

# SAFETY DATA SHEET

## 1. Identification

<b>Product identifier</b>	<b>Castin' Craft Casting Resin</b>
<b>Other means of identification</b>	
<b>SDS number</b>	7211750
<b>Product code</b>	00175, 00183, 00191, 01600, 34016, 34032, 34128, MICHAELS SKUs: 558114, 558122
<b>Recommended use</b>	Clear Casting Resin.
<b>Recommended restrictions</b>	None known.
<b>Manufacturer/Importer/Supplier/Distributor information</b>	
<b>Manufacturer</b>	
<b>Company name</b>	Environmental Technology, Inc.
<b>Address</b>	300 S. Bay Depot Road Fields Landing CA 95537, USA.
<b>Telephone number</b>	001 707-443-9323
<b>E-mail</b>	mail@eti-usa.com
<b>Contact person</b>	Technical Director
<b>Emergency phone number</b>	800-424-9300 (CHEMTREC)

## 2. Hazard(s) identification

<b>Physical hazards</b>	Flammable liquids	Category 3
<b>Health hazards</b>	Acute toxicity, oral	Category 4
	Acute toxicity, inhalation	Category 4
	Skin corrosion/irritation	Category 2
	Serious eye damage/eye irritation	Category 1
	Sensitization, respiratory	Category 1
	Sensitization, skin	Category 1
	Carcinogenicity	Category 2
	Reproductive toxicity	Category 2
	Specific target organ toxicity following single exposure	Category 2
	Specific target organ toxicity following single exposure	Category 3 respiratory tract irritation
	Specific target organ toxicity following single exposure	Category 3 narcotic effects
	Specific target organ toxicity following repeated exposure	Category 2 (Kidney, Hearing)
<b>Environmental hazards</b>	Not classified.	
<b>Label elements</b>		



<b>Signal word</b>	Danger
<b>Hazard statement</b>	Flammable liquid and vapour. Harmful if swallowed. Harmful in contact with skin. Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. May cause allergy or asthma symptoms or breathing difficulties if inhaled. Suspected of damaging fertility or the unborn child. Suspected of causing cancer. May cause drowsiness or dizziness. May cause damage to organs (Kidney, Hearing) through prolonged or repeated exposure.

## Precautionary statements

### Prevention

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container tightly closed. Ground and bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use non-sparking tools. Take action to prevent static discharges. Do not breathe mist or vapour. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace.

### Response

In case of fire: Use appropriate media to extinguish. IF SWALLOWED: Call a POISON CENTRE/doctor if you feel unwell. Rinse mouth. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTRE/doctor. Take off contaminated clothing and wash it before reuse. IF ON SKIN (or hair): Take off immediately all contaminated clothing and wash it before reuse. IF ON SKIN (or hair): Take off immediately all contaminated clothing and wash it before reuse. If skin irritation or rash occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Specific treatment is urgent (see this label). If exposed or concerned: Get medical advice/attention.

### Storage

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

### Disposal

Dispose of contents/container in accordance with local/regional/national/international regulations.

### Other hazards

Static accumulating flammable liquid can become electrostatically charged even in bonded and grounded equipment. Sparks may ignite liquid and vapour. May cause flash fire or explosion.

### Supplemental information

None.

## 3. Composition/information on ingredients

### Mixtures

Chemical name	CAS number	%
Maleic anhydride	108-31-6	<50
Styrene	100-42-5	<50
Phthalic anhydride	85-44-9	<35
Ethylene glycol	107-21-1	<30

### Composition comments

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

## 4. First-aid measures

### Inhalation

If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTRE or doctor/physician.

### Skin contact

If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse. Wash with plenty of water.

### Eye contact

Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.

### Ingestion

Rinse mouth. Never give anything by mouth to a victim who is unconscious or is having convulsions. DO NOT induce vomiting because of danger of aspirating liquid into lungs. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Call a poison centre/doctor if you feel unwell.

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

Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. Skin irritation. May cause an allergic skin reaction. Dermatitis. Rash. May cause allergic respiratory reaction. Vapours have a narcotic effect and may cause headache, fatigue, dizziness and nausea. Behavioural changes. Decrease in motor functions.

### Indication of immediate medical attention and special treatment needed

Treat symptomatically. In case of shortness of breath, give oxygen. Symptoms may be delayed. Aspiration may cause pulmonary oedema and pneumonitis.

