



Safety Data Sheet

Bestwelds Green Coolant
905-16-25503

SECTION 1: IDENTIFICATION

Trade Name Green Coolant
Product Number 905-16-25503, ORS-25503-1
ORS-25503-9

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

Details of the Supplier of the Safety Data Sheet

Manufacturer: Weld-Aid Products
14650 Dequindre
Detroit , Michigan
Information Phone Number: +1 (313) 883-6977
+1 (313) 883-4930
E-mail info@weldaid.com

Emergency Telephone Number
Emergency Spill Information +1 (800) 255-3924

SDS Date of Preparation: May 7, 2014

SECTION 2: HAZARDS IDENTIFICATION

US OSHA Classification (29CFR1910.1200):

Physical:	Health:
Not hazardous	Acute Toxicity Category 4 Specific Target Organ Toxicity – Repeat Exposure Category 2

Warning!



Hazard Phrases

Harmful if swallowed
May cause damage to kidneys through prolonged or repeated exposure.

Preventative Phrases

Do not breathe mist, vapors or spray.
Wash thoroughly after handling.
Do not eat, drink or smoke when using this product.
IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell.
Rinse mouth.
IF exposed or concerned: Call a POISON CENTER or doctor.
Store locked up.
Dispose of contents and container in accordance with local and national regulations.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS# /	%
Ethylene Glycol	107-21-1	60%

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SECTION 4: FIRST AID MEASURES

Description of First Aid Measures

Eye: Rinse thoroughly with water, holding the eye lids open to be sure the material is washed out. Get medical attention if irritation persists.

Skin: Remove contaminated clothing. Wash skin with soap and water. If skin irritation develops, seek medical attention. Launder clothing before reuse.

Inhalation: Remove to fresh air. If breathing has stopped administer artificial respiration. If breathing is difficult, have medical personnel administer oxygen. Get medical attention.

Ingestion: Seek immediate medical attention. Immediately call local poison control center or go to an emergency department. Never give anything by mouth to or induce vomiting in an unconscious or drowsy person.

Most Important symptoms and effects, both acute and delayed: May cause mild eye and skin irritation. Inhalation of vapors or mists may cause upper respiratory tract irritation and central nervous system effects. Ingestion may cause gastrointestinal irritation, nausea, vomiting dizziness, drowsiness, abdominal and back pain, intoxication, slurred speech, stupor and coma. Kidney damage may occur.

Indication of any immediate medical attention and special treatment needed: Immediate medical attention is required for ingestion. The principal toxic effects of ethylene glycol, when swallowed, are kidney damage and metabolic acidosis. The combination of metabolic acidosis, an osmol gap and oxalate crystals in the urine is evidence of ethylene glycol poisoning.

SECTION 5: FIRE FIGHTING MEASURES

Extinguishing Media:

Use water spray, carbon dioxide, dry chemical or foam to extinguish fire. A steady stream of water may cause frothing.

Special Hazards Arising from the Substance or Mixture

Unusual Fire and Explosion Hazards: None known.

Hazardous Decomposition Products: Combustion may produce carbon monoxide and carbon dioxide.

Advice for Fire-Fighters:

Firefighters should always wear self-contained breathing apparatus and full protective clothing for fires involving chemicals or in confined spaces. Cool fire exposed containers with water.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures:

Wear appropriate protective clothing and equipment. Ensure adequate ventilation.

Environmental Precautions:

Avoid release to the environment. Report spill as required by local and federal regulations.

Methods and Material for Containment and Cleaning Up:

Collect with an inert material and place in an appropriate container for disposal. Wash spill site with water.

Reference to Other Sections:

Refer to Section 8 for protective equipment and Section 15 for disposal considerations.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling:

Avoid contact with the eyes and prolonged contact with skin. Wash thoroughly after handling. Use with adequate ventilation.

Conditions for Safe Storage, Including any Incompatibilities

Store in a cool, dry location. Store in original container. Store away from oxidizers.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

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Chemical Name	Exposure Limits
Ethylene glycol	100 mg/m ³ Ceiling ACGIH TLV

Exposure Controls:

Engineering Controls: Good general room ventilation (equivalent to outdoors) should be adequate under normal conditions. If exposures are excessive increased mechanical ventilation such as local exhaust may be required.

Respiratory Protection: None required for normal use. If exposures are excessive, a NIOSH approved respirator with organic vapor cartridges and a particulate pre-filter may be used. Selection of respiratory protection depends on the contaminant type, form and concentration. Select in accordance with OSHA 1910.134 and good Industrial Hygiene practice.

Skin Protection: Impervious gloves such as neoprene or PVC are recommended if needed to avoid contact.

Eye Protection: Splash proof goggles are recommended if contact is possible.

