrointestinal:Hypermotility, diarrhea.
Nutritional and Gross Metabolic:Changes in:Body temperature increase.
- Archives of Disease in Childhood., British Medical Journal, Box 560B, Kennebunkport, ME 04046, Vol/p/yr: 54,551, 1979

Acute toxicity, TDLo, Oral, Human, 42.86 GM/KG.
Results:
Behavioral: Tremor.
Behavioral: Muscle contraction or spasticity.
- Journal of Pharmacology and Experimental Therapeutics, Williams & Wilkins Co., 428 E. Preston St., Baltimore, MD 21202, Vol/p/yr: 29,135, 1926

Acute toxicity, LDLO, Rectal, Species: Woman, 180.0 GM/KG, 28 H.
Results:
Sense Organs and Special Senses (Nose, Eye, Ear, and Taste):Eye:Mydriasis (pupilliary dilation).
Behavioral: Convulsions or effect on seizure threshold.
Gastrointestinal:Nausea or vomiting.
- Journal of the American Medical Association, American Medical Association, 535 N. Dearborn St., Chicago, IL 60610, Vol/p/yr: 104,1569, 1935

Acute toxicity, LD50, Oral, Rat, > 90.00 ML/KG.
Results:
Kidney, Ureter, Bladder: Changes in liver weight.
- Food Research., For publisher information, see JFDSAZ, Champaign, IL, Vol/p/yr: 21,348, 1956

Acute toxicity, LD50, Intraperitoneal, Mouse, 190.0 GM/KG.
Results:
Kidney, Ureter, Bladder: Changes in liver weight.

Kidney, Ureter, Bladder: Changes in bladder weight.
- National Technical Information Service, Vol/p/yr: AD628-313,

Acute toxicity, LD50, Intravenous, Mouse, 25.00 GM/KG.
Results:
Nutritional and Gross Metabolic:Weight loss or decreased weight gain.
Related to Chronic Data - death.
- Microvascular Research., Academic Press, Inc., 1 E. First St., Duluth, MN 55802, Vol/p/yr: 8,320, 1974

Acute toxicity, LDLO, Oral, Dog, 629.0 GM/KG.
Results:
Kidney, Ureter, Bladder: Changes in liver weight.
Kidney, Ureter, Bladder: Changes in bladder weight.
- Journal of Pharmacology and Experimental Therapeutics, Williams & Wilkins Co., 428 E. Preston St., Baltimore, MD 21202, Vol/p/yr: 29,135, 1926

Acute toxicity, LDLO, Oral, Species: Cat, 320.0 GM/KG.
Results:
Behavioral: Convulsions or effect on seizure threshold.
- Journal of Pharmacology and Experimental Therapeutics, Williams & Wilkins Co., 428 E. Preston St., Baltimore, MD 21202, Vol/p/yr: 29,135, 1926

Acute toxicity, LDLO, Oral, Species: Rabbit, 368.0 GM/KG.
Results:
Behavioral: Convulsions or effect on seizure threshold.
- Journal of Pharmacology and Experimental Therapeutics, Williams & Wilkins Co., 428 E. Preston St., Baltimore, MD 21202, Vol/p/yr: 29,135, 1926

Acute toxicity, LDLO, Intravenous, Species: Rabbit, 13.00 GM/KG.
Results:
Blood:Other hemolysis with or withot anemia.
- Journal of Pharmacology and Experimental Therapeutics, Williams & Wilkins Co., 428 E. Preston St., Baltimore, MD 21202, Vol/p/yr: 29,135, 1926

Acute toxicity, LDLO, Rectal, Species: Rabbit, 450.0 GM/KG.
Results:
Sense Organs and Special Senses (Nose, Eye, Ear, and Taste):Eye:Mydriasis (pupilliary dilation).
Behavioral: Muscle contraction or spasticity.
Gastrointestinal: Changes in structure or function of salivary glands.
- Journal of the American Medical Association, American Medical Association, 535 N. Dearborn St., Chicago, IL 60610, Vol/p/yr: 104,1569, 1935

Acute toxicity, LDLO, Oral, Species: Guinea pig, 429.0 GM/KG.
Results:
Behavioral: Convulsions or effect on seizure threshold.
- Journal of Pharmacology and Experimental Therapeutics, Williams & Wilkins Co., 428 E. Preston St., Baltimore, MD 21202, Vol/p/yr: 29,135, 1926

