

# SAFETY DATA SHEET

## 1. Identification

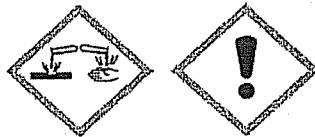
Product identifier	<b>RESTORE PLUS - ACID COOLING SYSTEM CLEANER</b>
Other means of identification	
SDS number	LT16551
Product code	CC2637 (55 gallon / 208 L Drum); CC2638 (1 gallon / 3.785 L)
Recommended use	Radiator cleaner for removing heavy rust and scale, oil contaminants and fuel contaminants.
Recommended restrictions	No restrictions on use known.
Chemical family	Mixture of: Water; Surfactant; Acids; Sequesterant
Manufacturer	
Company name	Cummins Filtration
Address	1200 Fleetguard Road Cookeville, TN, U.S.A. 38506
Telephone	(931) 526 9551
Website	www.cumminsfiltration.com
E-Mail	fleetmaster.us@cummins.com
Supplier information	Refer to Manufacturer
Emergency phone number	Chemtrec 1-800-424-9300 (Within Continental U.S.); Chemtrec 703-527-3887 (Outside U.S.).

## 2. Hazard(s) Identification

This material is classified as hazardous under OSHA regulations (29CFR 1910.1200) (Hazcom 2012).

Physical hazards	This mixture does not meet the classification criteria according to OSHA Hazcom 2012.
Health hazards	Skin corrosion/irritation - Category 2 Eye damage/irritation - Category 1 Specific target organ toxicity - single exposure - Category 3 (Respiratory irritation)
Environmental hazards	Not currently regulated by OSHA, refer to Section 12 for additional information.
OSHA defined hazards	This substance does not meet the classification criteria according to OSHA Hazcom 2012.

### Label elements



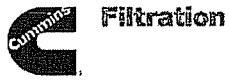
Signal Word	<b>DANGER!</b>
Hazard statement(s)	Causes skin irritation. Causes serious eye damage. May cause respiratory irritation.

### Precautionary statement(s)

**Prevention** Avoid breathing mist or vapor. Wash hands and face thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear protective gloves and eye/face protection.

**Response** IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs, get medical advice/attention. Take off contaminated clothing and wash it before reuse.  
IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTRE or doctor/physician.

**Storage** Store in a well-ventilated place. Keep container tightly closed. Store locked up.



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**Disposal** Dispose of contents/container in accordance with local regulation.

**Hazard(s) not otherwise Classified (HNOC)** No OSHA defined hazard classes.  
Other hazards which do not result in classification:  
Contact with metals may release small amounts of flammable hydrogen gas. Toxic fumes, gases or vapours may evolve on burning. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Environmental precautions: Harmful to aquatic life with long lasting effects. Avoid release to the environment. See ECOLOGICAL INFORMATION, Section 12.

**Supplemental Information** Avoid contact with eyes, skin and clothing. Keep away from incompatibles.

### 3. Composition/information on ingredients

#### Mixture

Chemical name	Common name and synonyms	CAS number	Concentration (%)
Citric acid	2-Hydroxypropanetricarboxylic acid	77-92-9	10.0 - 25.0
Nonylphenol, ethoxylated	Polyethylene glycol nonylphenyl ether	9016-45-9	5.0 - 10.0
Alcohols, C6-10, ethoxylated propoxylated	Not available.	68987-81-5	1.0 - 5.0
Alcohols, C8-10, ethoxylated propoxylated	Not available.	68603-25-8	1.0 - 5.0
Trisodium Hydroxyethylenediaminetriacetate	Trisodium HEDTA	139-89-9	1.0 - 3.0
Phosphoric acid	Orthophosphoric acid Hydrogen Phosphate	7664-38-2	0.1 - 0.6

The exact concentrations of the above listed chemicals are being withheld as a trade secret.

### 4. First-aid measures

**Inhalation** IF INHALED: Remove person to fresh air and keep comfortable for breathing. If breathing is difficult, give oxygen by qualified medical personnel only. If breathing stopped, begin artificial respiration. Call a POISON CENTER or doctor/physician if you feel unwell.