Other: Impervious clothing as needed to minimize skin contact. Suitable washing and eye flushing facilities should be available in the work area. Contaminated clothing should be removed and laundered before re-use.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Clear, liquid	Vapor Density: Not available
Odor: Odorless	Specific Gravity: 1.064
Odor Threshold: 60.3 mg/m ³ (ethylene glycol)	Water Solubility: Miscible
pH: Neutral	Octanol/Water Partition Coefficient: Not available
Melting Point/Freezing Point: -12.69 °C / 9.2°F (ethylene glycol)	Autoignition Temperature: Not applicable
Boiling Point: 317°F / 158.5°C	Decomposition Temperature: None
Flash Point: Not flammable	Viscosity: Not available
Evaporation Rate: <1	Explosion Properties: Not explosive
Flammable Limits: LEL: 3.2% (ethylene glycol) UEL: Not applicable	Oxidizing Properties: Not oxidizing
Vapor Pressure: 12.215 mmHg @ 68°F	

Other Information:

None

SECTION 10: STABILITY AND REACTIVITY

Reactivity:

Not reactive under normal conditions of use.

Chemical Stability:

Stable under normal storage and handling conditions.

Possibility of Hazardous Reactions:

Reaction with strong oxidizers will generate heat.

Conditions to Avoid:

None known.

Incompatible Materials:

Avoid oxidizers.

Hazardous Decomposition Products:

Thermal decomposition may produce carbon monoxide and carbon dioxide.

SECTION 11: TOXICOLOGICAL INFORMATION

Information on Toxicological Effects:

Eye: May cause mild irritation with redness and tearing.

Skin: Prolonged skin contact may cause skin irritation.

Inhalation: Vapors or mists may cause upper respiratory tract irritation with headache, nausea, vomiting, dizziness, and unusual eye movements, particularly if the material is heated.

Ingestion: Ingestion may cause abdominal pain, nausea, vomiting, dizziness, drowsiness, malaise, blurring of vision,

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irritability, back pain, decrease in urine output, kidney failure, and central nervous system effects, including irregular eye movements, convulsions and coma. Cardiac failure, pulmonary edema and severe kidney damage may develop from swallowing ethylene glycol. 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. May be fatal.

Acute Toxicity Values: No data available for the product. Acute Toxicity Estimate: Oral 833 mg/kg
Ethylene Glycol: Oral rat LD50 4700 mg/kg; Dermal rabbit LD50 9530 mg/kg.

Irritation: Ethylene glycol is not irritation to rabbit skin. Ethylene glycol is not irritating to rabbit eyes.

Corrosivity: This is not a corrosive product.

Sensitization: Ethylene glycol was not irritating in a guinea pig maximization test.

Repeat Dose Toxicity: Ethylene glycol can cause kidney toxicity via the formation of calcium oxalate crystals in a variety of species, including humans. Numerous repeated dose studies conducted in rats have indicated that male rats are more susceptible than female rats.

Carcinogen Status: None of the components are listed as a carcinogen by IARC, NTP, ACGIH, OSHA or EU Substances Directive.

Germ Cell Mutagenicity: 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.

Toxicity for Reproduction: 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 perorally.

SECTION 12: ECOLOGICAL INFORMATION

Toxicity:

Ethylene glycol: .96 hr LC50 Pimephales promelas 72860 mg/L; 48 hr EC50 daphnia magna >100 mg/L

Persistence and Degradability:

Ethylene glycol is readily biodegradable.

Bioaccumulative Potential::

Ethylene glycol has a BCF of 10.

Mobility in Soil:

Ethylene glycol is highly mobility in soil.

Other Adverse Effects:

None known.

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SECTION 13: DISPOSAL INFORMATION

Waste Treatment Methods

Dispose in accordance with local and national environmental regulations.

SECTION 14: TRANSPORT INFORMATION

	41.1 UN Number	41.2 UN Proper Shipping Name	14.3 Transport Hazard Class(s)	14.4 Packing Group	14.5 Environmental Hazards
US DOT		Not Regulated*			
Canada TDG		Not Regulated			
IMDG		Not Regulated			

*If shipped in a container above the RQ: RQ, Environmentally hazardous substance, liquid, n.o.s. (Ethylene glycol), UN3082, 9, PGIII

Special Precautions for User:

None

Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code:

Not applicable – product is transported only in packaged form.

SECTION 15: REGULATORY INFORMATION

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

International Inventories:

US EPA TSCA Inventory: All of the components are listed on the TSCA inventory.

Canadian Environmental Protection Act: All of the ingredients are listed on the Canadian Domestic Substances List.

U.S. REGULATIONS

CERCLA: Spills of this product over the RQ (reportable quantity) must be reported to the National Response Center. The RQ for this product, based on the RQ for Ethylene Glycol (60% maximum) of 5,000 lbs, is 8,333 lbs. Many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

EPA SARA 302: This product does not contain chemicals regulated under SARA Section 302.

EPA SARA 311 Hazard Classification: Chronic Health

EPA SARA 313: This product contains the following chemicals that are regulated under SARA Title III, section 313:

Ethylene Glycol	107-21-1	60%
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California Proposition 65: This product contains the following chemicals which are known to the State of California to cause cancer, reproductive toxicity or birth defects: None

CANADIAN REGULATIONS

Canadian Environmental Protection Act: All of the ingredients are listed on the Canadian Domestic Substances List.

WHMIS Classification: Class D - Division 2A

This product has been classified in accordance with the hazard criteria of the *Controlled Products Regulations* and the MSDS contains all the information required by the *Controlled Products Regulations*.

SECTION 16: OTHER INFORMATION

SDS Revision History:

Effective Date: May 7, 2014

Supersedes Date: New SDS

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Revision Summary: New SDS

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