### General information

IF exposed or concerned: Get medical advice/attention. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.

## 5. Fire-fighting measures

### Suitable extinguishing media

Water fog. Alcohol resistant foam. Dry chemical powder. Carbon dioxide (CO<sub>2</sub>).

<b>Unsuitable extinguishing media</b>	Do not use water jet as an extinguisher, as this will spread the fire.
<b>Specific hazards arising from the chemical</b>	Vapours may form explosive mixtures with air. Vapours may travel considerable distance to a source of ignition and flash back. This product is a poor conductor of electricity and can become electrostatically charged. If sufficient charge is accumulated, ignition of flammable mixtures can occur. To reduce potential for static discharge, use proper bonding and grounding procedures. This liquid may accumulate static electricity when filling properly grounded containers. Static electricity accumulation may be significantly increased by the presence of small quantities of water or other contaminants. Material will float and may ignite on surface of water. During fire, gases hazardous to health may be formed. Containers may explode under fire conditions - use water spray to cool unopened containers.
<b>Special protective equipment and precautions for firefighters</b>	Self-contained breathing apparatus and full protective clothing must be worn in case of fire. Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace.
<b>Fire fighting equipment/instructions</b>	Vapours are heavier than air and may spread near ground to sources of ignition. In case of fire and/or explosion do not breathe fumes. In the event of fire, cool tanks with water spray. Move container from fire area if it can be done without risk. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out. Do not direct water at source of leak or safety devices as icing may occur.
<b>Specific methods</b>	Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk. Self-contained breathing apparatus and full protective clothing must be worn in case of fire. In the event of fire and/or explosion do not breathe fumes.
<b>General fire hazards</b>	Flammable liquid and vapour. Vapours are heavier than air and may spread near ground to sources of ignition.

## 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	Wear protective clothing as described in section 8 of this safety data sheet. Avoid inhalation of vapours or mists. Keep unnecessary personnel away. Keep upwind. Keep out of low areas. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Ventilate closed spaces before entering them. Fully encapsulating, vapour protective clothing should be worn for spills and leaks with no fire. Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks). Use appropriate containment to avoid environmental contamination. Transfer by mechanical means such as vacuum truck to a salvage tank or other suitable container for recovery or safe disposal. Local authorities should be advised if significant spillages cannot be contained.
<b>Methods and materials for containment and cleaning up</b>	Refer to attached safety data sheets and/or instructions for use. Keep unnecessary personnel away. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Take precautionary measures against static discharge. Use only non-sparking tools. Keep combustibles (wood, paper, oil etc) away from spilled material. Stop the flow of material, if this is without risk. If possible, turn leaking containers so that gas escapes rather than liquid. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Prevent entry into waterways, sewer, basements or confined areas.  Never return spills to original containers for re-use. Collect and dispose of spillage as indicated in section 13 of the SDS.
<b>Environmental precautions</b>	Avoid discharge into drains, water courses or onto the ground. Use appropriate containment to avoid environmental contamination. Avoid discharge into storm drains, water courses or onto the ground.

## 7. Handling and storage

<b>Precautions for safe handling</b>	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get this material in contact with eyes. Do not breathe mist or vapour. Provide adequate ventilation. Avoid contact with skin. Keep out of reach of children. Minimize fire risks from flammable and combustible materials (including combustible dust and static accumulating liquids) or dangerous reactions with incompatible materials. Handling operations that can promote accumulation of static charges include but are not limited to: mixing, filtering, pumping at high flow rates, splash filling, creating mists or sprays, tank and container filling, tank cleaning, sampling, gauging, switch loading, vacuum truck operations. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Ground/bond container and receiving equipment. Take precautionary measures against static discharges. Use non-sparking tools and explosion-proof equipment. The product is flammable, and heating may generate vapours which may form explosive vapour/air mixtures. Wear appropriate personal protective equipment. Pregnant or breastfeeding women must not handle this product. Observe good industrial hygiene practices. Wash contaminated clothing before reuse. Avoid release to the environment.
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**Conditions for safe storage, including any incompatibilities**

Keep locked up. Keep out of the reach of children. Keep away from heat, sparks and open flame. Keep out of direct sunlight. Store in tightly closed original container in a dry, cool and well-ventilated place. The pressure in sealed containers can increase under the influence of heat. Avoid spark promoters. Ground/bond container and equipment. Prevent electrostatic charge build-up by using common bonding and grounding techniques. Styrene should not be stored for longer than 3 months. Containers should be checked weekly after 30 days to determine inhibitor concentration and possible polymerization. Store away from incompatible materials. Keep in an area equipped with sprinklers.

