AR-500 Resin

SECTION 1. IDENTIFICATION

Product Identifier	AR-500 Resin
Other Means of Identification	Mortar Resin
Product Family	Vinyl Ester Resin
Recommended Use	Mixed with another component to form a corrosion-resistant mortar.
Restrictions on Use	None known.
Supplier Identifier	The Stebbins Engineering and Manufacturing Company, 363 Eastern Boulevard, Watertown, NY, 13601, (315) 782-3000, www.stebbinseng.com
Emergency Phone No.	Chemtrec - Within North America, 1-800-424-9300, 24 hours Stebbins 24 Hour Contact-, 1-315-788-6624
SDS No.	002

SECTION 2. HAZARD IDENTIFICATION

Classified according to Canada's Hazardous Products Regulations (WHMIS 2015) and the US Hazard Communication Standard (HCS 2012).

Classification

Flammable liquid - Category 3; Combustible dust - Category 1; Skin irritation - Category 2; Eye irritation - Category 2A; Skin sensitization - Category 1B; Specific target organ toxicity (single exposure) - Category 3; Specific target organ toxicity (repeated exposure) - Category 1; Aquatic hazard (Acute) - Category 2

Label Elements

Signal Word:
Danger

Hazard Statement(s):
H226 Flammable liquid and vapour.
May form combustible dust concentrations in air.
Hazardous polymerization may occur.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.
H372 Causes damage to organs (auditory (hearing) system) through prolonged or repeated exposure if inhaled.

Prevention:
P202 Do not handle until all safety precautions have been read and understood.

P210 Keep away from heat, sparks, open flames, and hot surfaces. – No smoking.
P240 Ground/bond container and receiving equipment.
P241 Use explosion-proof electrical, ventilating, lighting, and other equipment.
P242 Use only non-sparking tools.
P243 Take precautionary measures against static discharge.
P260 Do not breathe vapours.
P264 Wash hands and skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P302 + P352 IF ON SKIN: Wash with plenty of water.
Response:
P332 + P313 If skin irritation occurs: Get medical advice/attention.
P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313 If eye irritation persists: Get medical advice/attention.
P314 Get medical advice/attention if you feel unwell.
P362 + P364 Take off contaminated clothing and wash it before reuse.
P370 + P378 In case of fire: Use dry chemical powder, appropriate foam to extinguish.
Storage:
P403 + P235 Store in a well-ventilated place. Keep cool.
P233 Keep container tightly closed.
P501 Dispose of contents and container in accordance with local, regional, national and international regulations.

Other hazards
Static Accumulating Liquid

Other Hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixture:

Chemical Name	CAS No.	%	Other Identifiers	Other Names
Vinyl Ester Resin	CBI	60 - 70 %	None	None
Styrene	100-42-5	30 - 40 %	None	Styrene monomer
Dimer/Trimer	800986-5689P	1 - 5 %	None	Oligomer
N,N-Diethylaniline	91-66-7	< 1.0 %	None	Diethylaniline Benzenamine
Tetramethylammonium Chloride	75-57-0	0.1 - 1 %	None	Tetranethyl-ammonium chloride

Notes

CBI = Confidential Business Information.

Vinyl Ester Resin: Not Classified under any Hazard Classification.

**This ingredient is a component of the complex mixture.

Concentrations are expressed in % weight/weight.

Chemical nature: Static Accumulator

Chemical nature: Defatter

SECTION 4. FIRST-AID MEASURES

First-aid Measures

Inhalation

Move to fresh air. Call a Poison Centre or doctor if you feel unwell. Get medical advice or attention if you feel unwell or are concerned.

Skin Contact

Take off contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Wash gently and thoroughly with lukewarm, gently flowing water and mild soap for 5 minutes. Get medical advice or attention if you feel unwell or are concerned. Thoroughly clean clothing, shoes and leather goods before reuse or dispose of safely.

Eye Contact

Rinse the contaminated eye(s) with lukewarm, gently flowing water for 5 minutes, while holding the eyelid(s) open. If eye irritation persists, get medical advice or attention.

