

**SECTION 1: Identification**

**Product identifiers:**

**Product trade name:** HYPRO\* 1300X40 ETBN  
**Company product number:** X40  
**Other means of identification:** Not Available

**Recommended use of the chemical and restrictions on use:**

**Uses:** Elastomeric modifier for thermoset resins.  
**Restrictions on use:** Consumer use of liquid UP (unsaturated polyester) resins for repair purposes and consumer use of resin paste as fillers/putties.

**Details of the supplier:**

**Manufacturer/Supplier:** CVC Thermoset Specialties  
844 N. Lenola Road  
Moorestown, New Jersey 08057  
United States  
Telephone: +1-856-533-3000  
FAX: +1-856-533-3003  
**For further information about this SDS:** Email: [CTS.info@emeraldmaterials.com](mailto:CTS.info@emeraldmaterials.com)

**Emergency telephone number:**

ChemTel (24 hours): 1-800-255-3924 (USA); +1-813-248-0585 (outside USA);  
1-300-954-583 (Australia); 000-800-100-4086 (India).

**SECTION 2: Hazard(s) identification**

**Classification of the substance or mixture:**

Flammable Liquid, category 3, H226  
Skin Irritation, category 2, H315  
Eye Irritation, category 2, H319  
STOT, single exposure, category 3, RTI , H335  
Reproductive Toxicity, category 2, H361  
STOT, repeated exposure, category 1, H372  
Hazardous to the aquatic environment, Acute, category 2, H401  
Hazardous to the aquatic environment, Chronic, category 3, H412

**Label elements:**

**Hazard pictogram(s):**



**Signal word:**

Danger

**Hazard statements:**

H226 Flammable liquid and vapour.  
H315 Causes skin irritation.  
H319 Causes serious eye irritation.  
H335 May cause respiratory irritation.  
H361 Suspected of damaging fertility or the unborn child.  
H372 Causes damage to organs through prolonged or repeated exposure.

H401 Toxic to aquatic life.  
H412 Harmful to aquatic life with long lasting effects.

**Precautionary statements:**

P201 Obtain special instructions before use.  
P202 Do not handle until all safety precautions have been read and understood.  
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P240 Ground and bond container and receiving equipment.  
P241 Use explosion-proof electrical/ventilating/lighting equipment.  
P242 Use non-sparking tools.  
P243 Take action to prevent static discharges.  
P260 Do not breathe dust/fume/gas/mist/vapours/spray.  
P264 Wash 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.  
P273 Avoid release to the environment.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.  
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.  
P312 Call a POISON CENTRE/doctor if you feel unwell.  
P332+P313 If skin irritation occurs: Get medical advice/attention.  
P337+P313 If eye irritation persists: Get medical advice/attention.  
P362+P364 Take off contaminated clothing and wash it before reuse.  
P370+P378 In case of fire: Use carbon dioxide, dry chemical, foam to extinguish.  
P403+P233 Store in a well-ventilated place. Keep container tightly closed.  
P403+P235 Store in a well-ventilated place. Keep cool.  
P405 Store locked up.  
P501 Dispose of contents/container in accordance with local, regional and international regulations.

**Supplemental information:** Contains 45-55 % of components with unknown hazards to the aquatic environment.

Classification and hazards statements are listed according to the United Nations Globally Harmonized System of Classification and Labelling of Chemicals (GHS). Regulations in individual countries/regions may determine which classifications and hazard statements are applicable based on adopted hazard classes and categories. Precautionary statements are listed according to the United Nations Globally Harmonized System of Classification and Labelling of Chemicals (GHS) - Annex III. Regulations in individual countries/regions may determine which statements are required on the product label. See product label for specifics.

**Other hazards:** Hazardous polymerization may occur upon depletion of inhibitor.

See Section 11 for toxicological information.

### SECTION 3: Composition/information on ingredients

**Mixture:**

<u>CAS-No.</u>	<u>Chemical Name</u>	<u>Weight%</u>
0000100-42-5	Styrene	45-<55

**Notes:** Styrene: <=50%. This material contains inhibitor(s).

Amounts specified are typical and do not represent a specification. Remaining components are proprietary, non-hazardous, and/or present at amounts below reportable limits.