**8. Exposure controls/personal protection****Occupational exposure limits****US. ACGIH Threshold Limit Values**

Components	Type	Value	Form
Ethylene glycol (CAS 107-21-1)	STEL	10 mg/m3	Aerosol, inhalable.
		50 ppm	Vapor fraction
Maleic anhydride (CAS 108-31-6)	TWA	25 ppm	Vapor fraction
	TWA	0.01 mg/m3	Inhalable fraction and vapor.
Phthalic anhydride (CAS 85-44-9)	STEL	0.005 mg/m3	Inhalable fraction and vapor.
	TWA	0.002 mg/m3	Inhalable fraction and vapor.
Styrene (CAS 100-42-5)	STEL	40 ppm	
	TWA	20 ppm	

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

Components	Type	Value
Ethylene glycol (CAS 107-21-1)	Ceiling	100 mg/m3
Maleic anhydride (CAS 108-31-6)	TWA	0.4 mg/m3
		0.1 ppm
Phthalic anhydride (CAS 85-44-9)	TWA	6.1 mg/m3
		1 ppm
Styrene (CAS 100-42-5)	STEL	170 mg/m3
		40 ppm
	TWA	85 mg/m3 20 ppm

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

Components	Type	Value	Form
Ethylene glycol (CAS 107-21-1)	Ceiling	100 mg/m3	Aerosol
		50 ppm	Vapour.
	STEL	20 mg/m3	Particulate.
Maleic anhydride (CAS 108-31-6)	TWA	10 mg/m3	Particulate.
	TWA	0.1 ppm	
Phthalic anhydride (CAS 85-44-9)	TWA	1 ppm	
Styrene (CAS 100-42-5)	STEL	75 ppm	
	TWA	50 ppm	

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

Components	Type	Value	Form
Ethylene glycol (CAS 107-21-1)	STEL	10 mg/m3	Aerosol, inhalable.
		50 ppm	Vapor fraction
Maleic anhydride (CAS 108-31-6)	TWA	25 ppm	Vapor fraction
	TWA	0.01 mg/m3	Inhalable fraction and vapor.

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

Components	Type	Value	Form
Phthalic anhydride (CAS 85-44-9)	STEL	0.005 mg/m3	Inhalable fraction and vapor. Inhalable fraction and vapor.
	TWA	0.002 mg/m3	
Styrene (CAS 100-42-5)	STEL	40 ppm	
	TWA	20 ppm	

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

Components	Type	Value	Form
Ethylene glycol (CAS 107-21-1)	Ceiling	100 mg/m3	Aerosol
Maleic anhydride (CAS 108-31-6)	TWA	0.01 mg/m3	Inhalable fraction and vapor.
Phthalic anhydride (CAS 85-44-9)	TWA	1 ppm	
Styrene (CAS 100-42-5)	STEL	100 ppm	
	TWA	35 ppm	

**Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety)**

Components	Type	Value	Form
Ethylene glycol (CAS 107-21-1)	Ceiling	127 mg/m3	Vapor and mist.
		50 ppm	Vapor and mist.
Maleic anhydride (CAS 108-31-6)	TWA	1 mg/m3	
		0.25 ppm	
Phthalic anhydride (CAS 85-44-9)	TWA	6.1 mg/m3	
		1 ppm	
Styrene (CAS 100-42-5)	STEL	426 mg/m3	
		100 ppm	
		213 mg/m3	
	TWA	50 ppm	

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

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

**Biological limit values****ACGIH Biological Exposure Indices**

Components	Value	Determinant	Specimen	Sampling Time
Styrene (CAS 100-42-5)	400 mg/g	Mandelic acid plus phenylglyoxylic acid	Creatinine in urine	*
	40 ug/l	Styrene	Urine	*

\* - For sampling details, please see the source document.

**Exposure guidelines****Canada - Manitoba OELs: Skin designation**

Phthalic anhydride (CAS 85-44-9) Can be absorbed through the skin.

**Canada - Quebec OELs: Skin designation**

Styrene (CAS 100-42-5) Can be absorbed through the skin.