Ingestion

Rinse mouth with water. Never give anything by mouth if person is rapidly losing consciousness, or is unconscious or convulsing. Do not induce vomiting. Get medical advice or attention if you feel unwell or are concerned. Do not give milk or alcoholic beverages.

First-aid Comments

Get medical advice or attention if you feel unwell or are concerned. Show this safety data sheet to the doctor in attendance.

Most Important Symptoms and Effects, Acute and Delayed

Signs and symptoms of exposure to this material may include:
If swallowed: aspiration hazard.
If inhaled: at high concentrations can irritate the nose and throat. Symptoms may include headache, nausea, dizziness, drowsiness and confusion.
If on skin: may cause mild irritation.

Immediate Medical Attention and Special Treatment

Target Organs

Respiratory system, skin.

Special Instructions

Not applicable.

Medical Conditions Aggravated by Exposure

None known.

SECTION 5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media

Carbon dioxide, dry chemical powder, appropriate foam, water spray or fog.

Unsuitable Extinguishing Media

None known.

Specific Hazards Arising from the Product

Can ignite if strongly heated. Can be ignited by static discharge. May accumulate in hazardous amounts in low-lying areas especially inside confined spaces, resulting in a fire hazard. Closed containers may rupture violently when heated releasing contents. Heating increases the release of toxic vapour.
In a fire, the following hazardous materials may be generated: very toxic carbon monoxide, carbon dioxide; irritating chemicals; toxic chemicals.

Special Protective Equipment and Precautions for Fire-fighters

Approach fire from upwind to avoid hazardous vapours or gases.
Fire-fighters may enter the area if positive pressure SCBA and full Bunker Gear is worn.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment, and Emergency Procedures

Use the personal protective equipment recommended in Section 8 of this safety data sheet.

Environmental Precautions

It is good practice to prevent releases into the environment. If the spill is inside a building, prevent product from entering drains, ventilation systems and confined areas.

Methods and Materials for Containment and Cleaning Up

Contain and soak up spill with absorbent that does not react with spilled product. Collect using shovel/scoop or approved HEPA vacuum and place in a suitable container for disposal. Place used absorbent into suitable, covered, labelled containers for disposal.

SECTION 7. HANDLING AND STORAGE

Precautions for Safe Handling

Keep containers tightly closed when not in use or empty. Do NOT eat, drink or store food in work areas. Do NOT smoke in work areas. Only use where there is adequate ventilation. Wash hands thoroughly after handling this product and before eating, using the washroom or leaving work area. Do not get in eyes, on skin or on clothing.
Electrically bond and ground equipment. Ground clips must contact bare metal.

Conditions for Safe Storage

Store in an area that is: well-ventilated, cool, dry, out of direct sunlight and away from heat and ignition sources. Store between: 50°F (10°C) and 81°F (27°C).

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

	ACGIH TLV®		OSHA PEL		AIHA WEEL	
Chemical Name	**TWA**	**STEL**	**TWA**	**Ceiling**	**8-hr TWA**	**TWA**
Styrene	20 ppm	40 ppm	100 ppm	200 ppm		

STYRENE-Exposure-Permissible Concentration

OSHA Z-2 - PEAK - 600 ppm

OSHA P0 - TWA - 50 ppm (215 mg/m3)

OSHA P0 - STEL - 100 ppm (425 mg/m3)

NIOSH REL - TWA - 50 ppm (215 mg/m3)

NIOSH REL - ST - 100 ppm (425 mg/m3)

CAL PEL - C - 500 ppm

CAL PEL - PEL - 50 ppm (215 mg/m3)

CAL PEL - STEL - 100 ppm (425 mg/m3)
Consult local authorities for provincial or state exposure limits.
Canada:
British Columbia: 50 ppm, 8 hour TWA
Alberta: 50 ppm, 8 hour TWA
Quebec: 50 ppm, 8 hour TWA
Ontario: 50 mg/m^3, 8 hour TWA;
213 ppm, 15 minutes
Saskatchewan: 215 ppm, 15 minutes

TLV® = Threshold Limit Value. TWA = Time-Weighted Average. STEL = Short-term Exposure Limit. PEL = Permissible Exposure Limits.
OSHA = US Occupational Safety and Health Administration. ACGIH® = American Conference of Governmental Industrial Hygienists.