### SECTION 4: First-aid measures

**Description of first aid measures:**

**General:** If irritation or other symptoms occur or persist from any route of exposure, remove the affected individual from the area: see a physician/get medical attention.

**Eye contact:** Immediately flush eyes with plenty of clean water for an extended time, not less than fifteen (15) minutes. Flush longer if there is any indication of residual chemical in the eye. Ensure adequate flushing of the eyes by separating the eyelids with fingers and roll eyes in a circular motion. If eye irritation persists: Get medical advice/attention.

**Skin contact:** Immediately remove contaminated clothing and shoes. Wash the affected area with plenty of soap and water

until no evidence of the chemical remains (at least 15-20 minutes). Launder clothing before reuse. If skin irritation occurs: Get medical advice/attention.

**Inhalation:** If affected, remove to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Call a POISON CENTER or doctor/physician if you feel unwell.

**Ingestion:** Do not induce vomiting. Never give anything by mouth to an unconscious person. Rinse out the mouth with water. Get medical attention immediately.

**Protection of first aid responders:** Wear proper personal protective clothing and equipment.

**Most important symptoms and effects, both acute and delayed:** Dizziness, Drowsiness, Headache, Irritation, Nausea. Pre-existing skin problems may be aggravated by prolonged or repeated contact. Persons with sensitive airways (e.g., asthmatics) may react to vapors. See section 11 for additional information.

**Indication of any immediate medical attention and special treatment needed, if necessary:** Treat symptomatically.

## SECTION 5: Fire-fighting measures

### Extinguishing media:

**Suitable:** Use ABC dry chemical, foam, CO<sub>2</sub>, or water fog. Water may be ineffective due to the low flash point.

**Unsuitable:** Do not use direct water stream. May spread fire.

### Special hazards arising From the chemical:

**Unusual fire/explosion hazards:** Issue warning: flammable liquid. Eliminate all ignition sources. Ventilate the area. If spill is large, be prepared to isolate the hazard area. Deny access to the spill area to persons who are not involved in the cleanup and/or who have not been properly trained in spill management of hazardous/flammable liquids. Vapors may explode if ignited in an enclosed area. Run off to sewer may cause a fire or explosion hazard. Protect product from flames of any kind; maintain proper clearance when using heat devices, etc. Product can form a flammable vapor/air mixture at temperatures at or above the flash point. Hot vapor or mists may be susceptible to spontaneous combustion when mixed with air. Ignition temperatures decrease with increasing vapor volume and vapor/air contact time and are influenced by pressure changes. Therefore, ignition may occur below published ignition temperatures. Use of this product in processes involving elevated-temperatures, vacuum if subject to sudden ingress of air, sudden escape of vapor or mist, etc., must be thoroughly evaluated to assure safe operation. Closed container may rupture (due to build up in pressure) when exposed to extreme heat. Product may burn if an ignition source is present. Gives off volatile vapors that are heavier than air and may travel along the ground or may be moved by ventilation and ignited by flame, sparks, heaters, or other ignition sources at distant locations (flashback potential). High temperatures, inhibitor depletion, accidental impurities, or exposure to radiation or oxidizers may cause spontaneous polymerizing reaction generating heat/pressure. Closed containers may rupture or explode under runaway polymerization.

**Hazardous combustion products:** Irritating or toxic substances will be emitted upon burning, combustion or decomposition. See section 10 (Hazardous decomposition products) for additional information.

**Special protective equipment and precautions for fire-fighters:** Use water/water spray to keep fire-exposed containers cool. Water spray may be used to flush spills away from exposures and to dilute spills to non-flammable mixtures. Do not flush flammable liquids into sewer as a fire or vapor explosion hazard may result. Never direct a hose stream directly onto a burning flammable/combustible liquid. Solid or straight hose stream will cause fire to spread if directed onto a burning spill or into an open container of burning liquid. Wear self-contained breathing apparatus (SCBA) equipped with a full facepiece and operated in a pressure-demand mode (or other positive pressure mode) and approved protective clothing. Personnel without suitable respiratory protection must leave the area to prevent significant exposure to hazardous gases from combustion, burning or decomposition. In an enclosed or poorly ventilated area, wear SCBA during cleanup immediately after a fire as well as during the attack phase of firefighting operations.