**Skin contact** IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs, get medical advice/attention. Take off contaminated clothing and wash it before reuse.

**Eye contact** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.

**Ingestion** IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Never give anything by mouth to a person who is unconscious or is having convulsions Get medical attention.

**Most important symptoms and effects, both acute and delayed** Causes skin irritation. Contact may cause redness, swelling and a painful sensation. Direct eye contact may produce severe irritation with possible eye damage. Symptoms may include severe pain, tearing, redness, swelling and blurred vision. May cause irreversible eye damage. Severe respiratory irritant. Symptoms may include coughing, choking and wheezing. May cause severe irritation and corrosive damage in the mouth, throat and stomach.

**Indication of any immediate medical attention and special treatment needed** Immediate medical attention is required. Causes serious eye damage. Provide general supportive measures and treat symptomatically.

**General Information** 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** Use media suitable to the surrounding fire such as water fog or fine spray, alcohol foams, carbon dioxide and dry chemical.



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## 1. Product and Company Identification

<b>Product identifier</b>	<b>RESTORE PLUS - ACID COOLING SYSTEM CLEANER</b>
<b>Other means of identification</b>	
<b>MSDS number</b>	LT16551
<b>Product code</b>	CC2637 (55 gallon / 208 L Drum); CC2638 (1 gallon / 3.785 L)
<b>Product use</b>	Radiator cleaner for removing heavy rust and scale, oil contaminants and fuel contaminants.
<b>Chemical family</b>	Mixture of: Water; Surfactants; Acids; Sequesterant
<b>Manufacturer</b>	
<b>Company name</b>	Cummins Filtration
<b>Address</b>	1200 Fleetguard Road Cookeville, TN, U.S.A. 38506
<b>Telephone</b>	(931) 526 9551
<b>Website</b>	www.cumminsfiltration.com
<b>E-Mail</b>	fleetmaster.us@cummins.com
<b>Supplier information</b>	Refer to Manufacturer
<b>Emergency phone number</b>	Chemtrec 1-800-424-9300 (Within Continental U.S.); Chemtrec 703-527-3887 (Outside U.S.).

## 2. Hazard(s) Identification

<b>Emergency overview</b>	Clear amber liquid. Little or no odour. WARNING! May be harmful if inhaled or swallowed. May cause respiratory irritation. May cause severe irritation to the mouth, throat and stomach. Possible severe eye irritation and tissue damage. May cause skin irritation.
<b>Potential health effects</b>	
<b>Routes of exposure</b>	
<b>Routes of entry skin &amp; eye</b>	YES
<b>Routes of entry skin absorption</b>	NO
<b>Routes of entry inhalation</b>	YES
<b>Routes of entry ingestion</b>	YES
<b>Target organs</b>	Eyes, skin, respiratory system, digestive system.
<b>Chronic effects</b>	Chronic skin contact with low concentrations may cause dermatitis.
<b>Most important symptoms/effects, acute and delayed</b>	Causes skin irritation. Contact may cause redness, swelling and a painful sensation. Direct eye contact may produce severe irritation with possible eye damage. Symptoms may include severe pain, tearing, redness, swelling and blurred vision. May cause irreversible eye damage. Severe respiratory irritant. Symptoms may include coughing, choking and wheezing. May cause severe irritation and corrosive damage in the mouth, throat and stomach. Symptoms may include abdominal pain, vomiting, burns, perforations and bleeding.
<b>Potential environmental effects</b>	Harmful to aquatic life with long lasting effects. Avoid release to the environment. See ECOLOGICAL INFORMATION, Section 12.