Appropriate Engineering Controls

Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below exposure guidelines (if applicable) or below levels that cause known, suspected or apparent adverse effects. Provide appropriate exhaust ventilation at places where dust is formed. Use non-sparking ventilation systems, approved explosion-proof equipment and intrinsically safe electrical systems in areas where this product is used and stored. Control static electricity discharges which includes bonding of equipment to ground.

Individual Protection Measures

Eye/Face Protection

Wear approved safety glasses. When there is potential for eye exposure to Liquid, vopor or mist, wear safety goggles.

Skin Protection

Wear chemical protective clothing e.g. gloves, aprons, boots. Cover as much exposed skin as possible. Hygiene measures wash hands before breaks and at the end of a workday. When using do not eat or drink. When using do not smoke.
Wear resistant gloves (consult your safety equipment supplier). Discard gloves that show tears, pinholes, or signs of wear. Suitable materials are butyl rubber, natural rubber, neoprene rubber, nitrile rubber, polyethylene, polyvinyl, alcohol, Viton®, polyvinyl chloride, cloth, and leather.

Respiratory Protection

Wear a NIOSH approved air-purifying respirator with an organic vapour cartridge.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Basic Physical and Chemical Properties

Appearance	Yellow - amber liquid. Particle Size: Not applicable
Odour	Sweet
Odour Threshold	Not available
pH	~ 4.8
Melting Point/Freezing Point	Not available (melting); Not available (freezing)
Boiling point/Initial boiling point	294 ºF (146 ºC)
Boiling Range	Not applicable
Flash Point	80 - 90 ºF (27 - 32 ºC) (closed cup)
Evaporation Rate	> 1 (diethyl ether = 1)
Flammability (solid, gas)	Not applicable
Upper/Lower Flammability or Explosive Limit	6.1% (upper); 1.1% (lower)
Vapour Pressure	6.398 mm Hg (0.853 kPa) at 25 ºC
Vapour Density (air = 1)	> 1
Relative Density (water = 1)	1.07 at 68 ºF
Solubility	Insoluble in water; Not available (in other liquids)
Partition Coefficient, n-Octanol/Water (Log Kow)	Not available
Auto-ignition Temperature	914 ºF (490 ºC) (Styrene)
Decomposition Temperature	Not applicable
Viscosity	> 20.5 mm2/s (kinematic); Not available (dynamic)

Other Information

Physical State	Liquid

Molecular Formula	Not applicable
Molecular Weight	Not applicable
Bulk Density	~ 66.77 lb/ft3 (1070.00 kg/m3)
Surface Tension	Not available
Critical Temperature	Not available
Vapour Pressure at 50 deg C	Not available
Saturated Vapour Concentration	Not available
Other Physical Property 1	Flammability (Solid, gas) May form combustible dust concentrations in air (during processing).
Other Physical Property 2	Flammability (Liquid): Static accumulating liquid

SECTION 10. STABILITY AND REACTIVITY

Reactivity

Not sensitive to mechanical impact. Not reactive under normal conditions of use.

Chemical Stability

Normally stable. No Decomposition if: stored and applicted as directed.

Possibility of Hazardous Reactions

None expected under normal conditions of storage and use. May polymerize violently: With vapours and fine dust in sufficient concentrations, and in the presence of an ignition source. This may cause an explosion.

Conditions to Avoid

Open flames, sparks, static discharge, heat and other ignition sources. Prolonged storage. Prolonged exposure to high temperatures. >100°F (38°C) prolonged exposure to air. Sunlight.

Incompatible Materials

Avoid: strong acids (e.g. hydrochloric acid), organic acids (e.g. acetic acid), inorganic acids (e.g. hydrofluoric acid), strong bases (e.g. sodium hydroxide), halogens (e.g. chlorine), oxidizing agents (e.g. peroxides), copper alloys, aluminum. Iron chloride, metal salts.