CAS #	Hazardous Components (Chemical Name)	NTP	IARC	ACGIH	OSHA
7732-18-5	Water	n.a.	n.a.	n.a.	n.a.
107-21-1	Ethylene glycol	n.a.	n.a.	A4	n.a.
1310-73-2	Sodium hydroxide	n.a.	n.a.	n.a.	n.a.
7631-99-4	Sodium nitrate	n.a.	n.a.	n.a.	n.a.
2492-26-4	2(3H)-Benzothiazolethione, Sodium salt	n.a.	n.a.	n.a.	n.a.
68439-51-0	Alcohols, C12-14, ethoxylated propoxylated	n.a.	n.a.	n.a.	n.a.
25322-68-3	Polyethylene glycol	n.a.	n.a.	n.a.	n.a.
NA	(Trade Secret)	n.a.	n.a.	n.a.	n.a.
126950-60-5	Alcohols, C12-14-secondary	n.a.	n.a.	n.a.	n.a.
9041-33-2	Oxirane, methyl-, polymer with oxirane, mono-2-propenyl ether	n.a.	n.a.	n.a.	n.a.
NA	Dye	n.a.	n.a.	n.a.	n.a.

12. Ecological Information

General Ecological Information:

Laboratory toxicity tests have indicated that Ethylene Glycol is not significantly toxic to fish and aquatic invertebrates, although amphibians such as toads and frogs may be more sensitive. Wildlife species are more susceptible to ethylene glycol since mammals and birds do not readily metabolize this material. The odor and flavor of Ethylene Glycol may attract some wildlife and cause them to consume spilled material.

Due care should be taken to avoid accidental releases of this material to aquatic and terrestrial environments. Ethylene glycol bio-degrades rapidly in both soil and water, and will not persist in the environment. Ethylene glycol is highly soluble in water.

Because of Ethylene Glycol's high solubility and rapid biodegradability, it is unlikely that it will bioaccumulate in aquatic or terrestrial environments.
CAS# 2492-26-4:
LC50, Bluegill (Lepomis macrochirus), 0.004 ML/L, 96 H, Mortality, Water temperature: 22.00 C (71.6 F) C, pH: 6.90, Hardness: 11.60 MG/L.
Results:
Affected fish stopped schooling behavior.
- Initial Submission: Pollution Control Laboratory Fish Bioassay Results for 50% Sodium MBT (2-Mercaptobenzothiazole), with Cover Letter Dated 10/12/79, Uniroyal Chemicals, 1994

Effective concentration to {0} % of test organisms, Bluegill (Lepomis macrochirus), 15.00 MG/L, 96 H, Mortality, Water temperature: 21.00 C (69.8 F) - 22.00 C (71.6 F) C, pH: 7.30, Hardness: 154.00 mg/L.
Results:
No observed effect.
- Bioassay Report LC 50, Acute, Static 96 Hours in Freshwater with Cover Letter, R.T.Vanderbilt Co.Inc., 1985

LC50, Bluegill (Lepomis macrochirus), 4.500 MG/L, 48 H, Mortality, Water temperature: 22.00 C (71.6 F) C, pH: 7.20.
Results:
No observed effect.
- Toxicologic Investigation of: Ureka White, Monsanto Co., 1985

LC50, Bluegill (Lepomis macrochirus), 5.700 MG/L, 24 H, Mortality, Water temperature: 22.00 C (71.6 F) C, pH: 7.20.
Results:
No observed effect.
- Toxicologic Investigation of: Ureka White, Monsanto Co., 1985

LC50, Bluegill (Lepomis macrochirus), 3.800 MG/L, 96 H, Mortality, Water temperature: 22.00 C (71.6 F) C, pH: 7.20.
Results:
No observed effect.
- Toxicologic Investigation of: Ureka White, Monsanto Co., 1985

LC50, Bluegill (Lepomis macrochirus), 13.30 MG/L, 96 H, Mortality, Water temperature: 21.00 C (69.8 F) - 22.00 C (71.6 F) C, pH: 7.30, Hardness: 154.00 mg/L.
Results:
No observed effect.
- Bioassay Report LC 50, Acute, Static 96 Hours in Freshwater with Cover Letter, R.T.Vanderbilt Co.Inc., 1985