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## 3. Composition/information on ingredients

### Mixture

Chemical name	CAS #	Percent
Citric acid	77-92-9	10.0 - 25.0
Nonylphenol, ethoxylated	9016-45-9	5.0 - 10.0
Alcohols, C6-10, ethoxylated propoxylated	68987-81-5	1.0 - 5.0
Alcohols, C8-10, ethoxylated propoxylated	68603-25-8	1.0 - 5.0
Trisodium Hydroxyethylenediaminetriacetate	139-89-9	1.0 - 3.0
Phosphoric acid	7664-38-2	0.1 - 0.6

## 4. First Aid Measures

### First aid procedures

<b>Inhalation</b>	IF INHALED: Remove person to fresh air and keep comfortable for breathing. If breathing is difficult, give oxygen by qualified medical personnel only. If breathing stopped, begin artificial respiration. Get medical attention.
<b>Skin contact</b>	Immediately flush skin with running water for at least 15 minutes, while removing contaminated clothing. Get medical attention. Wash contaminated clothing before reuse.
<b>Eye contact</b>	Immediately flush eyes with running water for at least 20 minutes. Seek immediate medical attention/advice.
<b>Ingestion</b>	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Never give anything by mouth to a person who is unconscious or is having convulsions. Get medical attention immediately.

### Notes to physician

Immediate medical attention is required. Causes serious eye damage. Provide general supportive measures and treat symptomatically.

### General Information

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

### Flammable properties

Not flammable by WHMIS criteria.

### Extinguishing media

<b>Suitable extinguishing media</b>	Use media suitable to the surrounding fire such as water fog or fine spray, alcohol foams, carbon dioxide and dry chemical.
<b>Unsuitable extinguishing media</b>	None known.

### Protection of firefighters

<b>Specific hazards arising from the chemical</b>	Contact with metals may release small amounts of flammable hydrogen gas. Vapours are heavier than air and collect in confined and low-lying areas. The pressure in sealed containers can increase under the influence of heat.
<b>Protective equipment for firefighters</b>	Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA. Firefighters should wear proper protective equipment and self-contained breathing apparatus with full face piece operated in positive pressure mode.

### Fire fighting

#### equipment/instructions

Move containers from fire area if safe to do so. Cool closed containers exposed to fire with water spray. Do not allow run-off from fire fighting to enter drains or water courses. Dike for water control.

### Specific methods

Use standard firefighting procedures and consider the hazards of other involved materials.

### Explosion data

#### Sensitivity to static discharge

Not expected to be sensitive to static discharge.



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<b>Sensitivity to mechanical impact</b>	Not expected to be sensitive to mechanical impact.
<b>Hazardous combustion products</b>	Carbon oxides; formaldehyde; Sulphur oxides; Nitrogen oxides (NOx); Other unidentified organic compounds
<b>General fire hazards</b>	Not classified as flammable.

## 6. Accidental Release Measures

<b>Personal precautions</b>	Keep people away from and upwind of spill/leak. Restrict access to area until completion of clean-up. Wear appropriate protective equipment. Refer to protective measures listed in sections 7 and 8.
<b>Environmental precautions</b>	Prevent product from entering drains, sewers, waterways and soil.
<b>Methods and materials for containment and cleaning up</b>	Ventilate the area. Remove all sources of ignition. Prevent further leakage or spillage if safe to do so. For spilled liquids: absorb spill with inert, non-combustible material such as sand, then place into suitable containers. Pick up and transfer to properly labelled containers. Contaminated absorbent material may pose the same hazards as the spilled product. Contact the proper local authorities.
<b>Other information</b>	Clean up in accordance with all applicable regulations.

## 7. Handling and Storage

<b>Handling</b>	Use only outdoors or in a well-ventilated area. Wear suitable protective equipment during handling. Avoid breathing mist or vapours. Avoid contact with skin, eyes and clothing. Keep away from extreme heat and direct flame. Keep away from incompatibles. Keep containers tightly closed when not in use. Wash thoroughly after handling. Empty containers retain residue (liquid and/or vapour) and can be dangerous.
<b>Storage</b>	Store in cool/well-ventilated place. Storage area should be clearly identified, clear of obstruction and accessible only to trained and authorized personnel. Inspect periodically for damage or leaks. Do not store near any incompatible materials (see Section 10).

## 8. Exposure Controls / Personal Protection

### Occupational exposure limits

#### U.S. OSHA Exposure Limits (29 CFR 1910)

	Type	Value
Phosphoric acid (CAS 7664-38-2)	TWA	1 mg/m <sup>3</sup>

#### US. ACGIH Threshold Limit Values

	Type	Value
Phosphoric acid (CAS 7664-38-2)	STEL	3 mg/m <sup>3</sup>
	TWA	1 mg/m <sup>3</sup>

### Biological limit values

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

<b>Engineering controls</b>	Use only outdoors or in a well-ventilated area. Apply technical measures to comply with the occupational exposure limits. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. In case of insufficient ventilation wear suitable respiratory equipment.
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### Personal protective equipment

<b>Eye / face protection</b>	Wear eye/face protection. Chemical splash goggles are recommended. A full face shield may also be necessary.
<b>Skin protection</b>	Wear protective gloves. The suitability for a specific workplace should be discussed with the producers of the protective gloves. Wear sufficient clothing to prevent skin contact.

**Respiratory protection** If airborne concentrations are above the permissible exposure limit or are not known, use NIOSH-approved respirators. Respirators should be selected based on the form and concentration of contaminants in air, and in accordance with CSA Z94.4-02. Advice should be sought from respiratory protection specialists.

**Hand protection** Ensure that eyewash stations and safety showers are close to the workstation location. Other equipment may be required depending on workplace standards.

## 9. Physical and chemical properties

### Appearance

**Physical state** Liquid.  
**Form** Thin liquid.  
**Colour** amber

**Odour** Little or no odour.

**Odour threshold** N/Av

**pH** 2.5 - 3.0

**Melting point /freezing point** N/Av

### Initial boiling point and boiling range

104°C (220°F)

**Flash point** N/Av

N/Av

**Evaporation rate** N/Av

**Flammability (solid, gas)** Not applicable.

**Lower flammability/explosive limit** N/Av

**Upper flammability/explosive limit** N/Av

**Vapour pressure** N/Av

**Vapour density** > 1 (Air = 1)

**Relative density** 1.11 - 1.13

### Solubility(ies)

**Other solubility(ies)** N/Av

**Solubility (water)** Complete

**Partition coefficient (n-octanol/water)** N/Av

**Auto-ignition temperature** N/Av

**Decomposition temperature** N/Av

**Viscosity** N/Av

### Other information

**Explosive properties** Not explosive

**Oxidizing properties** None known.

**Specific gravity** 1.11 - 1.13

**VOC** N/Av

**Volatilities %** N/Av

**Other physical/chemical data** No additional information.

## 10. Stability and reactivity

**Reactivity** Not normally reactive. Contact with metals may release small amounts of flammable hydrogen gas.

**Chemical stability** Stable under the recommended storage and handling conditions prescribed.

**Possibility of hazardous reactions** No dangerous reaction known under conditions of normal use. Hazardous polymerization does not occur.



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<b>Conditions to avoid</b>	Direct sources of heat. Do not use in areas without adequate ventilation. Avoid contact with incompatible materials.
<b>Incompatible materials</b>	Strong bases, strong oxidizing agents (e.g. Chlorides, peroxides), reducing agents (e.g. cyanides, metal hydrides).
<b>Hazardous decomposition products</b>	None known, refer to hazardous combustion products in Section 5.

## 11. Toxicological information

### Toxicological data

Components	Species	Test Results
Citric acid		
<b>Acute</b>		
<i>Dermal</i>		
LD50	Rabbit	> 2000 mg/kg (No mortality)
<i>Inhalation</i>		
LC50	Rat	N/Av
<i>Oral</i>		
LD50	Rat	3000 mg/kg
Nonylphenol, ethoxylated		
<b>Acute</b>		
<i>Dermal</i>		
LD50	Rabbit	2080 - 2120 mg/kg
<i>Inhalation</i>		
LC50	Rat	N/Av
<i>Oral</i>		
LD50	Rat	1310 mg/kg
Alcohols, C6-10, ethoxylated propoxylated		
<b>Acute</b>		
<i>Dermal</i>		
LD50	Rabbit	> 2000 mg/kg (No mortality)
<i>Inhalation</i>		
LC50	Rat	> 50 mg/L (aerosol)
<i>Oral</i>		
LD50	Rat	2380 - 2745 mg/kg
Alcohols, C8-10, ethoxylated propoxylated		
<b>Acute</b>		
<i>Dermal</i>		
LD50	Rabbit	> 2000 mg/kg (No mortality)
<i>Inhalation</i>		
LC50	Rat	N/Av
<i>Oral</i>		
LD50	Rat	> 2000 mg/kg
Trisodium Hydroxyethylenediaminetriacetate		
<b>Acute</b>		
<i>Dermal</i>		
LD50	Rabbit	N/Av
<i>Inhalation</i>		
LC50	Rat	> 10 mg/L (aerosol)
<i>Oral</i>		
LD50	Rat	3200 mg/kg



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Phosphoric acid

**Acute**

*Dermal*

LD50 Rabbit > 1260 mg/kg (85%); > 3160 mg/kg (75%)

*Inhalation*

LC50 Rat N/Av

*Oral*

LD50 Rat 3500 mg/kg (85%); 4400 mg/kg (75%)

**Acute effects**

Causes skin irritation. Causes serious eye damage. Severe respiratory irritant. May cause severe irritation and corrosive damage in the mouth, throat and stomach. See data above for individual ingredient acute toxicity data.

**Senitization**

Not expected to be a skin or respiratory sensitizer.

**Chronic effects**

Chronic skin contact with low concentrations may cause dermatitis.

**Carcinogenicity**

Not known to be carcinogenic. No components are listed as carcinogens by ACGIH, IARC, OSHA or NTP.

**Skin corrosion/irritation**

May cause moderate skin irritation.

**Serious eye damage/irritation**

Causes eye damage.

**Mutagenicity**

Contains no ingredient above reportable levels that is known to cause mutations in reproductive (germ) and/or non-reproductive cells (somatic).

**Reproductive effects**

Not expected to cause reproductive effects.

**Teratogenicity**

Not expected to be a teratogen.

**Most important symptoms/effects, acute and delayed**

Causes skin irritation. Contact may cause redness, swelling and a painful sensation. Direct eye contact may produce severe irritation with possible eye damage. Symptoms may include severe pain, tearing, redness, swelling and blurred vision. May cause irreversible eye damage. Severe respiratory irritant. Symptoms may include coughing, choking and wheezing. May cause severe irritation and corrosive damage in the mouth, throat and stomach. Symptoms may include abdominal pain, vomiting, burns, perforations and bleeding.

**Further information**

None known or reported by the manufacturer.

## 12. Ecological information

**Ecotoxicity data:**

Components	CAS No	Toxicity to Fish		
		LC50 / 96h	NOEC / 21 day	M Factor
Citric acid	77-92-9	1516 mg/L (Bluegill sunfish)	N/Av	None.
Nonylphenol, ethoxylated	9016-45-9	1.3 mg/L (Bluegill sunfish)	N/Av	None.
Alcohols, C6-10, ethoxylated propoxylated	68987-81-5	4.2 - 11 mg/L (Rainbow trout) (Read-across)	N/Av	None.
Alcohols, C8-10, ethoxylated propoxylated	68603-25-8	4.2 - 11 mg/L (Rainbow trout) (Read-across)	N/Av	None.
Trisodium Hydroxyethylenediaminetriacetate	139-89-9	331 mg/L (Bluegill sunfish)	> 25.7 mg/L/35 days (Zebra fish)	None.
Phosphoric acid	7664-38-2	75.1 mg/L (Japanese ricefish)	N/Av	None.