Hazardous Decomposition Products

Very toxic carbon monoxide, carbon dioxide; toxic chemicals; irritating chemicals. hydrocarbons.

SECTION 11. TOXICOLOGICAL INFORMATION

Information presented below is for the entire product, unless otherwise specified. Information on likely routes of exposure inhalation, skin absoption. Eye Contact ingestion.
Acute toxicity (oral): Not classified
Acute toxicity (dermal): Not classified
Acute toxicity (inhalation): Not classified.

Likely Routes of Exposure

Inhalation; skin contact; skin absorption; eye contact.

Acute Toxicity

Chemical Name	LC50	LD50 (oral)	LD50 (dermal)
Styrene	~ 11.8 mg/L (rat) (4-hour exposure) (vapour)	> 2,000 mg/kg (female rat)	> 2,000 mg/kg (rat)
N,N-Diethylaniline	1,920 mg/m3 (rat) (4-hour exposure) (vapour)	782 mg/kg (rat)	

LC50 (Inhalation)

Styrene:
Acute inhalation toxicity:
LC50 (Rat): 11.8 mg/l, 2770 ppm
Exposure time: 4 h

Test atmosphere: vapour
No observed adverse effect level (Humans): 100 ppm
Exposure time: 7 h
Test atmosphere: vapour

LD50 (Oral)

Styrene:
Acute oral toxicity:
LD50 Oral (Rat): > 2,000 mg/kg

tetramethylammonium chloride:
Acute oral toxicity: LD50 (Rat): 47 mg/kg

Dimer/Trimer:
Acute oral toxicity: LD50 > 2,000 mg/kg (Rat)
Method: OECD Test Guideline 423
GLP: yes

Assessment: Not classified as acutely toxic by ingestion under GHS.

LD50 (Dermal)

tetramethylammonium chloride:
Acute dermal toxicity:
LD50 (Rabbit): > 200 - < 500 mg/kg

Method: OECD Test Guideline 402

Assessment: No adverse effect has been observed in acute dermal toxicity tests.

Skin Corrosion/Irritation

Human experience shows mild irritation. Remarks: Repeated exposure may cause skin dryness or cracking. May cause skin irritation and/or dermatitis.
DIMER / TRIMER:
Species: reconstructed human epidermis (RhE), Method: OECD Test Guideline 439 Result: No skin irritation GLP: yes
Styrene:
Species: Rabbit
Result: Irritating to skin.
Species: human skin
Result: No skin irritation
Tetramethylammonium chloride:
Result: Irritating to skin.

Serious Eye Damage/Irritation

May cause serious eye irritation based on information for closely related materials. Remarks: Vapours may cause irritation to the eyes, respiratory system and the skin., Causes serious eye irritation.
Styrene:
Result: Irritating to eyes. Remarks: Vapour during processing may be irritating to the respiratory tract and to the eyes.
DIMER / TRIMER:
Species: Bovine cornea
Result: No eye irritation
Method: OECD Test Guideline 437
GLP: yes
Tetramethylammonium chloride:
Result: Slight, transient irritation.

STOT (Specific Target Organ Toxicity) - Single Exposure

Inhalation

A high concentration can displace oxygen in the air. If less oxygen is available to breathe, symptoms such as rapid breathing, rapid heart rate, clumsiness, emotional upsets and fatigue can result. As less oxygen becomes available, nausea and vomiting, collapse, convulsions, coma and death can occur. Symptoms occur more quickly with

physical effort. Lack of oxygen can cause permanent damage to organs including the brain and heart. At high concentrations harmful effects on the liver, nose and throat irritation.

Skin Absorption

Method: Maximisation Test
Components:
Styrene:

Exposure routes: Skin contact
Species: Guinea pig
Assessment: Does not cause skin sensitisation.

Result: negative
Exposure routes: inhalation (vapour)
Species: Humans
Assessment: Does not cause respiratory sensitisation

Result: negative (Styrene) species: Human
615 mg/kg
Application Route: Skin contact.

