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29 CFR 1910.1200 (OSHA HazCom 2012)

## SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

### Product identifier

Trade name : FSV-20  
RESIN

### Relevant identified uses of the substance or mixture and uses advised against

Details of the supplier of the safety data sheet	Emergency telephone number
<p>Composite Technologies International 1500 Charles A Daugherty Dr, Anniston, AL 36207 (800) 847 3637</p>	<p><b>(800) 847 3637</b></p> <p>or contact your local emergency response agency</p>

## SECTION 2. HAZARDS IDENTIFICATION

### GHS Classification

Flammable liquids : Category 3

Combustible Dust :


Skin irritation : Category 2

Eye irritation : Category 2A

Skin sensitization : Category 1

Specific target organ systemic toxicity - single exposure : Category 3 (Respiratory system)

Specific target organ systemic toxicity - repeated exposure (Inhalation) : Category 1 (Auditory system)

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## GHS label elements

Hazard pictograms



Signal Word

: Danger

Hazard Statements


: Flammable liquid and vapor.  
May form combustible dust concentrations in air.  
Causes skin irritation.  
May cause an allergic skin reaction.  
Causes serious eye irritation.  
May cause respiratory irritation.  
Causes damage to organs (Auditory system) through prolonged or repeated exposure if inhaled.

Precautionary Statements

: **Prevention:**  
Keep away from heat/sparks/open flames/hot surfaces. No smoking.  
Keep container tightly closed.  
Ground/bond container and receiving equipment.  
Use explosion-proof electrical/ ventilating/ lighting/ equipment.  
Use only non-sparking tools.  
Take precautionary measures against static discharge.  
Do not breathe dust/ fume/ gas/ mist/ vapors/ spray.  
Wash skin thoroughly after handling.  
Do not eat, drink or smoke when using this product.  
Use only outdoors or in a well-ventilated area.  
Contaminated work clothing must not be allowed out of the workplace.  
Wear protective gloves/ eye protection/ face protection.  
Hazardous polymerization can occur under certain conditions.  
Avoid excessive heat, direct sunlight, peroxides, and other polymerization catalysts. Store in a cool place and maintain proper concentrations of inhibitor and oxygen.

### Response:

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.  
IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.  
IF IN EYES: Rinse cautiously with water for several minutes.

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Remove contact lenses, if present and easy to do. Continue rinsing.  
 Get medical advice/ attention if you feel unwell.  
 If skin irritation or rash occurs: Get medical advice/ attention.  
 If eye irritation persists: Get medical advice/ attention.  
 Take off contaminated clothing and wash before reuse.  
 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

**Storage:**

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

**Disposal:**

Dispose of contents/ container to an approved waste disposal plant.

**Other hazards**

Static Accumulating liquid  
 Hazardous polymerization may occur.

### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture  
 Chemical nature : Static Accumulator  
 Chemical nature : Defatter

**Hazardous components**

Chemical name	CAS-No.	Classification	Concentration (%)
DIMER / TRIMER	800986-5689P	Skin Sens. 1B; H317	>= 1.50 - < 5.00

The identity and concentration of one or more component(s) is being withheld under business confidentiality.

STYRENE	100-42-5	Flam. Liq. 3; H226 Acute Tox. 4; H332 Skin Irrit. 2; H315 Eye Irrit. 2A; H319 STOT SE 3; H335 STOT RE 1; H372	32.2097
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		Asp. Tox. 1; H304	
VINYL TOLUENE	25013-15-4	Flam. Liq. 3; H226 Acute Tox. 4; H332 Skin Irrit. 2; H315 Eye Irrit. 2A; H319 STOT SE 3; H335 Asp. Tox. 1; H304	6.0977

**SECTION 4. FIRST AID MEASURES**

General advice	: Move out of dangerous area. Call a POISON CENTRE or doctor/physician if exposed or you feel unwell. Show this safety data sheet to the doctor in attendance. Do not leave the victim unattended.
If inhaled	: Move to fresh air. IF INHALED: Call a POISON CENTER/ doctor if you feel unwell. Keep patient warm and at rest. If unconscious, place in recovery position and seek medical advice.
In case of skin contact	: Remove contaminated clothing. If irritation develops, get medical attention. If on skin, rinse well with water. Wash contaminated clothing before re-use. If on clothes, remove clothes.
In case of eye contact	: Immediately flush eye(s) with plenty of water. Remove contact lenses. Protect unharmed eye.
If swallowed	: Obtain medical attention. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician.
Most important symptoms and effects, both acute and delayed	: Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: stomach or intestinal upset (nausea, vomiting, diarrhea)

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irritation (nose, throat, airways)  
 confusion  
 Causes skin irritation.  
 May cause an allergic skin reaction.  
 Causes serious eye irritation.  
 May cause respiratory irritation.  
 Causes damage to organs through prolonged or repeated exposure if inhaled.

