

1. Product and Company Identification

Product identifier	Scale Inhibitor No. 340, Liquid (4340-01, 4340-05, 4340-08)
Other means of identification	Not available
Recommended use	Cooling Water Treatment
Recommended restrictions	None known.
Manufacturer information	Nu-Calgon 2611 Schuetz Road St. Louis, MO 63043 US Phone: 314-469-7000 / 800-554-5499 Emergency Phone: 1-800-424-9300 (CHEMTREC)
Supplier	See above.

2. Hazards Identification

Physical hazards	Not classified.	
Health hazards	Serious eye damage/eye irritation	Category 2
	Reproductive toxicity	Category 1B
	Specific target organ toxicity, repeated exposure	Category 2
Environmental hazards	Not classified.	
WHMIS 2015 defined hazards	Not classified	
Label elements		



Signal word Danger

Hazard statement Causes serious eye irritation. May damage fertility or the unborn child. May cause damage to organs through prolonged or repeated exposure by ingestion.

Precautionary statement

Prevention Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wash thoroughly after handling. Do not breathe mist or vapor. Wear protective gloves, protective clothing and eye protection.

Response IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.
IF exposed or concerned: Get medical attention.
Get medical attention if you feel unwell.

Storage Store locked up.

Disposal Dispose of container in accordance with local, regional, national and international regulations.

WHMIS 2015: Health Hazard(s) not otherwise classified (HHNOC) None known

WHMIS 2015: Physical Hazard(s) not otherwise classified (PHNOC) None known

Hazard(s) not otherwise classified (HNOC) None known.

Supplemental information None.

3. Composition/Information on Ingredients

Mixture

Chemical name	Common name and synonyms	CAS number	%
Ethylene glycol		107-21-1	10-30*

Chemical name	Common name and synonyms	CAS number	%
Phosphonic acid,[nitrilotris(methylene)]tris-, pentasodium salt		2235-43-0	15-40*

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

Composition comments US GHS: The exact percentage (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of §1910.1200.
*CANADA GHS: The exact percentage (concentration) of composition has been withheld as a trade secret.

4. First Aid Measures

Inhalation	If symptoms develop move victim to fresh air. If symptoms persist, obtain medical attention.
Skin contact	Flush with cool water. Wash with soap and water. Obtain medical attention if irritation persists.
Eye contact	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.
Ingestion	Rinse mouth. Do not induce vomiting. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Never give anything by mouth if victim is unconscious or is convulsing. Obtain medical attention.
Most important symptoms/effects, acute and delayed	Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Prolonged exposure may cause chronic effects.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Symptoms may be delayed.
General information	IF exposed or concerned: Get medical advice/attention. 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. Avoid contact with eyes and skin. Keep out of reach of children.

5. Fire Fighting Measures

Suitable extinguishing media	Alcohol resistant foam. Powder. Carbon dioxide.
Unsuitable extinguishing media	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	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	No unusual fire or explosion hazards noted.
Hazardous combustion products	May include and are not limited to: Oxides of carbon.

6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. 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.
Methods and materials for containment and cleaning up	Use water spray to reduce vapors or divert vapor cloud drift. Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. 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.
Environmental precautions	Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. Avoid discharge into drains, water courses or onto the ground. Do not discharge into lakes, streams, ponds or public waters.

7. Handling and Storage

Precautions for safe handling	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe mist or vapor. Avoid contact with eyes. Pregnant or breastfeeding women must not handle this product. Provide adequate ventilation. Avoid prolonged exposure. Wear appropriate personal protective equipment. Wash thoroughly after handling. Use good industrial hygiene practices in handling this material. When using do not eat or drink.
Conditions for safe storage, including any incompatibilities	Store locked up. Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS). Keep out of reach of children.

8. Exposure Controls/Personal Protection

Occupational exposure limits

Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)

Components	Type	Value
Ethylene glycol (CAS 107-21-1)	Ceiling	100 mg/m3

Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)

Components	Type	Value	Form
Ethylene glycol (CAS 107-21-1)	Ceiling	100 mg/m3	Aerosol.
		50 ppm	Vapor.
	STEL	20 mg/m3	Particulate.
	TWA	10 mg/m3	Particulate.

Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act)

Components	Type	Value	Form
Ethylene glycol (CAS 107-21-1)	STEL	10 mg/m3	Aerosol, inhalable.
		50 ppm	Vapor fraction
	TWA	25 ppm	Vapor fraction

Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents)

Components	Type	Value	Form
Ethylene glycol (CAS 107-21-1)	Ceiling	100 mg/m3	Aerosol.

Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment)

Components	Type	Value	Form
Ethylene glycol (CAS 107-21-1)	Ceiling	127 mg/m3	Vapor and mist.
		50 ppm	Vapor and mist.

Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21)

Components	Type	Value	Form
Ethylene glycol (CAS 107-21-1)	Ceiling	100 mg/m3	Aerosol.

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Ethylene glycol (CAS 107-21-1)	STEL	10 mg/m3	Aerosol, inhalable.
		50 ppm	Vapor fraction
	TWA	25 ppm	Vapor fraction

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.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Skin protection

Hand protection Impervious gloves. Confirm with reputable supplier first.

Other As required by employer code. Use of an impervious apron is recommended.

Respiratory protection	Where exposure guideline levels may be exceeded, use an approved NIOSH respirator. Respirator should be selected by and used under the direction of a trained health and safety professional following requirements found in OSHA's respirator standard (29 CFR 1910.134), CAN/CSA-Z94.4 and ANSI's standard for respiratory protection (Z88.2).
Thermal hazards	Not applicable.
General hygiene considerations	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. When using do not eat or drink.

9. Physical and Chemical Properties

Appearance	Clear
Physical state	Liquid.
Form	Liquid.
Color	Pale yellow
Odor	Mild
Odor threshold	Not available.
pH	7.5 - 8.5
Melting point/freezing point	4.1 °F (-15.5 °C)
Initial boiling point and boiling range	Not available.
Pour point	Not available.
Specific gravity	Not available.
Partition coefficient (n-octanol/water)	Not available.
Flash point	Not available.
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable.
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	Not available.
Relative density	1.205 - 1.285
Solubility(ies)	Complete
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.

10. Stability and Reactivity

Reactivity	This product may react with strong oxidizing agents.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Chemical stability	Material is stable under normal conditions.
Conditions to avoid	Do not mix with other chemicals.
Incompatible materials	Strong acids. Strong oxidizing agents. Strong bases.
Hazardous decomposition products	May include and are not limited to: Oxides of carbon.

11. Toxicological Information

Routes of exposure	Eye, Skin contact, Inhalation, Ingestion.
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Information on likely routes of exposure

Ingestion May cause stomach distress, nausea or vomiting.
Inhalation May cause damage to organs through prolonged or repeated exposure by inhalation.
Skin contact No adverse effects due to skin contact are expected.
Eye contact Causes serious eye irritation.

Symptoms related to the physical, chemical and toxicological characteristics Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision.

Information on toxicological effects**Acute toxicity**

Components	Species	Test Results
Ethylene glycol (CAS 107-21-1)		
Acute		
<i>Dermal</i>		
LD50	Mouse	> 3500 mg/kg, ECHA
	Rabbit	9530 mg/kg, HSDB
<i>Inhalation</i>		
LC50	Rat	> 2.5 mg/L, 6 Hours, ECHA 2725 mg/m ³ , 4 hr, HSDB
<i>Oral</i>		
LD50	Cat	1670 mg/kg, CCID - New Zealand 1650 mg/kg, HSDB
	Dog	> 8.8 g/kg, HSDB 5500 mg/kg, HSDB
	Guinea pig	6600 mg/kg, CCOHS 8.2 g/kg, HSDB
	Human	1110 - 1665 mg/kg, HSDB
	Mouse	14.6 g/kg, HSDB
	Rabbit	5000 mg/kg, CCOHS
	Rat	> 10000 mg/kg, ECHA 7712 mg/kg, ECHA 5.9 g/kg, HSDB
Phosphonic acid,[nitrilotris(methylene)]tris-, pentasodium salt (CAS 2235-43-0)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	> 15800 mg/kg, RTECS
<i>Inhalation</i>		
LC50	Not available	
<i>Oral</i>		
LD50	Duck	> 2510 mg/kg, RTECS
	Quail	> 2510 mg/kg, RTECS
	Rat	17800 mg/kg, RTECS
Skin corrosion/irritation	Prolonged skin contact may cause temporary irritation.	
Exposure minutes	Not available.	
Erythema value	Not available.	
Oedema value	Not available.	
Serious eye damage/eye irritation	Causes serious eye irritation.	
Corneal opacity value	Not available.	
Iris lesion value	Not available.	
Conjunctival reddening value	Not available.	

Conjunctival oedema value	Not available.
Recover days	Not available.
Respiratory or skin sensitization	
Canada - Alberta OELs: Irritant	
Ethylene glycol (CAS 107-21-1)	Irritant
Respiratory sensitization	Not a respiratory sensitizer.
Skin sensitization	This product is not expected to cause skin sensitization.
Mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
Carcinogenicity	See below.
US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)	
Not listed.	
Reproductive toxicity	May damage fertility or the unborn child.
Teratogenicity	Not available.
Specific target organ toxicity - single exposure	Not classified.
Specific target organ toxicity - repeated exposure	May cause damage to organs through prolonged or repeated exposure.
Aspiration hazard	Not an aspiration hazard.
Chronic effects	May cause damage to organs through prolonged or repeated exposure.