Not reported., Rainbow Trout (Oncorhynchus mykiss), 10000. UG/L, 24 H, Mortality, Water temperature: 13.00 C (55.4 F) C, pH: 7.60, Hardness: 17.00 MG/L.
Results:
No loss of equilibrium observed.
- Lethal Effects of 1888 Chemicals upon Four Species of Fish from Western North America, MacPhee, C., and R. Ruelle, 1969

LC50, Rainbow Trout (Oncorhynchus mykiss), 0.730 PPM, 96 H, Mortality.
Results:
No observed effect.
- Pesticide Ecotoxicity Database (Formerly: Environmental Effects Database (EEDB)), Office of Pesticide Programs, 2000

LC50, Rainbow Trout (Oncorhynchus mykiss), 0.730 PPM, 96 H, Mortality.
Results:
No observed effect.
- Pesticide Ecotoxicity Database (Formerly: Environmental Effects Database (EEDB)), Office of Pesticide Programs, 2000

Effective concentration to {0} % of test organisms, Rainbow Trout (Oncorhynchus mykiss), 3.160 MG/L, 96 H, Mortality, Water temperature: 11.00 C (51.8 F) C, pH: 8.00, Hardness: 205.00 mg/L.
Results:
No observed effect.
- Bioassay Report LC 50, Acute, Static 96 Hours in Freshwater with Cover Letter, R.T.Vanderbilt Co.Inc., 1985

LC50, Rainbow Trout (Oncorhynchus mykiss), 2.880 MG/L, 96 H, Mortality, Water temperature: 11.00 C (51.8 F) C, pH: 8.00, Hardness: 205.00 mg/L.
Results:
No observed effect.
- Bioassay Report LC 50, Acute, Static 96 Hours in Freshwater with Cover Letter, R.T.Vanderbilt Co.Inc., 1985

LC50, Rainbow Trout (Oncorhynchus mykiss), 2.000 MG/L, 24 H, Mortality, Water temperature: 12.00 C (53.6 F) C, pH: 7.30.
Results:
No observed effect.
- Toxicologic Investigation of: Ureka White, Monsanto Co., 1985

LC50, Rainbow Trout (Oncorhynchus mykiss), 1.800 MG/L, 96 H, Mortality, Water temperature: 12.00 C (53.6 F) C, pH: 7.30.
Results:
No observed effect.
- Toxicologic Investigation of: Ureka White, Monsanto Co., 1985

LC50, Rainbow Trout (Oncorhynchus mykiss), 1.800 MG/L, 48 H, Mortality, Water temperature: 12.00 C (53.6 F) C, pH: 7.30.
Results:
No observed effect.
- Toxicologic Investigation of: Ureka White, Monsanto Co., 1985

Effective concentration to {0} % of test organisms, Rainbow Trout (Oncorhynchus mykiss), 1.400 MG/L, 96 H, Mortality, Water temperature: 12.00 C (53.6 F) C, pH: 7.30.
Results:
No observed effect.
- Toxicologic Investigation of: Ureka White, Monsanto Co., 1985

Effective concentration to 50% of test organisms., Water Flea (Daphnia magna), 2.900 PPM, 48 H, Intoxication,.
Results:
No observed effect.
- Pesticide Ecotoxicity Database (Formerly: Environmental Effects Database (EEDB)), Office of Pesticide Programs, 2000

Effective concentration to {0} % of test organisms, Water Flea (Daphnia magna), 10.00 MG/L, 24 H, Mortality, Water temperature: 19.00 C (66.2 F) C, pH: 8.10, Hardness: 220.00 MG/L.
Results:
No observed effect.
- Toxicologic Investigation of: Ureka White, Monsanto Co., 1985

Effective concentration to {0} % of test organisms, Water Flea (Daphnia magna), 18.00 MG/L, 24 H, Mortality, Water temperature: 19.00 C (66.2 F) C, pH: 8.10, Hardness: 220.00 MG/L.
Results:
No observed effect.
- Toxicologic Investigation of: Ureka White, Monsanto Co., 1985

LC50, Water Flea (Daphnia magna), 19.00 MG/L, 48 H, Mortality, Water temperature: 19.00 C (66.2 F) C, pH: 8.10, Hardness: 220.00 MG/L.
Results:
No observed effect.
- Toxicologic Investigation of: Ureka White, Monsanto Co., 1985