Notes to physician : No hazards which require special first aid measures.

## SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.  
 Water spray  
 Foam  
 Alcohol-resistant foam  
 Carbon dioxide (CO<sub>2</sub>)  
 Dry chemical


Unsuitable extinguishing media : High volume water jet

Specific hazards during firefighting : Organic dusts at sufficient concentration can form explosive mixtures in air.  
 Never use welding or cutting torch on or near drum (even empty) because product (even just residue) can ignite explosively.  
 Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.  
 Do not allow run-off from fire fighting to enter drains or water courses.

Hazardous combustion products : Hydrocarbons  
 carbon dioxide and carbon monoxide  
 toxic fumes  
 acrid smoke and fumes

Specific extinguishing methods :

Further information : Product is compatible with standard fire-fighting agents.  
 Do not use a solid water stream as it may scatter and spread fire.  
 Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.  
 Use a water spray to cool fully closed containers.  
 Polymerization will take place under fire conditions. If

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polymerization occurs in a closed container, there is a possibility it will rupture violently. Cool storage container with water, if exposed to fire.

Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.

## SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures : Evacuate personnel to safe areas.  
Remove all sources of ignition.  
Use personal protective equipment.  
Ensure adequate ventilation.  
Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.  
Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed.


Environmental precautions : Prevent product from entering drains.  
Prevent further leakage or spillage if safe to do so.  
If the product contaminates rivers and lakes or drains inform respective authorities.

Methods and materials for containment and cleaning up : Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

Other information : Comply with all applicable federal, state, and local regulations.  
Suppress (knock down) gases/vapours/mists with a water spray jet.

## SECTION 7. HANDLING AND STORAGE

Advice on safe handling : Open drum carefully as content may be under pressure.  
Avoid formation of aerosol.  
Provide sufficient air exchange and/or exhaust in work rooms.  
Do not breathe vapours/dust.  
Do not smoke.  
Persons susceptible to skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used.  
Container hazardous when empty.  
Take precautionary measures against static discharges.  
Avoid exposure - obtain special instructions before use.

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Avoid contact with skin and eyes.  
Smoking, eating and drinking should be prohibited in the application area.  
For personal protection see section 8.  
Dispose of rinse water in accordance with local and national regulations.  
Secondary operations, such as grinding and sanding, may produce dust.  
Maintain good housekeeping. Do not permit dust layers to accumulate, for example, on floors, ledges, and equipment, in order to avoid any potential for dust explosion hazards.  
For further guidance on prevention of dust explosions, refer to National Fire Protection Association (NFPA) 654: "Standard for the Prevention of Fire and Dust Explosions, from the Manufacturing, Processing and Handling of Combustible Particulate Solids".

Conditions for safe storage : Keep container tightly closed in a dry and well-ventilated place.  
Containers which are opened must be carefully resealed and kept upright to prevent leakage.  
Observe label precautions.  
No smoking.

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
STYRENE	100-42-5	TWA	50 ppm 215 mg/m3	NIOSH REL
		ST	100 ppm 425 mg/m3	NIOSH REL
		TWA	100 ppm	OSHA Z-2
		CEIL	200 ppm	OSHA Z-2
		Peak	600 ppm	OSHA Z-2
		TWA	50 ppm 215 mg/m3	OSHA P0
		STEL	100 ppm 425 mg/m3	OSHA P0
		C	500 ppm	CAL PEL
		PEL	50 ppm 215 mg/m3	CAL PEL
		STEL	100 ppm	CAL PEL

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			425 mg/m <sup>3</sup>	
		TWA	20 ppm	ACGIH
		STEL	40 ppm	ACGIH
VINYL TOLUENE	25013-15-4	TWA	50 ppm	ACGIH
		STEL	100 ppm	ACGIH
		TWA	100 ppm 480 mg/m <sup>3</sup>	NIOSH REL
		TWA	100 ppm 480 mg/m <sup>3</sup>	OSHA Z-1
		TWA	100 ppm 480 mg/m <sup>3</sup>	OSHA P0
		PEL	50 ppm 240 mg/m <sup>3</sup>	CAL PEL

**Hazardous components without workplace control parameters**

Components	CAS-No.
DIMER / TRIMER	800986-5689P

**Biological occupational exposure limits**

Components	CAS-No.	Control parameters	Biological specimen	Sampling time	Permissible concentration	Basis
STYRENE	100-42-5	Mandelic acid plus phenylglyoxylic acid	Urine	End of shift (As soon as possible after exposure ceases)	400 mg/g Creatinine	ZUS_A CGIHB
		Styrene	Urine	End of shift (As soon as possible after exposure ceases)	40 µg/l	ZUS_A CGIHB


**Engineering measures**

: 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.

