

SAFETY DATA SHEET

1. Identification

Product identifier Heavy Duty Extended Life Nitrite, Amine, Phosphate, Silicate (NAPS) Free Premium

Antifreeze/Coolant

Other means of identification

Product code 234

Recommended use Coolant

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Company name Heritage-Crystal Clean, LLC
Address 2175 Point Boulevard Suite 375

Elgin, IL 60123-9211

Telephone Technical Questions 877-938-7948

Website www.crystal-clean.com

E-mail cc_ehs@crystal-clean.com

Emergency phone number Chemtrec 800-424-9300

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards Acute toxicity, oral Category 4

Serious eye damage/eye irritation Category 2A

Specific target organ toxicity, repeated Category 2 (Kidney)

exposure

OSHA defined hazards Not classified.

Label elements



Signal word Warning

Hazard statement Harmful if swallowed. Causes eye irritation. May cause damage to organs (Kidney) through

prolonged or repeated exposure.

Precautionary statement

Prevention Do not breathe mist or vapor. Wash thoroughly after handling. Do not eat, drink or smoke when

using this product.

Response Get medical advice/attention if you feel unwell. Rinse mouth. If eye irritation persists: Get

medical advice/attention.

Storage Store away from incompatible materials.

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

Hazard(s) not otherwise

classified (HNOC)

None known.

3. Composition/information on ingredients

Mixtures

| Chemical name | CAS number | % |
|-------------------|------------|-----|
| Ethylene Glycol | 107-21-1 | >45 |
| Diethylene glycol | 111-46-6 | <5 |

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3164-85-0 <3

Composition comments

Components not listed are either non-hazardous or are below reportable limits.

4. First-aid measures

Inhalation

If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. Call a physician if symptoms develop or persist.

Skin contact

Rinse skin with water/shower. Get medical attention if irritation develops and persists.

Eye contact

Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

Ingestion

Rinse mouth. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Get medical advice/attention if you feel unwell.

Most important symptoms/effects, acute and delayed Abdominal pain. Convulsions. Edema. Dizziness. Nausea, vomiting. Irritation of eyes and mucous membranes. Irritation of nose and throat. Exposed individuals may experience eye tearing, redness, and discomfort. Skin irritation. Prolonged exposure may cause chronic effects.

Indication of immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

General information

If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.

5. Fire-fighting measures

Suitable extinguishing media Unsuitable extinguishing media Alcohol resistant foam. Water fog. Dry chemical powder. Carbon dioxide (CO2).

Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical

During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire fighting equipment/instructions

Move containers from fire area if you can do so without risk.

Specific methods General fire hazards Use standard firefighting procedures and consider the hazards of other involved materials. Will burn if involved in a fire.

6. Accidental release measures

Personal precautions. protective equipment and emergency procedures

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

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Methods and materials for containment and cleaning up

Large Spills: Stop the flow of material, if this is without risk. Use water spray to reduce vapors or divert vapor cloud drift. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Prevent entry into waterways, sewer, basements or confined areas. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the

SDS.

Environmental precautions

Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling

Do not breathe mist or vapor. Avoid contact with eyes. Avoid prolonged exposure. Do not taste or swallow. When using, do not eat, drink or smoke. Provide adequate ventilation. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Observe good industrial hygiene practices. Use care in handling/storage.

Conditions for safe storage, including any incompatibilities

Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

US. ACGIH Threshold Limit Values

| Components | Туре | Value | Form |
|--------------------------------|---------|-----------|----------|
| Ethylene Glycol (CAS 107-21-1) | Ceiling | 100 mg/m3 | Aerosol. |

US. Workplace Environmental Exposure Level (WEEL) Guides

| Components | Туре | Value | |
|-----------------------------|------|----------|--|
| Diethylene glycol (CAS 111- | TWA | 10 mg/m3 | |

46-6)

Biological limit values

No biological exposure limits noted for the ingredient(s).

Appropriate engineering

controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust

ventilation,

or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles). Wear a chemical respirator with organic

vapor cartridge and full face piece if the atmosphere cannot be maintained under the exposure

Skin protection limits.

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Hand protection Wear appropriate chemical resistant gloves.

Other Wear suitable protective clothing. Use of an impervious apron is recommended.

Respiratory protectionChemical respirator with organic vapor cartridge and full facepiece. **Thermal hazards**Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

Keep away from food and drink. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash

work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance

Physical state Liquid.
Form Liquid.
Color Yellow.
Odor Mild.

Odor threshold Not available.

pH 8 – 9

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Melting point/freezing point Not available.

Initial boiling point and boiling 265 °F (129.44 °C) 50% water using 15 lb radiator cap

range

Flash point > 200.0 °F (> 93.3 °C) Pensky-Martens Closed Cup

Evaporation rate Not available.

Flammability (solid, gas) Not available.

Upper/lower flammability or explosive limits
Flammability limit - lower Not available.

(%)

Flammability limit - upper

Not available.

(%)

Explosive limit - lower (%) Not available.

Explosive limit - upper (%) Not available.

Vapor pressure Not available.

Vapor density > 1

Relative density 1.06 - 1.09 at 68°F

Solubility(ies)

Solubility (water) Completely Soluble

Partition coefficient (n-

Not available.

octanol/water)

Auto-ignition temperature Not available.

Decomposition temperature Not available.

Viscosity Not available.

Other information

Bulk density 8.9 lbs/gal

10. Stability and reactivity

ReactivityThe product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability Material is stable under normal conditions.

Possibility of hazardous

reactions

No dangerous reaction known under conditions of normal use.

Conditions to avoidAvoid temperatures exceeding the flash point. Contact with incompatible materials.

Incompatible materials Strong oxidizing agents.

Hazardous decomposition Carbon oxides.

products

11. Toxicological information

Information on likely routes of exposure

Inhalation May cause damage to organs through prolonged or repeated exposure by inhalation. Prolonged

inhalation may be harmful.

Skin contact No adverse effects due to skin contact are expected.

Eye contact Causes eye irritation. **Ingestion** Harmful if swallowed.

Symptoms related to the Abdominal pain. Convulsions. Edema. Dizziness. Nausea, vomiting. Irritation of nose and throat. physical, chemical and Irritation of eyes and mucous membranes. Exposed individuals may experience eye tearing, toxicological characteristics redness, and discomfort. Skin irritation.

Information on toxicological effects

Acute toxicity Harmful if swallowed.

Components Species Test Results

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Ethylene Glycol (CAS 107-21-1)

Acute

Dermal

LD50 Rabbit 9530 mg/kg

Oral

LD50 Rat 4700 mg/kg

Skin corrosion/irritation Prolonged skin contact may cause temporary irritation. Serious

eye damage/eye Causes eye irritation. irritation

Respiratory or skin sensitization

Respiratory sensitization Not available.

Skin sensitization This product is not expected to cause skin sensitization.

Germ cell mutagenicityNo data available to indicate product or any components present at greater than 0.1% are

mutagenic or genotoxic.

Carcinogenicity This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Reproductive toxicityThis product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity -

single exposure

Not classified.

Specific target organ toxicity -

repeated exposure

May cause damage to organs (Kidney) through prolonged or repeated exposure.

Aspiration hazard Not available.

Chronic effects Prolonged inhalation may be harmful. May cause damage to organs through prolonged or

repeated exposure.

12. Ecological information

Ecotoxicity The product is not classified as environmentally hazardous. However, this does not exclude the

possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components Species Test Results

Ethylene Glycol (CAS 107-21-1)

Aquatic

Fish LC50 Fathead minnow (Pimephales promelas) 8050 mg/l, 96 hours

Persistence and degradability No data is available on the degradability of this product.

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

Ethylene Glycol (CAS 107-21-1) -1.36

Mobility in soil Expected to be slightly to moderately mobile in soil.

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation

potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of

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

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste codeThe waste code should be assigned in discussion between the user, the producer and the waste

disposal company.

Waste from residues / unused

products

Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see:

Disposal instructions).

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or disposal.

Since emptied containers may retain product residue, follow label warnings even after container

is emptied.

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14. Transport information

DOT

Not regulated as dangerous goods.

Non Bulk packages (<10000 pounds) are not regulated as dangerous goods.

DOT BULK

BULK

UN number NA3082

UN proper shipping name Other regulated substances, liquid n.o.s. (Ethylene glycol RQ = 5000 LBS)

Transport hazard classe(es)

Class 9
Label(s) 9
Packing group III

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Special provisions IB3, T2, TP1

Packaging exceptions155Packaging non bulk203Packaging bulk241Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Not available.

Annex II of MARPOL 73/78 and the IBC Code

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15. Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication

Standard, 29 CFR 1910.1200.

All components are on the U.S. EPA TSCA Inventory List.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

CERCLA Hazardous Substance List (40 CFR 302.4)

Ethylene Glycol (CAS 107-21-1) LISTED

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - Yes

Delayed Hazard - Yes Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous Yes

chemical

SARA 313 (TRI reporting)

Chemical nameCAS number% by wt.Ethylene Glycol107-21-1>45

Other Federal Regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Ethylene Glycol (CAS 107-21-1)

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention

(40CFR68.130)

Not regulated.

Safe Drinking Water Act Not regulated.

(SDWA)
US state regulations

or other reproductive harm. US. Massachusetts RTK - Substance List

Ethylene Glycol (CAS 107-21-1)

US. New Jersey Worker and Community Right-to-Know Act

Ethylene Glycol (CAS 107-21-1)

US. Pennsylvania Worker and Community Right-to-Know Law

Diethylene glycol (CAS 111-46-6) Ethylene Glycol (CAS 107-21-1)

US. Rhode Island RTK

Ethylene Glycol (CAS 107-21-1)

US. - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance

Ethylene glycol (CAS 107-21-1)

International Inventories

| Country(s) or region | Inventory name | On inventory (yes/no)* |
|----------------------|----------------------------------------------------|------------------------|
| Australia | Australian Inventory of Chemical Substances (AICS) | Yes |
| Canada | Domestic Substances List (DSL) | Yes |
| Canada | Non-Domestic Substances List (NDSL) | No |

WARNING: This product contains a chemical known to the State of California to cause birth defects

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China Inventory of Existing Chemical Substances in China (IECSC)

Europe European Inventory of Existing Commercial Chemical

Yes

Substances (EINECS)

EuropeEuropean List of Notified Chemical Substances (ELINCS)NoJapanInventory of Existing and New Chemical Substances (ENCS)YesKoreaExisting Chemicals List (ECL)YesNew ZealandNew Zealand InventoryYesPhilippinesPhilippine Inventory of Chemicals and Chemical SubstancesYes

(PICCS)

United States & Puerto Rico Toxic Substances Control Act (TSCA) Inventory

Yes

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date31-August-2015Revision date25-September-2017

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HMIS® ratings Health: 2

Flammability: 1 Physical hazard: 0



NFPA ratings

Disclaimer Heritage-Crystal Clean, LLC cannot anticipate all conditions under which this information and its

product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently

available.

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