Lethal concentration to 84% of test organisms., Water Flea (Daphnia magna), 90.00 MG/L, 24 H, Mortality, Water temperature: 19.00 C (66.2 F) C, pH: 8.10, Hardness:

220.00 MG/L.
Results:
No observed effect.
- Toxicologic Investigation of: Ureka White, Monsanto Co., 1985

LC50, Water Flea (Daphnia magna), 44.00 MG/L, 24 H, Mortality, Water temperature: 19.00 C (66.2 F) C, pH: 8.10, Hardness: 220.00 MG/L.
Results:
No observed effect.
- Toxicologic Investigation of: Ureka White, Monsanto Co., 1985

Lethal concentration to 16% of test organisms., Water Flea (Daphnia magna), 13.00 MG/L, 48 H, Mortality, Water temperature: 19.00 C (66.2 F) C, pH: 8.10, Hardness: 220.00 MG/L.
Results:
No observed effect.
- Toxicologic Investigation of: Ureka White, Monsanto Co., 1985

Lethal concentration to 16% of test organisms., Water Flea (Daphnia magna), 22.00 MG/L, 24 H, Mortality, Water temperature: 19.00 C (66.2 F) C, pH: 8.10, Hardness: 220.00 MG/L.
Results:
No observed effect.
- Toxicologic Investigation of: Ureka White, Monsanto Co., 1985

Lethal concentration to 84% of test organisms., Water Flea (Daphnia magna), 28.00 MG/L, 48 H, Mortality, Water temperature: 19.00 C (66.2 F) C, pH: 8.10, Hardness: 220.00 MG/L.
Results:
No observed effect.
- Toxicologic Investigation of: Ureka White, Monsanto Co., 1985

Not reported., Chinook Salmon (Oncorhynchus tshawytscha), 10000. UG/L, 24 H, Behavior, Water temperature: 11.00 C (51.8 F) C, pH: 7.20, Hardness: 17.00 MG/L.
Results:
Aerated. Tested in polyethylene bags. Conc/only conc tested. Effect: loss of equilibrium occurred in {0-2 H}.
- Lethal Effects of 1888 Chemicals upon Four Species of Fish from Western North America, MacPhee, C., and R. Ruelle, 1969

Not reported., Chinook Salmon (Oncorhynchus tshawytscha), 10000. UG/L, 24 H, Mortality, Water temperature: 11.00 C (51.8 F) C, pH: 7.20, Hardness: 17.00 MG/L.
Results:
Affected fish stopped schooling behavior.
Affected fish lost equilibrium prior to death.
- Lethal Effects of 1888 Chemicals upon Four Species of Fish from Western North America, MacPhee, C., and R. Ruelle, 1969

Not reported., Chinook Salmon (Oncorhynchus tshawytscha), 10000. UG/L, 24 H, Behavior, pH: 7.60, Water Hardness: 17.00 MG/L.
Results:
Aerated. Tested in polyethylene bags. Conc/only conc tested. Effect: loss of equilibrium occurred in {0-0.5 H}.

- Lethal Effects of 1888 Chemicals upon Four Species of Fish from Western North America, MacPhee, C., and R. Ruelle, 1969

Not reported., Chinook Salmon (Oncorhynchus tshawytscha), 10000. UG/L, 24 H, Mortality, pH: 7.60, Water Hardness: 17.00 MG/L.
Results:
No observed effect.
- Lethal Effects of 1888 Chemicals upon Four Species of Fish from Western North America, MacPhee, C., and R. Ruelle, 1969

Not reported., Coho Salmon,Silver Salmon (Oncorhynchus kisutch), 10000. UG/L, 24 H, Behavior, Water temperature: 11.00 C (51.8 F) C, pH: 7.20, Hardness: 17.00 MG/L.
Results:
Aerated. Tested in polyethylene bags. Conc/only conc tested. Effect: loss of equilibrium occurred in {0-2 H}.
- Lethal Effects of 1888 Chemicals upon Four Species of Fish from Western North America, MacPhee, C., and R. Ruelle, 1969

Not reported., Coho Salmon,Silver Salmon (Oncorhynchus kisutch), 10000. UG/L, 24 H, Mortality, Water temperature: 11.00 C (51.8 F) C, pH: 7.20, Hardness: 17.00 MG/L.
Results:
No observed effect.
- Lethal Effects of 1888 Chemicals upon Four Species of Fish from Western North America, MacPhee, C., and R. Ruelle, 1969