**Personal protective equipment****Respiratory protection**

: In the case of vapour formation use a respirator with an approved filter.  
A NIOSH-approved air-purifying respirator with an appropriate



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	<p>cartridge and/or filter may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits (if applicable) or if overexposure has otherwise been determined. Protection provided by air-purifying respirators is limited. Use a positive pressure, air-supplied respirator if there is any potential for uncontrolled release, exposure levels are not known or any other circumstances where an air-purifying respirator may not provide adequate protection.</p>
Hand protection Remarks	: The suitability for a specific workplace should be discussed with the producers of the protective gloves.
Eye protection	: Wear chemical splash goggles when there is the potential for exposure of the eyes to liquid, vapor or mist.
Skin and body protection	<p>: Wear as appropriate:</p> <p>Impervious clothing</p> <p>Safety shoes</p> <p>Flame-resistant clothing</p> <p>Choose body protection according to the amount and concentration of the dangerous substance at the work place.</p> <p>Discard gloves that show tears, pinholes, or signs of wear.</p> <p>Wear resistant gloves (consult your safety equipment supplier).</p>
Hygiene measures	<p>: Wash hands before breaks and at the end of workday.</p> <p>When using do not eat or drink.</p> <p>When using do not smoke.</p>

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	: liquid
Odour	: No data available
Odour Threshold	: No data available
pH	: No data available
Melting point/freezing point	: No data available
Boiling point/boiling range	: 293 °F / 145 °C Calculated Phase Transition Liquid/Gas
Flash point	: 29.4 °C Method: Seta closed cup
Evaporation rate	: No data available
Flammability (solid, gas)	: May form combustible dust concentrations in air (during processing).
Flammability (liquids)	: Static Accumulating liquid

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Upper explosion limit : 6.1 %(V)  
GLP: Calculated Explosive Limit

Lower explosion limit : 1.1 %(V)  
GLP: Calculated Explosive Limit

Vapour pressure : 8.53248 hPa (25 °C)  
Calculated Vapor Pressure

Relative vapour density : No data available

Relative density : No data available

Density : 1.078 g/cm<sup>3</sup> (25 °C)

Solubility(ies)  
Water solubility : insoluble

Solubility in other solvents : No data available

Partition coefficient: n-octanol/water : No data available

Thermal decomposition : No data available

Viscosity  
Viscosity, dynamic : No data available

Viscosity, kinematic : > 20.5 mm<sup>2</sup>/s (40 °C)

Oxidizing properties : No data available

**SECTION 10. STABILITY AND REACTIVITY**

Reactivity : No decomposition if stored and applied as directed.  
Chemical stability : Stable under recommended storage conditions.  
Possibility of hazardous reactions : Hazardous polymerisation may occur.  
Vapours may form explosive mixture with air.  
This product does not present a dust explosion hazard as delivered. However, fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source, is a potential dust explosion hazard.

Conditions to avoid : Heat, flames and sparks.  
excessive heat



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Incompatible materials	Exposure to air. Exposure to sunlight. : Acids aluminum aluminum chloride aluminum salts Bases brass Copper Copper alloys halogens iron salts metal salts Oxidizing agents oxidizers peroxides Peroxides
Hazardous decomposition products	carbon dioxide and carbon monoxide Hydrocarbons

## SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure : Inhalation  
 Skin contact  
 Eye Contact  
 Ingestion

### Acute toxicity

Not classified based on available information.

### Components:


#### DIMER / TRIMER:

Acute oral toxicity : LD50 (Rat, female): > 2,000 mg/kg  
 Method: OECD Test Guideline 423  
 GLP: yes  
 Assessment: Not classified as acutely toxic by ingestion under GHS.