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Components	CAS No	Toxicity to Daphnia		
		EC50 / 48h	NOEC / 21 day	M Factor
Citric acid	77-92-9	1535 mg/L/24hr (Daphnia magna)	N/Av	None.
Nonylphenol, ethoxylated	9016-45-9	4.8 mg/L (Daphnia magna)	N/Av	None.
Alcohols, C6-10, ethoxylated propoxylated	68987-81-5	2.4 - 13.5 mg/L (Daphnia magna) (Read-across)	N/Av	None.
Alcohols, C8-10, ethoxylated propoxylated	68603-25-8	2.4 - 13.5 mg/L (Daphnia magna) (Read-across)	N/Av	None.
Trisodium Hydroxyethylenediaminetriacetate	139-89-9	192 mg/L (Daphnia magna)	25 mg/L	None.
Phosphoric acid	7664-38-2	376 mg/L (Daphnia magna)	N/Av	None.

Components	CAS No	Toxicity to Algae		
		EC50 / 96h or 72h	NOEC / 96h or 72h	M Factor
Citric acid	77-92-9	> 18 000 mg/L (Green algae) (Read-across)	N/Av	None.
Nonylphenol, ethoxylated	9016-45-9	N/Av	N/Av	None.
Alcohols, C6-10, ethoxylated propoxylated	68987-81-5	14 - 45 mg/L/72hr (Green algae) (Read-across)	10 mg/L/72hr	None.
Alcohols, C8-10, ethoxylated propoxylated	68603-25-8	14 - 45 mg/L/72hr (Green algae) (Read-across)	10 mg/L/72hr (Read-across)	None.
Trisodium Hydroxyethylenediaminetriacetate	139-89-9	12.06 mg/L/72hr (Green algae)	N/Av	None.
Phosphoric acid	7664-38-2	32 mg/L/72hr (Green algae)	N/Av	None.

**Ecotoxicity**

Harmful to aquatic life with long lasting effects. The product contains the following substances which are hazardous for the environment: Nonylphenol, ethoxylated; Alcohols, C6-10, ethoxylated propoxylated; Alcohols, C8-10, ethoxylated propoxylated. See above for individual ingredient ecotoxicity data.

**Environmental effects**

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. The product should not be allowed to enter drains or water courses, or be deposited where it can affect ground or surface waters.

**Aquatic toxicity**

None expected.

**Persistence and degradability**

No data is available on the product itself.  
 Contains the following chemicals which are not readily biodegradable: Trisodium Hydroxyethylenediaminetriacetate; Phosphoric acid.  
 The following ingredients are considered to be readily biodegradable: Citric acid; Alcohols, C6-10, ethoxylated propoxylated; Alcohols, C8-10, ethoxylated propoxylated.

**Bioaccumulation / accumulation**

No data is available on the product itself. See the following data for ingredient information.



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<u>Components</u>	<u>Partition coefficient n-octanol/water (log Kow)</u>	<u>Bioconcentration factor (BCF)</u>
Citric acid (CAS 77-92-9)	- 1.72	3
Nonylphenol, ethoxylated (CAS 9016-45-9)	3.7	< 0.2 to < 1.4
Alcohols, C6-10, ethoxylated propoxylated (CAS 68987-81-5)	3.01	N/Av
Alcohols, C8-10, ethoxylated propoxylated (CAS 68603-25-8)	3.15 - 4.57	N/Av
Trisodium Hydroxyethylenediaminetriacetate (CAS 139-89-9)	- 11.36 (calculated)	N/Av
Phosphoric acid (CAS 7664-38-2)	- 0.77	N/Av

**Mobility in soil** The product itself has not been tested.

## 13. Disposal consideration

**Disposal instructions** Collect and reclaim or dispose in sealed containers at licensed waste disposal site. This material and its container must be disposed of as hazardous waste. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of in accordance with local regulations.

**Waste from residues / unused products** Dispose in accordance with all applicable federal, provincial, state and local regulations.