Not reported., Coho Salmon,Silver Salmon (Oncorhynchus kisutch), 10000. UG/L, 24 H, Behavior, pH: 7.60, Water Hardness: 17.00 MG/L.
Results:
Aerated. Tested in polyethylene bags. Conc/only conc tested. Effect: loss of equilibrium occurred in {0-0.5 H}.
- Lethal Effects of 1888 Chemicals upon Four Species of Fish from Western North America, MacPhee, C., and R. Ruelle, 1969

Not reported., Coho Salmon,Silver Salmon (Oncorhynchus kisutch), 10000. UG/L, 24 H, Mortality, pH: 7.60, Water Hardness: 17.00 MG/L.
Results:
No observed effect.
- Lethal Effects of 1888 Chemicals upon Four Species of Fish from Western North America, MacPhee, C., and R. Ruelle, 1969

Not reported., Coho Salmon,Silver Salmon (Oncorhynchus kisutch), 10000. UG/L, 24 H, Behavior, Water temperature: 13.00 C (55.4 F) C, pH: 7.60, Hardness: 17.00 MG/L.
Results:
Aerated. Tested in polyethylene bags. Conc/only conc tested. Effect: loss of equilibrium occurred in {0-0.5 H}.
- Lethal Effects of 1888 Chemicals upon Four Species of Fish from Western North America, MacPhee, C., and R. Ruelle, 1969

Not reported., Coho Salmon,Silver Salmon (Oncorhynchus kisutch), 10000. UG/L, 24 H, Mortality, Water temperature: 13.00 C (55.4 F) C, pH: 7.60, Hardness: 17.00 MG/L.
Results:
No observed effect.
- Lethal Effects of 1888 Chemicals upon Four Species of Fish from Western North

America, MacPhee, C., and R. Ruelle, 1969

Not reported., Northern Squawfish (Ptychocheilus oregonensis), 10000. UG/L, 24 H, Behavior, Water temperature: 11.00 C (51.8 F) C, pH: 7.20, Hardness: 17.00 MG/L.
Results:
Aerated. Tested in polyethylene bags. Conc/only conc tested. Effect: loss of equilibrium occurred in {0-2 H}.
- Lethal Effects of 1888 Chemicals upon Four Species of Fish from Western North America, MacPhee, C., and R. Ruelle, 1969

Not reported., Northern Squawfish (Ptychocheilus oregonensis), 10000. UG/L, 24 H, Mortality, Water temperature: 11.00 C (51.8 F) C, pH: 7.20, Hardness: 17.00 MG/L.
Results:
Affected fish stopped schooling behavior.
Affected fish lost equilibrium prior to death.
- Lethal Effects of 1888 Chemicals upon Four Species of Fish from Western North America, MacPhee, C., and R. Ruelle, 1969

Not reported., Northern Squawfish (Ptychocheilus oregonensis), 10000. UG/L, 24 H, Behavior, pH: 7.60, Water Hardness: 17.00 MG/L.
Results:
Aerated. Tested in polyethylene bags. Conc/only conc tested. Effect: loss of equilibrium occurred in {0-0.5 H}.
- Lethal Effects of 1888 Chemicals upon Four Species of Fish from Western North America, MacPhee, C., and R. Ruelle, 1969

Not reported., Northern Squawfish (Ptychocheilus oregonensis), 10000. UG/L, 24 H, Mortality, Water temperature: 13.00 C (55.4 F) C, pH: 7.60, Hardness: 17.00 MG/L.
Results:
No loss of equilibrium observed.
- Lethal Effects of 1888 Chemicals upon Four Species of Fish from Western North America, MacPhee, C., and R. Ruelle, 1969

Effective concentration to 50% of test organisms., Green Algae (Pseudokirchneriella subcapitata), 1.000 MG/L, 48 H, Population, Water temperature: 24.00 C (75.2 F) C, pH: 7.80.
Results:
No observed effect.
- Toxicologic Investigation of: Ureka White, Monsanto Co., 1985

Effective concentration to 50% of test organisms., Green Algae (Pseudokirchneriella subcapitata), 2.000 MG/L, 24 H, Population, Water temperature: 24.00 C (75.2 F) C, pH: 7.80.
Results:
No observed effect.
- Toxicologic Investigation of: Ureka White, Monsanto Co., 1985