### Components:

#### STYRENE:

Acute oral toxicity : LD50 Oral (Rat): > 2,000 mg/kg  
 Acute inhalation toxicity : LC50 (Rat): 11.8 mg/l, 2770 ppm  
 Exposure time: 4 h  
 Test atmosphere: vapour

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No observed adverse effect level (Humans): 100 ppm

Exposure time: 7 h

Test atmosphere: vapour

Acute dermal toxicity : LD50 (Rat): > 2,000 mg/kg  
 Method: OECD Test Guideline 402  
 Assessment: No adverse effect has been observed in acute dermal toxicity tests.

VINYL TOLUENE:

Acute oral toxicity : LD50 (Rat): 2,255 mg/kg

Acute inhalation toxicity : LC50 (Rat): > 16.891 mg/l

Exposure time: 4 h

Test atmosphere: vapour

Acute dermal toxicity : LDLo (Rat): 4,500 mg/kg

#### **Skin corrosion/irritation**

Causes skin irritation.

#### **Product:**

Result: Repeated exposure may cause skin dryness or cracking.

Remarks: May cause skin irritation and/or dermatitis.

#### **Components:**

DIMER / TRIMER:

Species: reconstructed human epidermis (RhE)

Method: OECD Test Guideline 439

Result: No skin irritation

GLP: yes

#### **Components:**

STYRENE:

Species: Rabbit

Result: Irritating to skin.

Species: human skin


Result: No skin irritation

VINYL TOLUENE:

Result: Irritating to skin.

#### **Serious eye damage/eye irritation**

Causes serious eye irritation.

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**Product:**

Remarks: Vapours may cause irritation to the eyes, respiratory system and the skin., Causes serious eye irritation.

**Components:**

DIMER / TRIMER:

Species: Bovine cornea

Result: No eye irritation

Method: OECD Test Guideline 437

GLP: yes

**Components:**

STYRENE:

Result: Irritating to eyes.

Remarks: Vapour during processing may be irritating to the respiratory tract and to the eyes.

VINYL TOLUENE:

Result: Irritating to eyes.

**Respiratory or skin sensitisation**

Skin sensitisation: May cause an allergic skin reaction.

Respiratory sensitisation: Not classified based on available information.

**Components:**

DIMER / TRIMER:

Assessment: The product is a skin sensitizer, sub-category 1B.

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

Germ cell mutagenicity

Not classified based on available information.

**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

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Result: negative  
GLP: yes

: Test Type: Ames test  
Test species: Salmonella typhimurium  
Metabolic activation: with and without metabolic activation  
Method: Mutagenicity (Salmonella typhimurium - reverse mutation assay)  
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:**

VINYL TOLUENE:

Genotoxicity in vitro

: Test Type: In vitro mammalian cell gene mutation test  
Test species: mouse lymphoma cells  
Metabolic activation: with and without metabolic activation  
Result: negative

: Test Type: Ames test  
Test species: Salmonella typhimurium  
Metabolic activation: with and without metabolic activation  
Result: negative

Genotoxicity in vivo

: Test Type: chromosome aberration assay  
Test species: Rat (male)  
Method: OECD Test Guideline 475  
Result: negative  
GLP: no

Test Type: dominant lethal test  
Test species: Rat (male and female)  
Method: OECD Test Guideline 478  
Result: negative  
GLP: no


**Carcinogenicity**

Not classified based on available information.

**Product:**

Carcinogenicity -  
Assessment

: Styrene has been tested for carcinogenicity in rats and mice.  
Styrene caused lung tumors in mice only. These tumors are

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not considered to be relevant to humans.

#### **Reproductive toxicity**

Not classified based on available information.

#### **STOT - single exposure**

May cause respiratory irritation.

#### **Components:**

STYRENE:

Assessment: May cause respiratory irritation.

VINYL TOLUENE:

Exposure routes: inhalation (vapour)

Target Organs: Upper respiratory tract

Assessment: The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with respiratory tract irritation.

#### **STOT - repeated exposure**

Causes damage to organs (Auditory system) through prolonged or repeated exposure if inhaled.

#### **Components:**

STYRENE:

Exposure routes: inhalation (vapour)

Target Organs: Auditory system

Assessment: Causes damage to organs through prolonged or repeated exposure.

#### **Repeated dose toxicity**

#### **Components:**

STYRENE:

Species: Human

85 mg/m<sup>3</sup>

Application Route: inhalation (vapour)

Species: Human

615 mg/kg

Application Route: Skin contact

#### **Aspiration toxicity**

Not classified based on available information.

#### **Components:**

STYRENE:

May be fatal if swallowed and enters airways.

VINYL TOLUENE:

May be fatal if swallowed and enters airways.

#### **Further information**

#### **Product:**

Remarks: Solvents may degrease the skin.