**US ACGIH Threshold Limit Values: Skin designation**

Phthalic anhydride (CAS 85-44-9) Can be absorbed through the skin.

<b>Appropriate engineering controls</b>	Explosion-proof general and local exhaust ventilation. Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product. Provide adequate ventilation. Observe Occupational Exposure Limits and minimise the risk of inhalation of vapours.
<b>Individual protection measures, such as personal protective equipment</b>	
<b>Eye/face protection</b>	Wear splash-proof eye goggles to prevent any possibility of eye contact.
<b>Skin protection</b>	
<b>Hand protection</b>	Wear appropriate chemical resistant gloves.
<b>Other</b>	Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended. Wear protective gloves. The most suitable glove must be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material. Wear appropriate chemical resistant clothing to prevent any possibility of skin contact.
<b>Respiratory protection</b>	A NIOSH- approved air purifying respirator with an organic vapour cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits.
<b>Thermal hazards</b>	Wear appropriate thermal protective clothing, when necessary.
<b>General hygiene considerations</b>	When using, do not eat, drink or smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Contaminated work clothing should not be allowed out of the workplace. Wash at the end of each work shift and before eating, smoking or using the toilet.

## 9. Physical and chemical properties

<b>Appearance</b>	Pink liquid.
<b>Physical state</b>	Liquid.
<b>Form</b>	Liquid.
<b>Colour</b>	Pink.
<b>Odour</b>	Styrene.
<b>Odour threshold</b>	Not available.
<b>pH</b>	Not available.
<b>Melting point/freezing point</b>	Not available.
<b>Initial boiling point and boiling range</b>	146 °C (294.8 °F)
<b>Flash point</b>	31.0 °C (87.8 °F)
<b>Evaporation rate</b>	Not available.
<b>Flammability (solid, gas)</b>	Flammable gas.
<b>Upper/lower flammability or explosive limits</b>	
<b>Flammability limit - lower (%)</b>	0.9 % v/v
<b>Flammability limit - upper (%)</b>	8.8 % v/v
<b>Explosive limit - lower (%)</b>	Not available.
<b>Explosive limit – upper (%)</b>	Not available.
<b>Vapour pressure</b>	200 mm Hg
<b>Vapour density</b>	4.5 mm Hg
<b>Relative density</b>	1.05 - 1.3
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	Insoluble
<b>Partition coefficient (n-octanol/water)</b>	Not available.
<b>Auto-ignition temperature</b>	490 °C (914 °F)
<b>Decomposition temperature</b>	Not available.

**Viscosity** Not available.

**Other information**

**Explosive properties** Not explosive.

**Oxidising properties** Not oxidising.

## 10. Stability and reactivity

**Reactivity** The product is stable and non-reactive under normal conditions of use, storage and transport.

**Chemical stability** Stable under normal temperature conditions and recommended use.

**Possibility of hazardous reactions** High temperatures. May polymerize resulting in fire and explosion. Uninhibited styrene, or styrene with low inhibitor concentration, polymerizes slowly at room temperature and on exposure to light and air, and readily at elevated temperatures, greater than 65°C (149°F). Polymerization becomes self-sustaining above 95°C (203°F). Metal salts (e.g. ferric or aluminum chloride), peroxides, oxidizers and strong acids may also cause polymerization.

**Conditions to avoid** Eliminate all sources of ignition. Avoid incompatible materials and intense heat.

**Incompatible materials** Strong acids. Strong oxidising agents. Alkali metals. Aluminium. Halogens. Oxygen. Peroxides. Can form explosive peroxides. Styrene monomer has been involved in several plant-scale explosions when stored inappropriately or accidentally heated.

**Hazardous decomposition products** Styrene oxide.

## 11. Toxicological information

### Information on likely routes of exposure

**Inhalation** Harmful if inhaled. May cause damage to organs through prolonged or repeated exposure by inhalation. May cause allergy or asthma symptoms or breathing difficulties if inhaled. Vapours have a narcotic effect and may cause headache, fatigue, dizziness and nausea.

**Skin contact** Causes skin irritation. May cause an allergic skin reaction.

**Eye contact** Causes serious eye damage.

**Ingestion** Causes digestive tract burns. Harmful if swallowed. Harmful if swallowed.

**Symptoms related to the physical, chemical and toxicological characteristics** Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. Skin irritation. May cause allergic skin reaction. Dermatitis. Rash. May cause allergic respiratory reaction. May cause drowsiness or dizziness. Behavioural changes. Decrease in motor functions.