Ingestion

Styrene:
It may be fatal if swallowed and enters the airways.
Tetramethylammonium chloride:
Exposure routes: Ingestion
Target Organs: Central nervous system
Assessment: Causes damage to organs.

Aspiration Hazard

May be drawn into the lungs (aspirated) if swallowed or vomited.

STOT (Specific Target Organ Toxicity) - Repeated Exposure

Causes damage to organs (Auditory system) through prolonged or repeated exposure if inhaled. Styrene: Exposure routes: inhalation (vapor)
Target Organs: Auditory system
Assessment: Causes damage to organs through prolonged or repeated exposure.
Repeated dose toxicity
Components: Styrene:
Species: Human
85 mg/m3
Application Route: inhalation (vapor).

Respiratory and/or Skin Sensitization

Styrene:
Species: Human
85 mg/m3
Application Route: inhalation (vapour)
Species: Human
615 mg/kg
Application Route: Skin contact not known to be a respiratory sensitizer. Skin sensitizer. May cause an allergic reaction (skin sensitization) based on limited evidence.
(Dimer/Trimer) assessment: The product is a skin sensitizer, sub-category 1B. Method: Maximisation Test.
Styrene:
Exposure routes: Skin contact
Species: Guinea pig
Assessment: Does not cause skin sensitization.
Result: negative
Exposure routes: inhalation (vapour)
Species: Humans

Assessment: Does not cause respiratory sensitization.
Result: negative
Tetramethylammonium chloride:
Test Type: Local lymph node assay
Species: Mouse
Assessment: Did not cause sensitization on laboratory animals.
Method: OECD Test Guideline 429
Result: Did not cause sensitization on laboratory animals.

Carcinogenicity

Product: Conclusions cannot be drawn from the limited studies available.
Styrene has been tested for carcinogenicity in rats and mice. Styrene caused lung tumors in mice only. These tumors are not considered to be relevant to humans.
IARC. (Styrene) Group 2B – Possibly carcinogenic to humans.
NTP. (Styrene) Reasonably anticipated human carcinogen. OSHA: No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

Key to Abbreviations

IARC = International Agency for Research on Cancer. Group 2B = Possibly carcinogenic to humans. NTP = National Toxicology Program. OSHA = US Occupational Safety and Health Administration.

Reproductive Toxicity

Development of Offspring

Conclusions cannot be drawn from the limited studies available.

Sexual Function and Fertility

Conclusions cannot be drawn from the limited studies available.

Effects on or via Lactation

Does not cause effects on or via lactation.

Germ Cell Mutagenicity

Not classified based on available information.

Interactive Effects

Components:
DIMER / TRIMER:
Genotoxicity in vitro:
Test Type: Chromosome aberration test in vitro
Test species: Human lymphocytes
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 473
Result: negative
GLP: yes:
Test Type: Ames test
Test species: Salmonella typhimurium
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 471
Result: negative
GLP: yes:
Test Type: in vitro assay
Test species: Chinese hamster fibroblasts
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 476
Result: negative
GLP: yes
Components:
tetramethylammonium chloride:
Genotoxicity in vitro:
Test Type: Ames test
Method: OECD Test Guideline 471

Result: negative.

Other Information

Aspiration hazard Not classified based on available information. Styrene:
May be fatal if swallowed and enters airways.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Acute aquatic toxicity Category 2; Toxic to aquatic life Ecotoxicology Assessment Short-term (acute) aquatic hazard
Components:

Styrene:

Toxicity to fish:
LC50 (Pimephales promelas (fathead minnow)): 4.02 mg/l
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates.
EC50 (Daphnia magna (Water flea)): 4.7 mg/l
Exposure time: 48 h

Toxicity to algae:
ErC50 (Pseudokirchneriella subcapitata (green algae)): 4.9 mg/l
Exposure time: 72 h

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity):
NOEC (Daphnia magna (Water flea)): 1.01 mg/l
Exposure time: 21 days