Effective concentration to 50% of test organisms., Green Algae (Pseudokirchneriella subcapitata), 0.400 MG/L, 96 H, Population, Water temperature: 24.00 C (75.2 F) C, pH: 7.80.
Results:
No observed effect.
- Toxicologic Investigation of: Ureka White, Monsanto Co., 1985

Effective concentration to 50% of test organisms., Green Algae (Pseudokirchneriella subcapitata), 0.400 MG/L, 72 H, Population, Water temperature: 24.00 C (75.2 F) C, pH: 7.80.
Results:
No observed effect.
- Toxicologic Investigation of: Ureka White, Monsanto Co., 1985

Effective concentration to 50% of test organisms., Green Algae (Pseudokirchneriella subcapitata), 0.300 MG/L, 96 H, Population, Water temperature: 24.00 C (75.2 F) C, pH: 7.80.
Results:
No observed effect.
- Toxicologic Investigation of: Ureka White, Monsanto Co., 1985

13. Disposal Considerations

Waste Disposal Method: Dispose of contents/container in accordance with local/regional/national/international regulation.

14. Transport Information

LAND TRANSPORT (US DOT):

DOT Proper Shipping Name: Not-Restricted
DOT Hazard Class:
UN/NA Number:

LAND TRANSPORT (European ADR/RID):

ADR/RID Shipping Name: Not-Restricted
UN Number:
Hazard Class:

MARINE TRANSPORT (IMDG/IMO):

IMDG/IMO Shipping Name: Not-Restricted
UN Number:
Hazard Class:
Packing Group:
IMDG MFAG Number:
IMDG EMS Page:
Marine Pollutant: No

AIR TRANSPORT (ICAO/IATA):

ICAO/IATA Shipping Name: Not-Restricted

15. Regulatory Information

EPA SARA (Superfund Amendments and Reauthorization Act of 1986) Lists

CAS #	Hazardous Components (Chemical Name)	S. 302 (EHS)	S. 304 RQ	S. 313 (TRI)
7732-18-5	Water	No	No	No
107-21-1	Ethylene glycol	No	Yes 5000 LB	Yes
1310-73-2	Sodium hydroxide	No	Yes 1000 LB	No
7631-99-4	Sodium nitrate	No	No	Yes-Cat. N511
2492-26-4	2(3H)-Benzothiazolethione, Sodium salt	No	No	No
68439-51-0	Alcohols, C12-14, ethoxylated propoxylated	No	No	No
25322-68-3	Polyethylene glycol	No	No	No
NA	(Trade Secret)	No	No	No
126950-60-5	Alcohols, C12-14-secondary	No	No	No

9041-33-2	Oxirane, methyl-, polymer with oxirane, mono-2-propenyl ether	No	No	No
NA	Dye	No	No	No