See section 9 for additional information.

## SECTION 6: Accidental release measures

**Personal precautions, protective equipment and emergency procedures:** See Section 8 for recommendations on the use of personal protective equipment. Eliminate ignition sources. Ventilate areas of spill. Personal Protective Equipment must be worn.

**Environmental precautions:** Do not flush liquid into public sewer, water systems or surface waters.

**Methods and materials for containment and cleaning up:** Contain by diking with sand, earth or other non-combustible material.

Wear proper personal protective clothing and equipment. Absorb spill with an inert material. Place into labeled, closed container; store in safe location to await disposal. Change contaminated clothing and launder before reuse. Contaminated monomer(s) may be unstable. Add inhibitor to prevent polymerization. Absorbent can act as a contaminant (removes inhibitor) in liquid monomer(s) materials. CAUTION: Spilled liquid and dried film are slippery. Use care to avoid falls.

## SECTION 7: Handling and storage

**Precautions for safe handling:** As with any chemical product, use good laboratory/workplace procedures. Do not cut, puncture, or weld on or near the container. Do not breathe dust, vapor, aerosol, mist or gas. Wash thoroughly after handling this product. Always wash up before eating, smoking or using the facilities. Use under well-ventilated conditions. Avoid eye and skin contact. Avoid drinking, tasting, swallowing or ingesting this product. Wash contaminated clothing before reuse. Discard shoes contaminated with this product. Provide eyewash fountains and safety showers in the work area. Bond and ground all containers when transferring chemical. Eliminate ignition sources (e.g., sparks, static buildup, excessive heat, etc.). Use spark-proof tools and equipment. Vapors may travel to distant ignition sources.

**Conditions for safe storage, including any incompatibilities:** Avoid excessive heat. Do not store near flammable agents. Keep away from heat, sparks and open flames. Store under well-ventilated conditions. Keep container upright, when not in use, to prevent leakage. Avoid storing containers in direct sunlight as vapors may accumulate in the head space creating pressure. Store this material away from incompatible substances (see section 10). Do not store in open, unlabeled or mislabeled containers. Keep container closed when not in use. To prevent polymerization, container opened previously SHOULD NOT BE BLANKETED with nitrogen or other inert gas. Check inhibitor levels periodically. Product can accumulate static charge when handled. Equipment should be grounded. Emptied container may contain residual vapors or liquid which may ignite or explode. Do not reuse empty container without commercial cleaning or reconditioning. Bond and ground all containers when transferring chemical. Comply with all national, state and local codes pertaining to the storage, handling, dispensing and disposal of flammable liquids. Store product where temperatures are below 122°F (50°C).

## SECTION 8: Exposure controls / personal protection

### Control parameters:

#### Occupational exposure limits (OEL):

<u>Chemical Name</u> Styrene	<u>ACGIH - TWA/Ceiling</u> 20 ppm TWA		<u>ACGIH - STEL</u> 40 ppm STEL	
<u>Chemical Name</u> Styrene	<u>Australia</u> 50 ppm TWA, 100 ppm STEL	<u>New Zealand</u> 50 ppm TWA, 100 ppm STEL (skin)	<u>Korea</u> 20 ppm TWA (Vinyl benzene; Phenylethylene), 40 ppm STEL (Vinyl benzene; Phenylethylene) (skin)	<u>Taiwan</u> 50 ppm TWA, 266.25 mg/m <sup>3</sup> STEL
<u>Chemical Name</u> Styrene	<u>Japan ISHL</u> 20 ppm ACL	<u>Japan JSOH</u> 20 ppm OEL (skin)	<u>Indonesia</u> 20 ppm TWA, 40 ppm STEL (skin)	<u>Malaysia</u> 20 ppm TWA (skin)
<u>Chemical Name</u> Styrene	<u>Philippines</u> 100 ppm TWA	<u>Singapore</u> 50 ppm PEL, 100 ppm STEL		

N/E=Not established (no exposure limits established for the listed substances for listed country/region/organization).

### Exposure controls:

**Appropriate engineering controls:** Always provide effective general and, when necessary, local exhaust ventilation to draw spray, aerosol, fume, mist and vapor away from workers to prevent routine inhalation. Ventilation must be adequate to maintain the ambient workplace atmosphere below the exposure limit(s) outlined in the SDS. Eliminate ignition sources (e.g., sparks, static buildup, excessive heat, etc.).

### Individual protection measures, such as personal protective equipment:

**Eye/face protection:** Safety glasses or goggles required.

**Skin and body protection:** Wear chemical resistant (impervious) gloves. Wear chemical resistant protective clothing. Use good laboratory/workplace procedures including personal protective clothing: labcoat, safety glasses and protective gloves.

**Respiratory protection:** In case of insufficient ventilation, wear suitable respiratory equipment. Wear an approved respirator (e.g., an organic vapor respirator, a full face air purifying respirator for organic vapors, or a self-contained breathing apparatus) whenever exposure to aerosol, mist, spray, fume or vapor exceed the applicable exposure limit(s) of

any chemical substance listed in this SDS.

**Further information:** Eyewash fountains and safety showers are recommended in the work area.

## SECTION 9: Physical and chemical properties

<b>Form:</b>	Liquid	<b>pH:</b>	Not Available
<b>Appearance:</b>	Yellow	<b>Relative density:</b>	0.945
<b>Odor:</b>	Styrene	<b>Partition coefficient (n-octanol/water):</b>	Not Available
<b>Odor threshold:</b>	Not Available	<b>% Volatile by weight:</b>	50%
<b>Solubility in water:</b>	Miscible	<b>VOC:</b>	50%
<b>Evaporation rate:</b>	(Styrene) Slower than n-butyl acetate	<b>Boiling point °C:</b>	145 °C Styrene
<b>Vapor pressure:</b>	6.5 mm Hg @ 25°C (77°F) (Styrene)	<b>Boiling point °F:</b>	293 °F Styrene
<b>Vapor density:</b>	Heavier than air	<b>Flash point:</b>	32 °C (90 °F)
<b>Viscosity:</b>	500-1900 cP @ 25°C (77°F)	<b>Auto-ignition temperature:</b>	490°C (914°F) (Styrene)
<b>Melting point/Freezing point:</b>	-31°C (-23.8°F) (Styrene)	<b>Flammability (solid, gas):</b>	Not Applicable (liquid)
<b>Oxidizing properties:</b>	Not oxidizing	<b>Flammability or explosive limits:</b>	LFL/LEL: 1.1% (Styrene)  UFL/UEL: 6.1% (Styrene)
<b>Explosive properties:</b>	Not explosive		
<b>Decomposition temperature:</b>	Not Available		
<b>SAPT:</b>	73 °C (164 °F)		

**Other information:** Amounts specified are typical and do not represent a specification.

## SECTION 10: Stability and reactivity

**Reactivity:** Exothermic reactions including polymerization may occur in contact with amines.

**Chemical stability:** This product is stable. Stable, however may polymerize at elevated temperatures or upon depletion of inhibitor.

**Possibility of hazardous reactions:** Hazardous polymerization will occur. Stable, however may polymerize at elevated temperatures or upon depletion of inhibitor.

**Conditions to avoid:** Do not expose to excessive heat or ignition sources. Excessive heat or ignition sources, direct sunlight, Ultraviolet radiation, lack or depletion of polymerization inhibitor, contamination with incompatible materials.

**Incompatible materials:** Avoid contact with acids or bases and amines. Oxidizing agents may cause decomposition yielding carbon monoxide and carbon dioxide, heat, and pressure. Intense heat may be generated if product comes in contact with strong basic materials or strongly basic amines. Avoid contact with strong oxidants, highly halogenated compounds in presence of iron, inorganic nitrates, or triethyl aluminum. Avoid contact with strong oxidizing agents and reducing agents. Depending on the amount and specific materials involved, contact can result in intense heat, boiling, flame development, explosion or toxic gas generation.

**Hazardous decomposition products:** Carbon dioxide, carbon monoxide, hydrocarbons, oxides of nitrogen, and oxides of sulfur.

## SECTION 11: Toxicological information

### Information on likely routes of exposure:

**General:** Caution must be exercised through the prudent use of protective equipment and handling procedures to minimize exposure. Health effects are particularly evident when product is heated. Overexposure will cause central nervous system depression.

**Eyes:** Causes serious eye irritation. May cause redness of the eyes, tearing and blurred vision.

**Skin:** Causes skin irritation. Repeated or prolonged contact may cause irritation, dermatitis, defatting and drying or cracking of the skin.

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**Inhalation:** May cause respiratory tract irritation. Excessive inhalation can cause respiratory tract irritation, dizziness, fatigue, weakness, nausea and headache. Inhalation of fumes and vapors from processing, combustion or decomposition may cause irritation of the respiratory tract and mucous membranes.

**Ingestion:** Ingestion may cause nausea, vomiting and diarrhea.

**Acute toxicity information:** Not classified (based on available data, the classification criteria are not met). No toxicity studies have been conducted on this product. ATEmix (oral): >5000 mg/kg. ATEmix (dermal): >2000 mg/kg. ATEmix (inhal.): >20 mg/L, 4 hours (vapor).

<u>Chemical Name</u>	<u>Inhalation LC50</u>	<u>Species</u>	<u>Oral LD50</u>	<u>Species</u>	<u>Dermal LD50</u>	<u>Species</u>
Styrene	11.8 mg/L (4 hours)	Rat/ adult	5000 mg/kg	Rat/ adult	>2000 mg/kg	Rat/ adult

**Skin corrosion/irritation:** Causes skin irritation - Category 2.

<u>Chemical Name</u>	<u>Skin irritation</u>	<u>Species</u>
Styrene	Irritant	Rabbit/ adult

**Serious eye damage/irritation:** Causes serious eye irritation - Category 2 (2A).

<u>Chemical Name</u>	<u>Eye irritation</u>	<u>Species</u>
Styrene	Irritant	Rabbit/ adult

**Respiratory or skin sensitization:** Not classified (no relevant information found).

<u>Chemical Name</u>	<u>Skin sensitisation</u>	<u>Species</u>
Styrene	Non-sensitizer	Weight of evidence

**Carcinogenicity:** Not classified (no relevant information found). STYRENE: Data from other long-term animal studies and from epidemiology studies of workers exposed to styrene do not provide a basis to conclude that styrene is carcinogenic. An increased incidence of lung tumors was observed in mice from a recent inhalation study - LOAEC (Lowest-Observed-Adverse-Effect-Concentration), inhalation, mouse - 0.09-0.18 mg/L. These tumours are not considered to be relevant to humans. Additional animal study data: NOAEL (no-observed-adverse-effect-level) (carcinogenicity), oral, rat: 2000 mg/kg bw/day; LOAEL (Lowest-Observed-Adverse-Effect-Level) (carcinogenicity), oral, mouse: 150 mg/kg bw/day. NOAEC (no-observed-adverse-effect-concentration) (carcinogenicity), inhalation, rat: >=4.34 mg/L (no effects observed). U.S. NTP 14th RoC - Reasonably anticipated to be a human carcinogen; IARC - upgraded from 2B to 2A in 2018, monograph publication pending.

**Germ cell mutagenicity:** Not classified (no relevant information found). STYRENE: Styrene was not mutagenic in in-vitro assays such as the Ames test without metabolic activation but in the presence of metabolic systems has given both negative and positive responses. Styrene has induced chromosomal aberrations and sister chromatid exchanges in-vitro dependent on the metabolic activation system. Some cytogenetic studies on workers exposed to styrene have shown increases in chromosomal damage, although these effects do not appear to be related to styrene exposure levels and are not supported by the data observed in the animal studies.

**Reproductive toxicity:** Suspected of damaging fertility or the unborn child - Category 2. STYRENE: Reviews of the developmental and reproductive data indicate that styrene does not cause birth defects in orally-dosed rats, and inhalation-exposed laboratory animals. Other developmental effects have been reported at exposure levels that are maternally toxic. Developmental toxicity, inhalation, rats: NOAEC (no-observed-adverse-effect-concentration) = 150 ppm.

**Specific target organ toxicity (STOT) - single exposure:** May cause respiratory irritation - Category 3. STYRENE: Acute inhalation literature data (human) - NOAEC (No-Observed-Adverse-Effect-Concentration): 7 hours exposure = 100 ppm; 1 hour exposure = 216 ppm (no effects on the Central Nervous System (CNS)) (Stewart et al., 1968); Some minor impairment observed in neurobehavioral test performance at 200 ppm for 1.5 hour (Oltmare et al., 1974).

**Specific target organ toxicity (STOT) - repeated exposure:** Causes damage to organs through prolonged or repeated exposure - Category 1. STYRENE: Repeated dose toxicity study, oral, mouse, 2 years: NOAEL (no-observed-adverse-effect-level) = 150 mg/kg bw/day (systemic effects). Repeated dose toxicity study, inhalation, 4 weeks, male rat: NOAEC (no-observed-adverse-effect-concentration) = 500 ppm (2.13 mg/L) (ototoxicity). Long-term inhalation literature studies (human): NOAEC (color vision effects) = 50 ppm (8-hour TWA)(Seeber et al., 2009); NOAEC (ototoxicity) = 20 ppm (Triebig et al., 2009).

**Aspiration hazard:** Not classified (based on available data, the classification criteria are not met).

**Other toxicity information:** No additional information available.

## SECTION 12: Ecological information

**Ecotoxicity:** No ecological testing has been conducted on this product.

<u>Chemical Name</u>	<u>Species</u>	<u>Acute</u>	<u>Acute</u>	<u>Chronic</u>
Styrene	Fish	LC50 4.02 mg/L (96 hours)	LC50 10 mg/L(96 hours)	N/E
Styrene	Invertebrates	EC50 4.7 mg/L (48 hours)	LC50 9.5 mg/L(96 hours)	NOEC 1.01 mg/L (21 days)
Styrene	Algae	EC50 4.9 mg/L (72 hours)	EC50 6.3 mg/L(96 hours)	EC10 0.28 mg/L(96 hours)
Styrene	Micro-organisms	EC50 500 mg/L (30 minutes)		

**Persistence and degradability:** No specific information available.

<u>Chemical Name</u>	<u>Biodegradation</u>
Styrene	Readily biodegradable

**Bioaccumulative potential:** No specific information available.

<u>Chemical Name</u>	<u>Bioconcentration Factor (BCF)</u>	<u>Log Kow</u>
Styrene	74 (calculated)	2.96 (OECD 107)

**Mobility in soil:** No specific information available.

<u>Chemical Name</u>	<u>Mobility in soil (Koc/Kow)</u>
Styrene	352 (estimated)

**Other adverse effects:** No additional information available.

## SECTION 13: Disposal considerations

Dispose of unused contents (incineration) in accordance with national and local regulations. Dispose of container in accordance with national and local regulations. Ensure the use of properly authorized waste management companies, where appropriate. After addition of excess inhibitor, dispose material in accordance with local regulations.

See Section 8 for recommendations on the use of personal protective equipment.

## SECTION 14: Transport information

The information below is provided to assist in documentation. It may supplement the information on the package. The package in your possession may carry a different version of the label depending on the date of manufacture. Depending on inner packaging quantities and packaging instructions, it may be subject to specific regulatory exceptions.

**UN number:** UN2055

**UN proper shipping name:**

Styrene monomer solution, stabilized

**Transport hazard class(es):**

**U.S. DOT hazard class:** 3

**Canada TDG hazard class:** 3

**Europe ADR/RID hazard class:** 3

**IMDG Code (ocean) hazard class:** 3

**ICAO/IATA (air) hazard class:** 3

A "N/A" listing for the hazard class indicates the product is not regulated for transport by that regulation.

**Packing group:** III

**Environmental hazards:**

**Marine pollutant:** Not Applicable

**Hazardous substance (USA):** A shipment in a single package greater than 2000 pounds may exceed the reportable quantity (RQ) for one or more components.

**Special precautions for user:** Not Applicable

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code:**

<u>Chemical Name</u>	<u>Category</u>
Styrene	Category Y

<b>SECTION 15: Regulatory information</b>
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**Safety, health and environmental regulations specific for the product in question:****Japan regulations:****Japan Industrial Safety and Health Law:**

Chemical name  
Styrene

Category

Dangerous Substance, Designated carcinogen, Notifiable substance, Harmful substance, Specified chemical substance

**Japan Fire Service Law:**

Chemical name  
Styrene

Category

Group 4 - Flammable liquids

**Japan Poisonous and Deleterious Substances:**

Chemical name  
No subject chemicals

CategoryThreshold**Japan Prevention of Marine Pollution and Disaster:**

Chemical name  
Styrene

Category

Noxious Category Y, Flammable substance

**Japan Chemical Substances Control Law:**

Chemical name  
Styrene

Category

Priority assessment chemical

Notes

Substance control number 47

**Korean regulations:****Korea Industrial Safety and Health Act:**

Chemical name  
Styrene

Category

Organic compounds

Threshold

1 %

**Korea Act on Registration and Evaluation of Chemical Substances (K-REACH) - Substances subject to registration:**

Styrene

**Korea Chemical Control Act (CCA):**

Chemical name  
No subject chemicals

CategoryCodeThreshold**Korea Safety Control of Dangerous Substances Act (MPSS):**

Chemical name  
No subject chemicals

ClassThreshold**Korea Waste Control Act: Waste disposal methods must comply with local and national laws.**

Chemical name  
No subject chemicals

Notes

**Other regulations:** No Additional Information

**Chemical inventories:**

<u>Regulation</u>	<u>Status</u>
Australian Inventory of Chemical Substances (AICS):	Y
Canadian Domestic Substances List (DSL):	Y
Canadian Non-Domestic Substances List (NDSL):	N
China Inventory of Existing Chemical Substances (IECSC):	Y
European EC Inventory (EINECS, ELINCS, NLP):	Y
Japan Existing and New Chemical Substances (ENCS):	Y
Japan Industrial Safety and Health Law (ISHL):	Y
Korean Existing and Evaluated Chemical Substances (KECL):	Y
New Zealand Inventory of Chemicals (NZIoC):	N
Philippines Inventory of Chemicals and Chemical Substances (PICCS):	N
Taiwan Inventory of Existing Chemicals:	Y
U.S. Toxic Substances Control Act (TSCA) (Active):	Y

A "Y" listing indicates all intentionally added components are either listed or are otherwise compliant with the regulation. A "N" listing indicates that for one or more components: 1) there is no listing on the public inventory (or is not on the ACTIVE inventory for U.S. TSCA); 2) no information is available; or 3) the component has not been reviewed. A "Y" for New Zealand may mean that a qualified group standard may exist for the components in this product.

**Chemical inventory notes:** New Zealand: One or more components may be covered by a group standard.

**Europe REACH (EC) 1907/2006:** Applicable components are registered, exempt or otherwise compliant. REACH is only relevant to substances either manufactured or imported into the EU. Emerald Performance Materials has met its obligations under the REACH regulation. REACH information regarding this product is provided for informational purposes only. Each Legal Entity may have differing REACH obligations, depending on their place in the supply chain. For material manufactured outside of the EU, the importer of record must understand and meet their specific obligations under the regulation.



## SECTION 16: Other information

**Legend:**

\* : Trademark owned by Emerald Performance Materials, LLC.

ACGIH: American Conference of Governmental Industrial Hygienists

N/A: Not Applicable

N/E: None Established

STEL: Short Term Exposure Limit

TWA: Time Weighted Average (exposure for 8-hour workday)

**Users Responsibility/Disclaimer of Liability:**

The information set forth herein is based on our current knowledge, and is intended to describe the product solely with respect to health, safety and the environment. As such, it must not be interpreted as a guarantee of any specific property of the product. As a result, the customer shall be solely responsible for deciding whether said information is suitable and beneficial.

Safety Data Sheet Preparer:

Product Compliance Department

Emerald Performance Materials, LLC

1499 SE Tech Center Place, Suite 300

Vancouver, WA 98683

United States