**Contaminated packaging** Empty containers should be taken for local recycling or waste disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

## 14. Transport information

**TDG**

Not regulated as dangerous goods

**ICAO/IATA**

Not regulated as dangerous goods

**IMDG**

Not regulated as dangerous goods

**General information** Appropriate advice on safety must accompany the package. This product does not meet the criteria for an environmentally hazardous mixture, according to the IMDG Code. See Section 12 for more environmental information.

## 15. Regulatory information

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

**WHMIS status** Controlled

**WHMIS classification** Class D2B (Materials Causing Other Toxic Effects, Toxic Material)

**WHMIS labeling**





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## International Inventories

TSCA: All listed ingredients appear on the Toxic Substances Control Act (TSCA) inventory.

Components listed below are present on the following International Inventory lists:

Ingredients	CAS #	European EINECS	Australia AICS	Philippines PICCS	Japan ENCS	Korea KECI/KECL	China IECSC	NewZealand IOC
Citric acid	77-92-9	201-069-1	Present	Present	(2)-1318	KE-20831	Present	HSR003138
Nonylphenol, ethoxylated	9016-45-9	500-024-6	Present	Present	(7)-172	KE-26244	Present	HSR003054; HSNO Approval: HSR006598, HSR006618 (dilution)
Alcohols, C6-10, ethoxylated propoxylated	68987-81-5	Polymer	Present		(7)-97	KE-13420	Present	May be used as a component in a product covered by a group standard, but is not approved for use as a chemical in its own right.
Alcohols, C8-10, ethoxylated propoxylated	68603-25-8	Polymer	Present	Present	(7)-97	KE-13422	Present	HSR003962
Trisodium Hydroxyethylenediaminetriacetate	139-89-9	205-381-9	Present	Present	(2)-1268	KE-02967	Present	HSR004041
Phosphoric acid	7664-38-2	231-633-2	Present	Present	(1)-422	KE-27427	Present	HSR001545, HSR001571 (dilution)

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

**NFPA Rating**                      0 - Minimal      1 - Slight      2 - Moderate      3 - Serious  
 : *Health:* 2      *Flammability:* 0      *Instability:* 1      *Special Hazards:* None.

**HMIS Rating**                      : \* - Chronic hazard      0 - Minimal      1 - Slight      2 - Moderate      3 - Serious  
*Health:* \*2      *Flammability:* 0      *Reactivity:* 1

**Issue date**                      05/27/2015

**Version #**                        1

**Legend**                            ACGIH: American Conference of Governmental Industrial Hygienists  
 AICS: Australian Inventory of Chemical Substances  
 CAS: Chemical Abstract Services  
 CSA: Canadian Standards Association  
 EC50: Effective Concentration 50%.  
 EINECS: European Inventory of Existing Commercial chemical Substances  
 ENCS: Existing and New Chemical Substances  
 HSDB: Hazardous Substances Data Bank  
 IARC: International Agency for Research on Cancer  
 IBC: Intermediate Bulk Container  
 IECSC: Inventory of Existing Chemical Substances  
 IMDG: International Maritime Dangerous Goods  
 IOC: Inventory of Chemicals  
 KECI: Korean Existing Chemicals Inventory  
 KECL: Korean Existing Chemicals List  
 LC: Lethal Concentration  
 LD: Lethal Dose  
 N/Ap: Not Applicable  
 N/Av: Not Available  
 NIOSH: National Institute of Occupational Safety and Health  
 NOEC: No observable effect concentration  
 NTP: National Toxicology Program

## MATERIAL SAFETY DATA SHEET

OECD: Organisation for Economic Co-operation and Development  
OSHA: Occupational Safety and Health Administration  
PEL: Permissible exposure limit  
PICCS: Philippine Inventory of Chemicals and Chemical Substances  
RTECS: Registry of Toxic Effects of Chemical Substances  
SDS: Safety Data Sheet  
STEL: Short Term Exposure Limit  
TDG: Canadian Transportation of Dangerous Goods Act & Regulations  
TLV: Threshold Limit Values  
TSCA: Toxic Substance Control Act  
TWA: Time Weighted Average  
WHMIS: Workplace Hazardous Materials Identification System

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