CAS #	Hazardous Components (Chemical Name)	Other US EPA or State Lists
7732-18-5	Water	CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: No; CA TAC, Title 8: No; MA Oil/HazMat: No; MI CMR, Part 5: No; NC TAP: No; NJ EHS: No; NY Part 597: No; PA HSL: No; SC TAP: No; WI Air: No
107-21-1	Ethylene glycol	CAA HAP,ODC: HAP; CWA NPDES: No; TSCA: Yes - Inventory, 4 Test; CA PROP.65: No; CA TAC, Title 8: TAC, Title 8; MA Oil/HazMat: No; MI CMR, Part 5: Part 5; NC TAP: Yes; NJ EHS: Yes - 0878; NY Part 597: Yes; PA HSL: Yes - E; SC TAP: Yes; WI Air: Yes
1310-73-2	Sodium hydroxide	CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: No; CA TAC, Title 8: TAC, Title 8; MA Oil/HazMat: Yes; MI CMR, Part 5: Part 5; NC TAP: No; NJ EHS: Yes - 1706; NY Part 597: Yes; PA HSL: Yes - E; SC TAP: Yes; WI Air: Yes
7631-99-4	Sodium nitrate	CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory, 8A CAIR; CA PROP.65: No; CA TAC, Title 8: No; MA Oil/HazMat: No; MI CMR, Part 5: No; NC TAP: No; NJ EHS: Yes - Cat.; NY Part 597: No; PA HSL: Yes - 1; SC TAP: No; WI Air: No
2492-26-4	2(3H)-Benzothiazolethione, Sodium salt	CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: No; CA TAC, Title 8: No; MA Oil/HazMat: No; MI CMR, Part 5: No; NC TAP: No; NJ EHS: No; NY Part 597: No; PA HSL: No; SC TAP: No; WI Air: No
68439-51-0	Alcohols, C12-14, ethoxylated propoxylated	CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: No; CA TAC, Title 8: No; MA Oil/HazMat: No; MI CMR, Part 5: No; NC TAP: No; NJ EHS: No; NY Part 597: No; PA HSL: No; SC TAP: No; WI Air: No
25322-68-3	Polyethylene glycol	CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: No; CA TAC, Title 8: No; MA Oil/HazMat: No; MI CMR, Part 5: No; NC TAP: No; NJ EHS: No; NY Part 597: No; PA HSL: No; SC TAP: No; WI Air: No
NA	(Trade Secret)	CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: No; CA TAC, Title 8: No; MA Oil/HazMat: No; MI CMR, Part 5: No; NC TAP: No; NJ EHS: No; NY Part 597: No; PA HSL: No; SC TAP: No; WI Air: No
126950-60-5	Alcohols, C12-14-secondary	CAA HAP,ODC: No; CWA NPDES: No; TSCA: No; CA PROP.65: No; CA TAC, Title 8: No; MA Oil/HazMat: No; MI CMR, Part 5: No; NC TAP: No; NJ EHS: No; NY Part 597: No; PA HSL: No; SC TAP: No; WI Air: No
9041-33-2	Oxirane, methyl-, polymer with oxirane, mono-2-propenyl ether	CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: No; CA TAC, Title 8: No; MA Oil/HazMat: No; MI CMR, Part 5: No; NC TAP: No; NJ EHS: No; NY Part 597: No; PA HSL: No; SC TAP: No; WI Air: No
NA	Dye	CAA HAP,ODC: No; CWA NPDES: No; TSCA: No; CA PROP.65: No; CA TAC, Title 8: No; MA Oil/HazMat: No; MI CMR, Part 5: No; NC TAP: No; NJ EHS: No; NY Part 597: No; PA HSL: No; SC TAP: No; WI Air: No

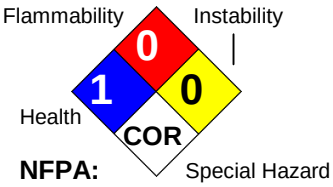
CAS #	Hazardous Components (Chemical Name)	International Regulatory Lists
7732-18-5	Water	Canadian DSL: Yes; Canadian NDSL: No; Taiwan TCSCA: Yes

107-21-1	Ethylene glycol	Canadian DSL: Yes; Canadian NDSL: No; Taiwan TCSCA: Yes
1310-73-2	Sodium hydroxide	Canadian DSL: Yes; Canadian NDSL: No; Taiwan TCSCA: Yes
7631-99-4	Sodium nitrate	Canadian DSL: Yes; Canadian NDSL: No; Taiwan TCSCA: Yes
2492-26-4	2(3H)-Benzothiazolethione, Sodium salt	Canadian DSL: Yes; Canadian NDSL: No; Taiwan TCSCA: Yes
68439-51-0	Alcohols, C12-14, ethoxylated propoxylated	Canadian DSL: Yes; Canadian NDSL: No; Taiwan TCSCA: Yes
25322-68-3	Polyethylene glycol	Canadian DSL: Yes; Canadian NDSL: No; Taiwan TCSCA: Yes
NA	(Trade Secret)	Canadian DSL: Yes; Canadian NDSL: No; Taiwan TCSCA: Yes
126950-60-5	Alcohols, C12-14-secondary	Canadian DSL: No; Canadian NDSL: No; Taiwan TCSCA: Yes
9041-33-2	Oxirane, methyl-, polymer with oxirane, mono-2-propenyl ether	Canadian DSL: Yes; Canadian NDSL: No; Taiwan TCSCA: Yes
NA	Dye	Canadian DSL: No; Canadian NDSL: No; Taiwan TCSCA: No

16. Other Information

Revision Date: 10/09/2015

Hazard Rating System:



Additional Information About This Product: Banned in CA.

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