12. Ecological Information

Ecotoxicity	See below		
Ecotoxicological data			
Components		Species	Test Results
Ethylene glycol (CAS 107-21-1)			
Crustacea	EC50	Daphnia	46300 mg/L, 48 Hours
Aquatic			
Fish	LC50	Fathead minnow (<i>Pimephales promelas</i>)	8050 mg/L, 96 hours
Persistence and degradability	No data is available on the degradability of this product.		
Bioaccumulative potential			
Mobility in soil			
Mobility in general	No data available.		
Other adverse effects	Not available.		
	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation)		

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 code	The 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	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport Information

Transport of Dangerous Goods (TDG) Proof of Classification	Classification Method: Classified as per Part 2, Sections 2.1 – 2.8 of the Transportation of Dangerous Goods Regulations. If applicable, the technical name and the classification of the product will appear below.
U.S. Department of Transportation (DOT)	
Not regulated as dangerous goods.	
Transportation of Dangerous Goods (TDG - Canada)	
Not regulated as dangerous goods.	

15. Regulatory Information

Canadian federal regulations This product has been classified in accordance with the hazard criteria of the HPR and the SDS contains all the information required by the HPR.

Canada Priority Substances List (Second List): Listed substance

Ethylene glycol (CAS 107-21-1) Listed.

Export Control List (CEPA 1999, Schedule 3)

Not listed.

Greenhouse Gases

Not listed.

Precursor Control Regulations

Not regulated.

WHMIS 2015 Exemptions Not applicable

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

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

All chemicals used are on the TSCA inventory.

CERCLA Hazardous Substance List (40 CFR 302.4)

Ethylene glycol (CAS 107-21-1) Listed.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not 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 No

SARA 311/312 Hazardous chemical No

SARA 313 (TRI reporting)

Chemicalname	CASnumber	%bywt.
Ethylene glycol	107-21-1	10-30*

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 (40 CFR 68.130)

Not regulated.

US state regulations See below

US - California Hazardous Substances (Director's): Listed substance

Ethylene glycol (CAS 107-21-1) Listed.

US - Illinois Chemical Safety Act: Listed substance

Ethylene glycol (CAS 107-21-1)

US - Louisiana Spill Reporting: Listed substance

Ethylene glycol (CAS 107-21-1) Listed.

US - Minnesota Haz Subs: Listed substance

Ethylene glycol (CAS 107-21-1) Listed.

US - New Jersey RTK - Substances: Listed substance

Ethylene glycol (CAS 107-21-1)

US - Texas Effects Screening Levels: Listed substance

Ethylene glycol (CAS 107-21-1) Listed.
Phosphonic acid,[nitrilotris(methylene)]tris-, pentasodium salt (CAS 2235-43-0) Listed.

US - Washington Chemical of High Concern to Children: Listed substance

Ethylene glycol (CAS 107-21-1)

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

Ethylene glycol (CAS 107-21-1)

US. Rhode Island RTK

Ethylene glycol (CAS 107-21-1)

US. California Proposition 65**WARNING:** This product can expose you to chemicals including Ethylene glycol (ingested), which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.**US - California Proposition 65 - CRT: Listed date/Developmental toxin**

Ethylene glycol (CAS 107-21-1)

Listed: June 19, 2015

Inventory status

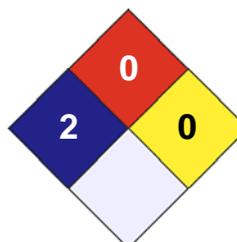
Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

16. Other Information

LEGEND	
Severe	4
Serious	3
Moderate	2
Slight	1
Minimal	0

HEALTH	* 2
FLAMMABILITY	0
PHYSICAL HAZARD	0
PERSONAL PROTECTION	X

**Disclaimer**

The information in the sheet was written based on the best knowledge and experience currently available. Information contained herein was obtained from sources considered technically accurate and reliable. While every effort has been made to ensure full disclosure of product hazards, in some cases data is not available and is so stated. Since conditions of actual product use are beyond control of the supplier, it is assumed that users of this material have been fully trained according to the requirements of all applicable legislation and regulatory instruments. No warranty, expressed or implied, is made and supplier will not be liable for any losses, injuries or consequential damages which may result from the use of or reliance on any information contained in this document.

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Prepared by

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Other information

For an updated SDS, please contact the supplier/manufacturer listed on the first page of the document.