### Information on toxicological effects

**Acute toxicity** Harmful by inhalation. Harmful if swallowed. May cause drowsiness or dizziness.

Components	Species	Test Results
Ethylene glycol (CAS 107-21-1)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rabbit	9530 mg/kg
<b>Oral</b>		
LD50	Rat	4700 mg/kg

**Skin corrosion/irritation** Causes skin irritation.

**Serious eye damage/eye irritation** Causes serious eye damage.

### Respiratory or skin sensitisation

#### ACGIH sensitisation

MALEIC ANHYDRIDE, INHALABLE FRACTION AND VAPOR (CAS 108-31-6) Dermal sensitization

Phthalic anhydride, inhalable fraction and vapor (CAS 85-44-9) Respiratory sensitisation  
Dermal sensitization

Respiratory sensitisation

#### Canada - Alberta OELs: Irritant

Ethylene glycol (CAS 107-21-1) Irritant

#### Canada - British Columbia OELs: Respiratory or skin sensitiser

Maleic anhydride (CAS 108-31-6) Capable of causing respiratory, dermal or conjunctival sensitization.

Phthalic anhydride (CAS 85-44-9)

Capable of causing respiratory, dermal or conjunctival sensitization.

**Canada - Manitoba OELs Hazard: Dermal sensitization**

Maleic anhydride (CAS 108-31-6)

Dermal sensitization

Phthalic anhydride (CAS 85-44-9)

Dermal sensitization

**Canada - Manitoba OELs Hazard: Respiratory sensitization**

Maleic anhydride (CAS 108-31-6)

Respiratory sensitisation

Phthalic anhydride (CAS 85-44-9)

Respiratory sensitisation

**Canada - Saskatchewan OELs Hazard Data: Sensitiser**

Maleic anhydride (CAS 108-31-6)

Sensitiser.

Phthalic anhydride (CAS 85-44-9)

Sensitiser.

**Respiratory sensitisation**

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

**Skin sensitisation**

May cause an allergic skin reaction.

**Germ cell mutagenicity**

Due to partial or complete lack of data the classification is not possible.

**Carcinogenicity**

Suspected of causing cancer. Possible cancer hazard - contains styrene which may cause cancer based on animal data.

**ACGIH Carcinogens**

Ethylene glycol (CAS 107-21-1)

A4 Not classifiable as a human carcinogen.

Maleic anhydride (CAS 108-31-6)

A4 Not classifiable as a human carcinogen.

Phthalic anhydride (CAS 85-44-9)

A4 Not classifiable as a human carcinogen.

Styrene (CAS 100-42-5)

A4 Not classifiable as a human carcinogen.

**Canada - Manitoba OELs: carcinogenicity**

Ethylene glycol (CAS 107-21-1)

Not classifiable as a human carcinogen.

Maleic anhydride (CAS 108-31-6)

Not classifiable as a human carcinogen.

Phthalic anhydride (CAS 85-44-9)

Not classifiable as a human carcinogen.

Styrene (CAS 100-42-5)

Not classifiable as a human carcinogen.

**Canada - Quebec OELs: Carcinogen category**

Styrene (CAS 100-42-5)

Detected carcinogenic effect in animals.

**IARC Monographs. Overall Evaluation of Carcinogenicity**

Styrene (CAS 100-42-5)

2B Possibly carcinogenic to humans.

**US. National Toxicology Program (NTP) Report on Carcinogens**

Styrene (CAS 100-42-5)

Reasonably Anticipated to be a Human Carcinogen.

**Reproductive toxicity**

Possible reproductive hazard. Suspected of damaging fertility or the unborn child. Due to inconclusive data the classification criteria are not met.

**Specific target organ toxicity - single exposure**

May cause drowsiness or dizziness.

**Specific target organ toxicity - repeated exposure**

May cause damage to organs (kidney, Hearing) through prolonged or repeated exposure.

**Aspiration hazard**

If aspirated into lungs during swallowing or vomiting, may cause chemical pneumonia, pulmonary injury or death.

**Chronic effects**

May cause damage to organs through prolonged or repeated exposure. Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects. May cause central nervous system depression.

**Further information**

Reproductive toxicity. Symptoms may be delayed.

**12. Ecological information**

**Ecotoxicity**

Expected to be toxic to aquatic organisms. May cause long-term adverse effects in the environment.