Toxicity to bacteria:
EC50 (activated sludge): ca. 500 mg/l
Exposure time: 0.5 h

Toxicity to soil-dwelling organisms:
NOEC (Eisenia fetida (earthworms)): 34 mg/kg
Exposure time: 14 d
Method: OECD Test Guideline 207

tetramethylammonium chloride:

Toxicity to fish:
LC50 (Pimephales promelas (fathead minnow)): 462 mg/l
Exposure time: 96 h, Test Type: flow-through test
Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates:
LC50 (Daphnia magna (Water flea)): 3.6 mg/l
Exposure time: 48 h, Test Type: static test

Method: OECD Test Guideline 202 Toxicity to algae:
EC50 (Pseudokirchneriella subcapitata (microalgae)): 115 mg/l
End point: Growth inhibition, Exposure time: 72 h, Test Type: static test, Method: OECD Test Guideline 201
Remarks: Information given is based on data obtained from similar substances.

NOEC (Pseudokirchneriella subcapitata (microalgae)): 7.5 mg/l
End point: Growth inhibition, Exposure time: 72 h, Test Type: static test, Method: OECD Test Guideline 201
Remarks: Information given is based on data obtained from similar substances.

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity):
NOEC (Daphnia magna (Water flea)): 0.03 mg/l, Exposure time: 11 d
End point: Reproduction Test, Test Type: semi-static test.

Ecotoxicology Assessment

Short-term (acute) aquatic hazard:
Acute aquatic toxicity Category 2; Toxic to aquatic life.
Long-term (chronic) aquatic hazard:
Not classified based on available information.

Components:
DIMER / TRIMER:
Toxicity to fish:
LC50 (Cyprinus carpio (Carp)): > 38 mg/l
Exposure time: 96 h
Test Type: semi-static test
Test substance: WAF
Method: OECD Test Guideline 203
GLP: yes
Remarks: No toxicity at the limit of solubility
Toxicity to daphnia and other aquatic invertebrates:
(Daphnia magna (Water flea)): Exposure time: 48 h
Test Type: static test.
Method: OECD Test Guideline 202
GLP: yes.

Persistence and Degradability

(Styrene) Biodegradability: Readily Biodegradation: >60%, 10 days.
(Dimer/Trimer) Biodegradability: Not readily.
(Tetramethylammonium Chloride) Biodegradability: Readily Biodegradation: 100%, 28 days Method: OECD Test Guideline 301B.

Results of PBT and vPvB assessment No ingredient of this product or its degradation products is known to be highly persistent. bioaccumulating and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulating (vPvB).

Bioaccumulative Potential

Component. (Styrene) bio-concentration factor (BCF): <100 n-Octanol/Water Partition Coefficient (Log Kow): 2.96 77 F (25 C)
Component. (Tetramethylammonium Chloride) n-Octanol/Water Partition Coefficient (Log Kow): -1.6 (20 °C) method: OECD Test Guideline 107
GLP: yes.

Mobility in Soil

(Styrene) Soil/water partition coefficient (Koc) 352.

Other Adverse Effects

Product:
Additional ecological information:
An environmental hazard cannot be excluded in the event of unprofessional handling or disposal., Toxic to aquatic life.
(Styrene) toxic to aquatic life.
Components:
Styrene and tetramethylammonium chloride:
Results of PBT and vPvB assessment:
This substance is not considered to be persistent, bioaccumulating and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulating (vPvB).

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal Methods

The product should not be allowed to enter drains, water courses or the soil. Send to a licensed waste management company. Product/Packaging disposal recommendations: Dispose in a safe manner in accordance with local/national regulations. Contact local environmental authorities for approved disposal or recycling methods in your jurisdiction.