#### **Carcinogenicity:**

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Group 2B: Possibly carcinogenic to humans

STYRENE

100-42-5

**OSHA**

No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

**NTP**

Reasonably anticipated to be a human carcinogen

STYRENE

100-42-5

---

**SECTION 12. ECOLOGICAL INFORMATION****Ecotoxicity****Product:**

Ecotoxicology Assessment

Acute aquatic toxicity : Acute aquatic toxicity Category 2; Toxic to aquatic life.

Chronic aquatic toxicity : Chronic aquatic toxicity Category 3; Harmful to aquatic life with long lasting effects.

**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  
Remarks: No toxicity at the limit of solubility

Toxicity to algae : ErC50 (Pseudokirchneriella subcapitata (green algae)): > 100 mg/l  
Exposure time: 72 h  
Test Type: static test  
Method: OECD Test Guideline 201  
GLP: yes

Toxicity to bacteria : EC50 (activated sludge): > 100 mg/l



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Exposure time: 3 h  
Test Type: Static  
Method: OECD Test Guideline 209  
GLP: yes

**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 : NOEC (Daphnia magna (Water flea)): 1.01 mg/l  
Exposure time: 21 d

(Chronic toxicity)

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


**VINYL TOLUENE:**

Toxicity to fish : LC50 (Lepomis macrochirus (Bluegill sunfish)): 2.6 mg/l  
Exposure time: 7 Days  
Test Type: flow-through test

LC50 (Pimephales promelas (fathead minnow)): 5.2 mg/l  
Exposure time: 96 h  
Test Type: semi-static test  
Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 1.3 mg/l  
Exposure time: 48 h  
Test Type: static test  
Method: OECD Test Guideline 202

Toxicity to algae : EC50 (Pseudokirchneriella subcapitata (green algae)): 2.6 mg/l  
Exposure time: 72 h  
Test Type: Growth inhibition  
Method: OECD Test Guideline 201

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Toxicity to daphnia and other aquatic invertebrates : NOEC (Daphnia magna (Water flea)): 1.8 mg/l  
Exposure time: 21 d

(Chronic toxicity)

#### **Persistence and degradability**

##### **Components:**

DIMER / TRIMER:

Biodegradability : Result: Not readily biodegradable.

STYRENE:

Biodegradability : Result: Readily biodegradable.  
Biodegradation: > 60 %  
Exposure time: 10 d

VINYL TOLUENE:

Biodegradability : Method: Simulation study  
Remarks: Readily biodegradable

No data available

#### **Bioaccumulative potential**

##### **Components:**

STYRENE:

Bioaccumulation : Bioconcentration factor (BCF): < 100

Partition coefficient: n-octanol/water : log Pow: 2.96 (25 °C)

VINYL TOLUENE:

Partition coefficient: n-octanol/water : log Pow: 3.35 (25 °C)  
pH: 8

No data available

#### **Mobility in soil**

##### **Components:**

STYRENE:

Distribution among environmental compartments : Koc: 352

No data available

#### **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., Harmful to aquatic life with long lasting effects.

##### **Components:**

STYRENE:

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).



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### SECTION 13. DISPOSAL CONSIDERATIONS

#### Disposal methods

- General advice : The product should not be allowed to enter drains, water courses or the soil.  
Do not contaminate ponds, waterways or ditches with chemical or used container.  
Send to a licensed waste management company.  
Dispose of in accordance with all applicable local, state and federal regulations.
- Contaminated packaging : Empty remaining contents.  
Dispose of as unused product.  
Empty containers should be taken to an approved waste handling site for recycling or disposal.  
Do not re-use empty containers.  
Do not burn, or use a cutting torch on, the empty drum.

### SECTION 14. TRANSPORT INFORMATION

#### International transport regulations

##### REGULATION

ID NUMBER	PROPER SHIPPING NAME	*HAZARD CLASS	SUBSIDIARY HAZARDS	PACKING GROUP	MARINE POLLUTANT / LTD. QTY.