**Components**

**Species**

**Test Results**

Ethylene glycol (CAS 107-21-1)

**Aquatic**

Fish

LC50

Fathead minnow (*Pimephales promelas*)

8050 mg/l, 96 hours

**Persistence and degradability**

No data is available on the degradability of this product.

**Bioaccumulative potential**

No data available on bioaccumulation.

**Partition coefficient n-octanol / water (log Kow)**

Ethylene glycol (CAS 107-21-1)

-1.36

Styrene (CAS 100-42-5)

2.95



<b>Mobility in soil</b>	No data available.
<b>Other adverse effects</b>	None known.

### 13. Disposal considerations

<b>Disposal instructions</b>	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations. Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulations.
<b>Local disposal regulations</b>	Dispose in accordance with all applicable regulations.
<b>Hazardous waste code</b>	D001: Waste Flammable material with a flash point <140 °F D002: Waste Corrosive material [pH <=2 or =>12.5, or corrosive to steel] The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
<b>Waste from residues / unused products</b>	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions). Do not allow this material to drain into sewers/water supplies.
<b>Contaminated packaging</b>	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

### 14. Transport information

#### TDG

<b>UN number</b>	UN1866
<b>UN proper shipping name</b>	RESIN SOLUTION, flammable
<b>Transport hazard class(es)</b>	
<b>Class</b>	3
<b>Subsidiary risk</b>	-
<b>Packing group</b>	III
<b>Environmental hazards</b>	No
<b>Special precautions for user</b>	Read safety instructions, SDS and emergency procedures before handling.

#### IATA

<b>UN number</b>	UN1866
<b>UN proper shipping name</b>	Resin solution flammable
<b>Transport hazard class(es)</b>	
<b>Class</b>	3
<b>Subsidiary risk</b>	-
<b>Packing group</b>	III
<b>Environmental hazards</b>	Yes
<b>ERG Code</b>	3L
<b>Special precautions for user</b>	Read safety instructions, SDS and emergency procedures before handling.

#### IMDG

<b>UN number</b>	UN1866
<b>UN proper shipping name</b>	RESIN SOLUTION flammable
<b>Transport hazard class(es)</b>	
<b>Class</b>	3
<b>Subsidiary risk</b>	-
<b>Packing group</b>	III
<b>Environmental hazards</b>	
<b>Marine pollutant</b>	Yes
<b>EmS</b>	F-E, S-E
<b>Special precautions for user</b>	Read safety instructions, SDS and emergency procedures before handling.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not established.

**General information** IMDG Regulated Marine Pollutant.

### 15. Regulatory information

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

**Controlled Drugs and Substances Act**  
Not regulated.

**Export Control List (CEPA 1999, Schedule 3)**

Not listed.

**Greenhouse Gases**

Not listed.

**Precursor Control Regulations**

Not regulated.

**International regulations****Stockholm Convention**

Not applicable.

**Rotterdam Convention**

Not applicable.

**Kyoto Protocol**

Not applicable.

**Montreal Protocol**

Not applicable.

**Basel Convention**

Not applicable.

**International Inventories**

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

**16. Other information****Issue date** 21-December-2017**Revision date** 21-December-2017**Version No.** 02

**References**

ACGIH  
 EPA: AQUIRE database  
 NLM: Hazardous Substances Data Base  
 US. IARC Monographs on Occupational Exposures to Chemical Agents  
 HSDB® - Hazardous Substances Data Bank  
 JIS Z 7250: 2005 Safety data sheet for chemical products-Part 1:Content and order of sections  
 JCIA GHS Guideline, October 2008  
 IARC Monographs. Overall Evaluation of Carcinogenicity  
 National Toxicology Program (NTP) Report on Carcinogens  
 ACGIH Documentation of the Threshold Limit Values and Biological Exposure Indices  
 Japan Society for Occupational Health, Recommendation of Occupational Exposure Limits  
 GOST 30333-2007 - Chemical production safety passport. General requirements  
 JIS Z 7252:2009 Classification of chemicals based on "Globally Harmonized System of Classification and Labelling of Chemicals (GHS)"  
 JIS Z 7253:2012 Hazard communication of chemicals based on GHS – Labelling and Safety Data Sheet (SDS)  
 Japan Chemical Industry Association (JCIA) GHS Guideline, June 2012

**Disclaimer**

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