SECTION 14. TRANSPORT INFORMATION

Regulation	UN No.	Proper Shipping Name	Transport Hazard Class(es)	Packing Group
US DOT	UN1866	resin solution, flammable	3	III
IMO (Marine)	UN1866	resin solution, flammable	3	III
IATA (Air)	UN1866	resin solution, flammable	3	III
Canadian TDG	UN1866	resin solution, flammable	3	III

Environmental Hazards Not applicable

Special Precautions Not applicable

Transport in Bulk according to International Maritime Organization Instruments

Not applicable

Emergency Response Guide No. 127

SECTION 15. REGULATORY INFORMATION

Safety, Health and Environmental Regulations

EPCRA - Emergency Planning and Community Right-to-Know Act
CERCLA Reportable Quantity component: Styrene CAS-No. 100-42-5
Component RQ 1,000 lbs. Calculated product RQ 2961 (lbs)

SARA 304 Extremely Hazardous Substances Reportable Quantity
Component: HYDROQUINONE CAS-No. 123-31-9
Component RQ 100 lbs. Calculated product RQ *lbs
*: Calculated RQ exceeds reasonably attainable upper limit.

Canada

Domestic Substances List (DSL) / Non-Domestic Substances List (NDSL)

All ingredients are listed on the DSL or are not required to be listed.

USA

Toxic Substances Control Act (TSCA) Section 8(b)

All ingredients are listed on the TSCA Inventory.

Additional USA Regulatory Lists

SARA Title III - Section 311/312: Reactivity Hazard Fire Hazard Acute Health Hazard Chronic Health Hazard
SARA Title III - Section 302: This material does not contain any components with a section 302 EHS TPQ.
SARA Title III - Section 313. (Styrene) Reporting levels established by SARA Title III, Section 313:
Styrene: CAS# 100-42-5 30 - 40 %
Massachusetts Right To Know:
New Jersey Right To Know:
Pennsylvania Right To Know:
California Proposition 65: WARNING: This product can expose you to chemicals including styrene, benzene, which is/are known to the State of California to cause cancer, and ethanediol, benzene, toluene, which is/are known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

CERCLA: 2304lb (Product) 1000 lbs. (Styrene)

Custom Regulatory 1

The components of this product are reported in the following inventories:
TSCA: On the inventory, or in compliance with the inventory
DSL: This product contains one or several components that are not on the Canadian DSL and have annual quantity limits.
AICS: On the inventory, or in compliance with the inventory
ENCS: On the inventory, or in compliance with the inventory
KECI: On the inventory, or in compliance with the inventory
PICCS: Not in compliance with the inventory
IECSC: On the inventory, or in compliance with the inventory
REACH: On the inventory, or in compliance with the inventory
NZIOC: On the inventory, or in compliance with the inventory
TCSI: On the inventory, or in compliance with the inventory

SECTION 16. OTHER INFORMATION

NFPA Rating	**Health - 2** **Flammability - 3** **Instability - 0** **Based on** Styrene
SDS Prepared By	B.E.R
Phone No.	(315) 782-3000
Date of Preparation	September 15, 2016
Date of Last Revision	June 30, 2023
Revision Indicators	Revision 9 Updated: . Toxicological, Ecological, and Exposure Controls/Personal Protection Information C.A.S.# SECTION 11. TOXICOLOGICAL INFORMATION. SECTION 12. ECOLOGICAL INFORMATION; Acute Aquatic Toxicity; reviewed and approved
Key to Abbreviations	ACGIH® = American Conference of Governmental Industrial Hygienists HSDB® = Hazardous Substances Data Bank IARC = International Agency for Research on Cancer NFPA = National Fire Protection Association NIOSH = National Institute for Occupational Safety and Health NTP = National Toxicology Program OSHA = US Occupational Safety and Health Administration RTECS® = Registry of Toxic Effects of Chemical Substances
References	CHEMINFO database. Canadian Centre for Occupational Health and Safety (CCOHS). HSDB® database. US National Library of Medicine. Available from Canadian Centre for Occupational Health and Safety (CCOHS). NIOSH Pocket Guide database. National Institute for Occupational Safety and Health. Available from Canadian Centre for Occupational Health and Safety (CCOHS). Registry of Toxic Effects of Chemical Substances (RTECS®) database. Dassault Systèmes/BIOVIA (“BIOVIA”). Available from Canadian Centre for Occupational Health and Safety (CCOHS).
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