#### U.S. DOT - ROAD

UN	1866	Resin solution	3	III	

#### CFR RAIL\_C

UN	1866	Resin solution	3	III	

#### U.S. DOT - INLAND WATERWAYS

UN	1866	Resin solution	3	III	

#### TDG ROAD\_C

UN	1866	RESIN SOLUTION	3	III	

#### TDG\_RAIL\_C

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UN	1866	RESIN SOLUTION	3	III
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**TDG\_INWT\_C**

UN	1866	RESIN SOLUTION	3	III
----	------	----------------	---	-----

**INTERNATIONAL MARITIME DANGEROUS GOODS**

UN	1866	RESIN SOLUTION	3	III	MARINE POLLUTANT:( ALIPHATIC PETROLEUM DISTILLATES, ALIPHATIC PETROLEUM DISTILLATES)
----	------	----------------	---	-----	---

**INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO**

UN	1866	Resin solution	3	III
----	------	----------------	---	-----

**INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER**

UN	1866	Resin solution	3	III
----	------	----------------	---	-----

**MX\_DG**

UN	1866	RESINA, SOLUCIONES DE	3	III
----	------	-----------------------	---	-----

**\*ORM = ORM-D, CBL = COMBUSTIBLE LIQUID**

Marine pollutant	no
------------------	----

Dangerous goods descriptions (if indicated above) may not reflect quantity, end-use or region-specific exceptions that can be applied. Consult shipping documents for descriptions that are specific to the shipment.

**SECTION 15. REGULATORY INFORMATION****EPCRA - Emergency Planning and Community Right-to-Know Act  
CERCLA Reportable Quantity**

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
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STYRENE	100-42-5	1000	3105
<b>SARA 304 Extremely Hazardous Substances Reportable Quantity</b>			
Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
HYDROQUINONE	123-31-9	100	*

\*: Calculated RQ exceeds reasonably attainable upper limit.

**SARA 311/312 Hazards** : Flammable (gases, aerosols, liquids, or solids)  
Combustible Dust  
Hazard not otherwise classified (physical hazards)  
Skin corrosion or irritation  
Serious eye damage or eye irritation  
Respiratory or skin sensitisation  
Specific target organ toxicity (single or repeated exposure)

**SARA 302** : This material does not contain any components with a section 302 EHS TPQ.

**SARA 313** The following components are subject to reporting levels established by SARA Title III, Section 313:  
STYRENE 100-42-5 32.20 %

**California Prop 65** WARNING! This product contains a chemical known to the State of California to cause cancer.  
STYRENE 100-42-5  
  
ETHYL BENZENE 100-41-4  
BENZENE 71-43-2  
CATECHOL 120-80-9  
FORMALDEHYDE 50-00-0  
1,4-DIOXANE 123-91-1  
ACETALDEHYDE 75-07-0  
ETHYLENE OXIDE 75-21-8  
1,3, BUTADIENE 106-99-0  
  
WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.  
ETHYLENE GLYCOL 107-21-1

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METHANOL	67-56-1
BENZENE	71-43-2
TOLUENE	108-88-3
ETHYLENE OXIDE	75-21-8
1,3, BUTADIENE	106-99-0

**The components of this product are reported in the following inventories:**

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
TSCA	: On TSCA Inventory

**Inventories**


AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TCSI (Taiwan), TSCA (USA)

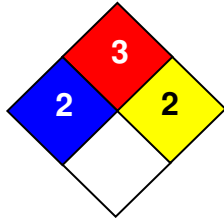
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**SECTION 16. OTHER INFORMATION****Further information**

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**NFPA:****HMIS III:**

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<p>Flammability</p> <p>Health</p> <p>Instability</p>  <p>Special hazard.</p>	<table border="1"> <tr> <td><b>HEALTH</b></td><td><b>2*</b></td></tr> <tr> <td><b>FLAMMABILITY</b></td><td><b>3</b></td></tr> <tr> <td><b>PHYSICAL HAZARD</b></td><td><b>2</b></td></tr> </table> <p>0 = not significant, 1 =Slight, 2 = Moderate, 3 = High 4 = Extreme, * = Chronic</p>	<b>HEALTH</b>	<b>2*</b>	<b>FLAMMABILITY</b>	<b>3</b>	<b>PHYSICAL HAZARD</b>	<b>2</b>
<b>HEALTH</b>	<b>2*</b>						
<b>FLAMMABILITY</b>	<b>3</b>						
<b>PHYSICAL HAZARD</b>	<b>2</b>						

#### NFPA Flammable and Combustible Liquids Classification

Flammable Liquid Class IC


#### Full text of H-Statements

H226	Flammable liquid and vapor.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H372	Causes damage to organs through prolonged or repeated exposure if inhaled.

Sources of key data used to compile the Safety Data Sheet

The UNECE administers regional agreements implementing harmonised classification for labelling (GHS) and transport.

The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances. This SDS has been prepared by CTI's Environmental Health and Safety Department.

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#### Full text of other abbreviations

AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative