

## SAFETY DATA SHEET

## 1. Identification

<b>Product identifier</b>	<b>Volatile Aromatic Compounds Mixture - 503/502/524</b>	
<b>Other means of identification</b>		
<b>Item</b>	M-VAVOC503M2	
<b>Recommended use</b>	Not available.	
<b>Recommended restrictions</b>	None known.	
<b>Manufacturer/Importer/Supplier/Distributor information</b>		
<b>Manufacturer</b>		
<b>Company name</b>	Chem Service, Inc.	
<b>Address</b>	660 Tower Lane West Chester, PA 19380 United States	
<b>Telephone</b>	Toll Free	800-452-9994
	Direct	610-692-3026
<b>Website</b>	www.chemservice.com	
<b>E-mail</b>	info@chemservice.com	
<b>Emergency phone number</b>	Chemtrec US	800-424-9300
	Chemtrec outside US	+1 703-527-3887

## 2. Hazard(s) identification

<b>Physical hazards</b>	Flammable liquids	Category 2
<b>Health hazards</b>	Acute toxicity, oral	Category 3
	Acute toxicity, dermal	Category 3
	Acute toxicity, inhalation	Category 3
	Serious eye damage/eye irritation	Category 2A
	Sensitization, skin	Category 1A
	Germ cell mutagenicity	Category 1
	Carcinogenicity	Category 1A
	Reproductive toxicity	Category 1A
	Specific target organ toxicity, single exposure	Category 1
	Specific target organ toxicity, repeated exposure	Category 1
<b>Environmental hazards</b>	Hazardous to the aquatic environment, acute hazard	Category 1
	Hazardous to the aquatic environment, long-term hazard	Category 1
<b>OSHA defined hazards</b>	Not classified.	

## Label elements



Signal word

Danger

Hazard statement

Highly flammable liquid and vapor. Toxic if inhaled. Toxic if swallowed. Toxic in contact with skin. May cause an allergic skin reaction. Causes serious eye irritation. Causes damage to organs. Causes damage to organs through prolonged or repeated exposure. May cause genetic defects. May cause cancer. May damage fertility or the unborn child. Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects.

## Precautionary statement

### Prevention

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use explosion-proof electrical/ventilating/lighting equipment. Do not breathe mist or vapor. Keep container tightly closed. Wash thoroughly after handling. Ground/bond container and receiving equipment. Wear protective gloves/protective clothing/eye protection/face protection. Use only non-sparking tools. Take precautionary measures against static discharge. 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. Avoid release to the environment. Wear eye protection/face protection.

### Response

If swallowed: Immediately call a poison center/doctor. 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. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a poison center/doctor. Rinse mouth. If skin irritation or rash occurs: Get medical advice/attention. Take off immediately all contaminated clothing and wash it before reuse. In case of fire: Use appropriate media to extinguish. Collect spillage. If eye irritation persists: Get medical advice/attention.

### 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 in accordance with local/regional/national/international regulations.

### Hazard(s) not otherwise classified (HNOC)

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

### Supplemental information

94.4% of the mixture consists of component(s) of unknown acute hazards to the aquatic environment. 94.4% of the mixture consists of component(s) of unknown long-term hazards to the aquatic environment.

## 3. Composition/information on ingredients

### Mixtures

Chemical name	Common name and synonyms	CAS number	%
Methanol		67-56-1	94.4
1,2,3-Trichlorobenzene		87-61-6	0.2
1,2,4-Trichlorobenzene		120-82-1	0.2
1,2,4-Trimethylbenzene		95-63-6	0.2
1,2-Dichlorobenzene		95-50-1	0.2
1,3,5-Trimethylbenzene		108-67-8	0.2
1,3-Dichlorobenzene		541-73-1	0.2
1,4-Dichlorobenzene		106-46-7	0.2
2-Chlorotoluene		95-49-8	0.2
4-Chlorotoluene		106-43-4	0.2
Benzene		71-43-2	0.2
Bromobenzene		108-86-1	0.2
Chlorobenzene		108-90-7	0.2
Ethylbenzene		100-41-4	0.2
Hexachloro-1,3-butadiene		87-68-3	0.2
Isopropylbenzene		98-82-8	0.2
m-Xylene		108-38-3	0.2
Naphthalene		91-20-3	0.2
n-Butylbenzene		104-51-8	0.2
n-Propylbenzene		103-65-1	0.2
o-Xylene		95-47-6	0.2
p-Isopropyltoluene		99-87-6	0.2
p-Xylene		106-42-3	0.2
sec-Butylbenzene		135-98-8	0.2
Styrene		100-42-5	0.2
tert-Butylbenzene		98-06-6	0.2
Tetrachloroethene		127-18-4	0.2
Toluene		108-88-3	0.2

Chemical name	Common name and synonyms	CAS number	%
Trichloroethene		79-01-6	0.2

#### 4. First-aid measures

<b>Inhalation</b>	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Do not use mouth-to-mouth method if victim inhaled the substance. Oxygen or artificial respiration if needed. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Call a POISON CENTER or doctor/physician.
<b>Skin contact</b>	Remove contaminated clothing immediately and wash skin with soap and water. Take off immediately all contaminated clothing. Get medical advice/attention if you feel unwell. In case of eczema or other skin disorders: Seek medical attention and take along these instructions. Wash contaminated clothing before reuse.
<b>Eye contact</b>	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 if irritation develops and persists.
<b>Ingestion</b>	Call a physician or poison control center immediately. Rinse mouth. If swallowed, induce vomiting immediately as directed by medical personnel. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Do not use mouth-to-mouth method if victim ingested the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Get medical advice/attention if you feel unwell.
<b>Most important symptoms/effects, acute and delayed</b>	Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Severe eye irritation. May cause an allergic skin reaction. Dermatitis. Rash. Prolonged exposure may cause chronic effects.
<b>Indication of immediate medical attention and special treatment needed</b>	Provide general supportive measures and treat symptomatically. Thermal burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim warm. Keep victim under observation. Symptoms may be delayed.
<b>General information</b>	Take off immediately all contaminated clothing. Take off all contaminated clothing immediately. 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. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before reuse.

#### 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Alcohol resistant foam. Water spray. Water fog. Carbon dioxide (CO2). Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only.
<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>	Vapors may form explosive mixtures with air. Vapors 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.
<b>Special protective equipment and precautions for firefighters</b>	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>Fire fighting equipment/instructions</b>	In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk.
<b>Specific methods</b>	Use standard firefighting procedures and consider the hazards of other involved materials.
<b>General fire hazards</b>	Highly flammable liquid and vapor.

#### 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Avoid breathing mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. 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. For personal protection, see section 8 of the SDS.
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## Methods and materials for containment and cleaning up

Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). This material is classified as a water pollutant under the Clean Water Act and should be prevented from contaminating soil or from entering sewage and drainage systems which lead to waterways.

Large Spills: Stop the flow of material, if this is without risk. Keep combustibles (wood, paper, oil, etc.) away from spilled material. Take precautionary measures against static discharge. Use only non-sparking tools. Dike the spilled material, where this is possible. Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. For waste disposal, see section 13 of the SDS.

Never return spills to original containers for re-use. Put material in suitable, covered, labeled containers.

## Environmental precautions

Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Contact local authorities in case of spillage to drain/aquatic environment. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground. Use appropriate containment to avoid environmental contamination.

## 7. Handling and storage

### Precautions for safe handling

Explosion-proof general and local exhaust ventilation. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. 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. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. Do not breathe mist or vapor. Do not taste or swallow. Avoid contact with eyes. Avoid inhalation of vapors and spray mists. Avoid contact with eyes, skin, and clothing. Wear appropriate personal protective equipment. When using, do not eat, drink or smoke. Wash hands thoroughly after handling. Avoid prolonged exposure. Pregnant or breastfeeding women must not handle this product. Should be handled in closed systems, if possible. Avoid release to the environment. Wash contaminated clothing before reuse. Observe good industrial hygiene practices.

For additional information on equipment bonding and grounding, refer to the Canadian Electrical Code in Canada, (CSA C22.1), or the American Petroleum Institute (API) Recommended Practice 2003, "Protection Against Ignitions Arising out of Static, Lightning, and Stray Currents" or National Fire Protection Association (NFPA) 77, "Recommended Practice on Static Electricity" or National Fire Protection Association (NFPA) 70, "National Electrical Code".

### Conditions for safe storage, including any incompatibilities

Store locked up. Keep away from heat, sparks and open flame. Prevent electrostatic charge build-up by using common bonding and grounding techniques. Eliminate sources of ignition. Avoid spark promoters. Ground/bond container and equipment. These alone may be insufficient to remove static electricity. Store in original tightly closed container. Keep container tightly closed. Store in a cool, dry place out of direct sunlight. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS). Keep in an area equipped with sprinklers.

## 8. Exposure controls/personal protection

### Occupational exposure limits

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

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

Components	Type	Value
Benzene (CAS 71-43-2)	STEL	5 ppm
	TWA	1 ppm

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
1,2-Dichlorobenzene (CAS 95-50-1)	Ceiling	300 mg/m <sup>3</sup>
		50 ppm
1,4-Dichlorobenzene (CAS 106-46-7)	PEL	450 mg/m <sup>3</sup>

**US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)**

Components	Type	Value
Chlorobenzene (CAS 108-90-7)	PEL	75 ppm
		350 mg/m3
Ethylbenzene (CAS 100-41-4)	PEL	75 ppm
		435 mg/m3
Isopropylbenzene (CAS 98-82-8)	PEL	100 ppm
		245 mg/m3
Methanol (CAS 67-56-1)	PEL	50 ppm
		260 mg/m3
m-Xylene (CAS 108-38-3)	PEL	200 ppm
		435 mg/m3
Naphthalene (CAS 91-20-3)	PEL	100 ppm
		50 mg/m3
o-Xylene (CAS 95-47-6)	PEL	10 ppm
		435 mg/m3
p-Xylene (CAS 106-42-3)	PEL	100 ppm
		435 mg/m3
		100 ppm

**US. OSHA Table Z-2 (29 CFR 1910.1000)**

Components	Type	Value
Benzene (CAS 71-43-2)	Ceiling	25 ppm
	TWA	10 ppm
Styrene (CAS 100-42-5)	Ceiling	200 ppm
	TWA	100 ppm
Tetrachloroethene (CAS 127-18-4)	Ceiling	200 ppm
	TWA	100 ppm
Toluene (CAS 108-88-3)	Ceiling	300 ppm
	TWA	200 ppm
Trichloroethene (CAS 79-01-6)	Ceiling	200 ppm
	TWA	100 ppm

**US. ACGIH Threshold Limit Values**

Components	Type	Value
1,2,4-Trichlorobenzene (CAS 120-82-1)	Ceiling	5 ppm
1,2,4-Trimethylbenzene (CAS 95-63-6)	TWA	25 ppm
1,2-Dichlorobenzene (CAS 95-50-1)	STEL	50 ppm
	TWA	25 ppm
1,3,5-Trimethylbenzene (CAS 108-67-8)	TWA	25 ppm
1,4-Dichlorobenzene (CAS 106-46-7)	TWA	10 ppm
2-Chlorotoluene (CAS 95-49-8)	TWA	50 ppm
Benzene (CAS 71-43-2)	STEL	2.5 ppm
	TWA	0.5 ppm
Chlorobenzene (CAS 108-90-7)	TWA	10 ppm
Ethylbenzene (CAS 100-41-4)	TWA	20 ppm
Hexachloro-1,3-butadiene (CAS 87-68-3)	TWA	0.02 ppm
Isopropylbenzene (CAS 98-82-8)	TWA	50 ppm
Methanol (CAS 67-56-1)	STEL	250 ppm

**US. ACGIH Threshold Limit Values**

<b>Components</b>	<b>Type</b>	<b>Value</b>
m-Xylene (CAS 108-38-3)	TWA	200 ppm
	STEL	150 ppm
Naphthalene (CAS 91-20-3)	TWA	100 ppm
	STEL	150 ppm
o-Xylene (CAS 95-47-6)	TWA	100 ppm
	STEL	150 ppm
p-Xylene (CAS 106-42-3)	TWA	100 ppm
	STEL	150 ppm
Styrene (CAS 100-42-5)	TWA	40 ppm
	STEL	20 ppm
Tetrachloroethene (CAS 127-18-4)	TWA	25 ppm
	STEL	100 ppm
Toluene (CAS 108-88-3)	TWA	20 ppm
	STEL	25 ppm
Trichloroethene (CAS 79-01-6)	TWA	10 ppm

**US. NIOSH: Pocket Guide to Chemical Hazards**

<b>Components</b>	<b>Type</b>	<b>Value</b>
1,2,4-Trichlorobenzene (CAS 120-82-1)	Ceiling	40 mg/m3
		5 ppm
1,2,4-Trimethylbenzene (CAS 95-63-6)	TWA	125 mg/m3
		25 ppm
1,2-Dichlorobenzene (CAS 95-50-1)	Ceiling	300 mg/m3
		50 ppm
1,3,5-Trimethylbenzene (CAS 108-67-8)	TWA	125 mg/m3
		25 ppm
2-Chlorotoluene (CAS 95-49-8)	STEL	375 mg/m3
		75 ppm
Benzene (CAS 71-43-2)	TWA	250 mg/m3
		50 ppm
Ethylbenzene (CAS 100-41-4)	STEL	1 ppm
		0.1 ppm
Hexachloro-1,3-butadiene (CAS 87-68-3)	STEL	545 mg/m3
		125 ppm
Isopropylbenzene (CAS 98-82-8)	TWA	435 mg/m3
		100 ppm
Methanol (CAS 67-56-1)	TWA	0.24 mg/m3
		0.02 ppm
m-Xylene (CAS 108-38-3)	TWA	245 mg/m3
		50 ppm
Naphthalene (CAS 91-20-3)	STEL	325 mg/m3
		250 ppm
m-Xylene (CAS 108-38-3)	TWA	260 mg/m3
		200 ppm
Naphthalene (CAS 91-20-3)	STEL	655 mg/m3
		150 ppm
Naphthalene (CAS 91-20-3)	TWA	435 mg/m3
		100 ppm
Naphthalene (CAS 91-20-3)	STEL	75 mg/m3
		15 ppm

**US. NIOSH: Pocket Guide to Chemical Hazards**

Components	Type	Value
o-Xylene (CAS 95-47-6)	TWA	50 mg/m <sup>3</sup> 10 ppm
	STEL	655 mg/m <sup>3</sup> 150 ppm
p-Xylene (CAS 106-42-3)	TWA	435 mg/m <sup>3</sup> 100 ppm
	STEL	655 mg/m <sup>3</sup> 150 ppm
Styrene (CAS 100-42-5)	TWA	435 mg/m <sup>3</sup> 100 ppm
	STEL	425 mg/m <sup>3</sup> 100 ppm
Toluene (CAS 108-88-3)	TWA	215 mg/m <sup>3</sup> 50 ppm
	STEL	560 mg/m <sup>3</sup> 150 ppm
Trichloroethene (CAS 79-01-6)	TWA	375 mg/m <sup>3</sup> 100 ppm
	TWA	25 ppm

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

Components	Value	Determinant	Specimen	Sampling Time
Benzene (CAS 71-43-2)	25 µg/g	S-Phenylmercapturic acid	Creatinine in urine	*
Chlorobenzene (CAS 108-90-7)	100 mg/g	4-Chlorocatechol, with hydrolysis	Creatinine in urine	*
Ethylbenzene (CAS 100-41-4)	0.15 g/g	Sum of mandelic acid and phenylglyoxylic acid	Creatinine in urine	*
Methanol (CAS 67-56-1)	15 mg/l	Methanol	Urine	*
m-Xylene (CAS 108-38-3)	1.5 g/g	Methylhippuric acids	Creatinine in urine	*
o-Xylene (CAS 95-47-6)	1.5 g/g	Methylhippuric acids	Creatinine in urine	*
p-Xylene (CAS 106-42-3)	1.5 g/g	Methylhippuric acids	Creatinine in urine	*
Styrene (CAS 100-42-5)	40 µg/l	Styrene	Urine	*
	400 mg/g	Mandelic acid plus phenylglyoxylic acid	Creatinine in urine	*
Tetrachloroethene (CAS 127-18-4)	0.5 mg/l	Tetrachloroethylene	Blood	*
	3 ppm	Tetrachloroethylene	End-exhaled air	*
Toluene (CAS 108-88-3)	0.3 mg/g	o-Cresol, with hydrolysis	Creatinine in urine	*
	0.03 mg/l	Toluene	Urine	*
	0.02 mg/l	Toluene	Blood	*
Trichloroethene (CAS 79-01-6)	15 mg/l	Trichloroacetic acid	Urine	*
	0.5 mg/l	Trichloroethanol, without hydrolysis	Blood	*

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

## Exposure guidelines

### US - California OELs: Skin designation

1,2-Dichlorobenzene (CAS 95-50-1)	Can be absorbed through the skin.
2-Chlorotoluene (CAS 95-49-8)	Can be absorbed through the skin.
Benzene (CAS 71-43-2)	Can be absorbed through the skin.
Hexachloro-1,3-butadiene (CAS 87-68-3)	Can be absorbed through the skin.
Isopropylbenzene (CAS 98-82-8)	Can be absorbed through the skin.
Methanol (CAS 67-56-1)	Can be absorbed through the skin.
Naphthalene (CAS 91-20-3)	Can be absorbed through the skin.
Styrene (CAS 100-42-5)	Can be absorbed through the skin.
Toluene (CAS 108-88-3)	Can be absorbed through the skin.

### US - Minnesota Haz Subs: Skin designation applies

2-Chlorotoluene (CAS 95-49-8)	Skin designation applies.
Isopropylbenzene (CAS 98-82-8)	Skin designation applies.
Methanol (CAS 67-56-1)	Skin designation applies.
Styrene (CAS 100-42-5)	Skin designation applies.
Tetrachloroethene (CAS 127-18-4)	Skin designation applies.
Toluene (CAS 108-88-3)	Skin designation applies.

### US - Tennessee OELs: Skin designation

Isopropylbenzene (CAS 98-82-8)	Can be absorbed through the skin.
Methanol (CAS 67-56-1)	Can be absorbed through the skin.

### US ACGIH Threshold Limit Values: Skin designation

Benzene (CAS 71-43-2)	Can be absorbed through the skin.
Hexachloro-1,3-butadiene (CAS 87-68-3)	Can be absorbed through the skin.
Methanol (CAS 67-56-1)	Can be absorbed through the skin.
Naphthalene (CAS 91-20-3)	Can be absorbed through the skin.

### US NIOSH Pocket Guide to Chemical Hazards: Skin designation

Hexachloro-1,3-butadiene (CAS 87-68-3)	Can be absorbed through the skin.
Isopropylbenzene (CAS 98-82-8)	Can be absorbed through the skin.
Methanol (CAS 67-56-1)	Can be absorbed through the skin.

### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Isopropylbenzene (CAS 98-82-8)	Can be absorbed through the skin.
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### Appropriate engineering controls

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. Provide eyewash station. Eye wash fountain and emergency showers are recommended.

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

**Eye/face protection** Chemical respirator with organic vapor cartridge and full facepiece.

#### Skin protection

**Hand protection** Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier.

**Other** Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.

**Respiratory protection** Chemical respirator with organic vapor cartridge and full facepiece.

**Thermal hazards** Wear appropriate thermal protective clothing, when necessary.

### General hygiene considerations

Observe any medical surveillance requirements. When using do not smoke. Keep away from food and drink. 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.

## 9. Physical and chemical properties

### Appearance

<b>Physical state</b>	Liquid.
<b>Form</b>	Liquid.
<b>Color</b>	Not available.

**Odor** Not available.

**Odor threshold** Not available.



<b>pH</b>	Not available.
<b>Melting point/freezing point</b>	-144.04 °F (-97.8 °C) estimated
<b>Initial boiling point and boiling range</b>	148.46 °F (64.7 °C) estimated
<b>Flash point</b>	53.6 °F (12.0 °C) estimated
<b>Evaporation rate</b>	Not available.
<b>Flammability (solid, gas)</b>	Not applicable.
<b>Upper/lower flammability or explosive limits</b>	
<b>Flammability limit - lower (%)</b>	7.3 % estimated
<b>Flammability limit - upper (%)</b>	36 % estimated
<b>Explosive limit - lower (%)</b>	Not available.
<b>Explosive limit - upper (%)</b>	Not available.
<b>Vapor pressure</b>	169.3 hPa estimated
<b>Vapor density</b>	Not available.
<b>Relative density</b>	Not available.
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	Not available.
<b>Partition coefficient (n-octanol/water)</b>	Not available.
<b>Auto-ignition temperature</b>	867.2 °F (464 °C) estimated
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	Not available.
<b>Other information</b>	
<b>Density</b>	0.8031 g/cm3 estimated
<b>Explosive properties</b>	Not explosive.
<b>Flammability class</b>	Flammable IB estimated
<b>Oxidizing properties</b>	Not oxidizing.
<b>Percent volatile</b>	98 % estimated
<b>Specific gravity</b>	0.8 estimated
<b>VOC</b>	98.1 % estimated

## 10. Stability and reactivity

<b>Reactivity</b>	The product is stable and non-reactive under normal conditions of use, storage and transport.
<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	Hazardous polymerization does not occur.
<b>Conditions to avoid</b>	Avoid heat, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Contact with incompatible materials.
<b>Incompatible materials</b>	Strong oxidizing agents.
<b>Hazardous decomposition products</b>	No hazardous decomposition products are known.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Inhalation</b>	Toxic if inhaled. May cause damage to organs by inhalation. May cause damage to organs through prolonged or repeated exposure by inhalation.
<b>Skin contact</b>	Toxic in contact with skin. May cause an allergic skin reaction.
<b>Eye contact</b>	Causes serious eye irritation.
<b>Ingestion</b>	Toxic if swallowed.

**Symptoms related to the physical, chemical and toxicological characteristics**

Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Severe eye irritation. May cause an allergic skin reaction. Dermatitis. Rash.

**Information on toxicological effects**

**Acute toxicity**

Toxic if inhaled. Toxic in contact with skin. Toxic if swallowed.

<b>Components</b>	<b>Species</b>	<b>Test Results</b>
1,2,3-Trichlorobenzene (CAS 87-61-6)		
<b><u>Acute</u></b>		
<b>Oral</b>		
LD50	Rat	756 mg/kg
1,2,4-Trichlorobenzene (CAS 120-82-1)		
<b><u>Acute</u></b>		
<b>Oral</b>		
LD50	Rat	756 mg/kg
1,2,4-Trimethylbenzene (CAS 95-63-6)		
<b><u>Acute</u></b>		
<b>Dermal</b>		
LD50	Rabbit	> 3160 mg/kg
<b>Oral</b>		
LD50	Rat	3280 mg/kg
1,2-Dichlorobenzene (CAS 95-50-1)		
<b><u>Acute</u></b>		
<b>Oral</b>		
LD50	Rat	1516 mg/kg
1,3,5-Trimethylbenzene (CAS 108-67-8)		
<b><u>Acute</u></b>		
<b>Oral</b>		
LD50	Rat	3280 mg/kg
1,3-Dichlorobenzene (CAS 541-73-1)		
<b><u>Acute</u></b>		
<b>Oral</b>		
LD50	Rat	580 mg/kg
1,4-Dichlorobenzene (CAS 106-46-7)		
<b><u>Acute</u></b>		
<b>Dermal</b>		
LD50	Rat	> 2000 mg/kg, 24 Hours
<b>Oral</b>		
LD50	Rat	500 mg/kg
2-Chlorotoluene (CAS 95-49-8)		
<b><u>Acute</u></b>		
<b>Dermal</b>		
LD50	Rat	> 1080 mg/kg, 24 Hours
<b>Oral</b>		
LD50	Rat	1659 mg/kg
Benzene (CAS 71-43-2)		
<b><u>Acute</u></b>		
<b>Oral</b>		
LD50	Rat	690 - 1230 mg/kg

Components	Species	Test Results
Chlorobenzene (CAS 108-90-7)		
<b><u>Acute</u></b>		
<b>Inhalation</b>		
<i>Vapor</i>		
LC50	Rat	13.6 mg/l
Ethylbenzene (CAS 100-41-4)		
<b><u>Acute</u></b>		
<b>Oral</b>		
LD50	Rat	3500 mg/kg
Hexachloro-1,3-butadiene (CAS 87-68-3)		
<b><u>Acute</u></b>		
<b>Oral</b>		
LD50	Rat	90 mg/kg
Isopropylbenzene (CAS 98-82-8)		
<b><u>Acute</u></b>		
<b>Dermal</b>		
LD50	Rabbit	> 3160 mg/kg, 24 Hours
m-Xylene (CAS 108-38-3)		
<b><u>Acute</u></b>		
<b>Oral</b>		
LD50	Rat	4300 mg/kg
Naphthalene (CAS 91-20-3)		
<b><u>Acute</u></b>		
<b>Dermal</b>		
LD50	Rabbit	> 2 g/kg
<b>Oral</b>		
LD50	Rat	490 mg/kg
o-Xylene (CAS 95-47-6)		
<b><u>Acute</u></b>		
<b>Oral</b>		
LD50	Rat	3523 mg/kg
p-Isopropyltoluene (CAS 99-87-6)		
<b><u>Acute</u></b>		
<b>Oral</b>		
LD50	Rat	4750 mg/kg
p-Xylene (CAS 106-42-3)		
<b><u>Acute</u></b>		
<b>Oral</b>		
LD50	Rat	3523 mg/kg
Styrene (CAS 100-42-5)		
<b><u>Acute</u></b>		
<b>Dermal</b>		
LD50	Rat	> 2000 mg/kg, 24 Hours
<b>Oral</b>		
LD50	Rat	1 g/kg
Tetrachloroethene (CAS 127-18-4)		
<b><u>Acute</u></b>		
<b>Oral</b>		
LD50	Rat	2400 mg/kg

Components	Species	Test Results
Toluene (CAS 108-88-3)		
<b>Acute</b>		
<b>Inhalation</b>		
LC50	Rat	12.5 - 28.8 mg/l, 4 Hours
Trichloroethene (CAS 79-01-6)		
<b>Acute</b>		
<b>Oral</b>		
LD50	Rat	4920 mg/kg

\* Estimates for product may be based on additional component data not shown.

<b>Skin corrosion/irritation</b>	Prolonged skin contact may cause temporary irritation.
<b>Serious eye damage/eye irritation</b>	Causes serious eye irritation.
<b>Respiratory or skin sensitization</b>	
<b>Respiratory sensitization</b>	Not a respiratory sensitizer.
<b>Skin sensitization</b>	May cause an allergic skin reaction.
<b>Germ cell mutagenicity</b>	May cause genetic defects.
<b>Carcinogenicity</b>	Risk of cancer cannot be excluded with prolonged exposure. May cause cancer.

#### IARC Monographs. Overall Evaluation of Carcinogenicity

1,2-Dichlorobenzene (CAS 95-50-1)	3 Not classifiable as to carcinogenicity to humans.
1,3-Dichlorobenzene (CAS 541-73-1)	3 Not classifiable as to carcinogenicity to humans.
1,4-Dichlorobenzene (CAS 106-46-7)	2B Possibly carcinogenic to humans.
Benzene (CAS 71-43-2)	1 Carcinogenic to humans.
Ethylbenzene (CAS 100-41-4)	2B Possibly carcinogenic to humans.
Hexachloro-1,3-butadiene (CAS 87-68-3)	3 Not classifiable as to carcinogenicity to humans.
Isopropylbenzene (CAS 98-82-8)	2B Possibly carcinogenic to humans.
m-Xylene (CAS 108-38-3)	3 Not classifiable as to carcinogenicity to humans.
Naphthalene (CAS 91-20-3)	2B Possibly carcinogenic to humans.
o-Xylene (CAS 95-47-6)	3 Not classifiable as to carcinogenicity to humans.
p-Xylene (CAS 106-42-3)	3 Not classifiable as to carcinogenicity to humans.
Styrene (CAS 100-42-5)	2B Possibly carcinogenic to humans.
Tetrachloroethene (CAS 127-18-4)	2A Probably carcinogenic to humans.
Toluene (CAS 108-88-3)	3 Not classifiable as to carcinogenicity to humans.
Trichloroethene (CAS 79-01-6)	1 Carcinogenic to humans.

#### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Benzene (CAS 71-43-2)	Cancer
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#### US. National Toxicology Program (NTP) Report on Carcinogens

1,4-Dichlorobenzene (CAS 106-46-7)	Reasonably Anticipated to be a Human Carcinogen.
Benzene (CAS 71-43-2)	Known To Be Human Carcinogen.
Isopropylbenzene (CAS 98-82-8)	Reasonably Anticipated to be a Human Carcinogen.
Naphthalene (CAS 91-20-3)	Reasonably Anticipated to be a Human Carcinogen.
Styrene (CAS 100-42-5)	Reasonably Anticipated to be a Human Carcinogen.
Tetrachloroethene (CAS 127-18-4)	Reasonably Anticipated to be a Human Carcinogen.
Trichloroethene (CAS 79-01-6)	Reasonably Anticipated to be a Human Carcinogen.

<b>Reproductive toxicity</b>	May damage fertility or the unborn child.
<b>Specific target organ toxicity - single exposure</b>	Causes damage to organs.
<b>Specific target organ toxicity - repeated exposure</b>	Causes damage to organs through prolonged or repeated exposure.
<b>Aspiration hazard</b>	Not an aspiration hazard.
<b>Chronic effects</b>	Causes damage to organs through prolonged or repeated exposure. Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects.

## 12. Ecological information

<b>Ecotoxicity</b>	Very toxic to aquatic life with long lasting effects.
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Components	Species	Test Results
1,2,4-Trichlorobenzene (CAS 120-82-1)		
<b>Aquatic</b>		
Crustacea	EC50	Water flea (Daphnia magna) 3.1 - 3.69 mg/l, 48 hours
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss) 1.35 - 1.73 mg/l, 96 hours
1,2,4-Trimethylbenzene (CAS 95-63-6)		
<b>Aquatic</b>		
Fish	LC50	Fathead minnow (Pimephales promelas) 7.19 - 8.28 mg/l, 96 hours
1,2-Dichlorobenzene (CAS 95-50-1)		
<b>Aquatic</b>		
Crustacea	EC50	Water flea (Daphnia magna) 0.74 mg/l, 48 hours
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss) 1.58 mg/l, 96 hours
1,3,5-Trimethylbenzene (CAS 108-67-8)		
<b>Aquatic</b>		
Fish	LC50	Goldfish (Carassius auratus) 9.89 - 15.05 mg/l, 96 hours
1,3-Dichlorobenzene (CAS 541-73-1)		
<b>Aquatic</b>		
Crustacea	EC50	Water flea (Daphnia magna) 1.2 mg/l, 48 hours
Fish	LC50	Bluegill (Lepomis macrochirus) 3.9 - 6.2 mg/l, 96 hours
1,4-Dichlorobenzene (CAS 106-46-7)		
<b>Aquatic</b>		
Crustacea	EC50	Water flea (Daphnia magna) 0.0007 mg/l, 48 hours
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss) 1.12 mg/l, 96 hours
2-Chlorotoluene (CAS 95-49-8)		
<b>Aquatic</b>		
Fish	LC50	Bleak (Alburnus alburnus) 6.7 - 9.1 mg/l, 96 hours
Benzene (CAS 71-43-2)		
<b>Aquatic</b>		
Crustacea	EC50	Water flea (Daphnia magna) 8.76 - 15.6 mg/l, 48 hours
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss) 7.2 - 11.7 mg/l, 96 hours
Bromobenzene (CAS 108-86-1)		
<b>Aquatic</b>		
Fish	LC50	Fathead minnow (Pimephales promelas) 5.6 mg/l, 96 hours
Chlorobenzene (CAS 108-90-7)		
<b>Aquatic</b>		
Fish	LC50	Bluegill (Lepomis macrochirus) 4.1 - 4.9 mg/l, 96 hours
Ethylbenzene (CAS 100-41-4)		
<b>Aquatic</b>		
Crustacea	EC50	Water flea (Daphnia magna) 1.37 - 4.4 mg/l, 48 hours
Fish	LC50	Fathead minnow (Pimephales promelas) 7.5 - 11 mg/l, 96 hours
Hexachloro-1,3-butadiene (CAS 87-68-3)		
<b>Aquatic</b>		
Fish	LC50	Fathead minnow (Pimephales promelas) 0.09 - 0.11 mg/l, 96 hours
Isopropylbenzene (CAS 98-82-8)		
<b>Aquatic</b>		
Crustacea	EC50	Brine shrimp (Artemia sp.) 3.55 - 11.29 mg/l, 48 hours

Components		Species	Test Results
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	2.7 mg/l, 96 hours
Methanol (CAS 67-56-1)			
<b>Aquatic</b>			
Crustacea	EC50	Water flea (Daphnia magna)	> 10000 mg/l, 48 hours
Fish	LC50	Fathead minnow (Pimephales promelas)	> 100 mg/l, 96 hours
m-Xylene (CAS 108-38-3)			
<b>Aquatic</b>			
Crustacea	EC50	Water flea (Daphnia magna)	2.81 - 5 mg/l, 48 hours
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	8.4 mg/l, 96 hours
Naphthalene (CAS 91-20-3)			
<b>Aquatic</b>			
Crustacea	EC50	Water flea (Daphnia magna)	1.09 - 3.4 mg/l, 48 hours
Fish	LC50	Pink salmon (Oncorhynchus gorbuscha)	1.11 - 1.68 mg/l, 96 hours
n-Butylbenzene (CAS 104-51-8)			
<b>Aquatic</b>			
Crustacea	EC50	Water flea (Daphnia magna)	0.27 - 0.44 mg/l, 48 hours
n-Propylbenzene (CAS 103-65-1)			
<b>Aquatic</b>			
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	1.55 mg/l, 96 hours
o-Xylene (CAS 95-47-6)			
<b>Aquatic</b>			
Crustacea	EC50	Water flea (Daphnia magna)	0.78 - 2.51 mg/l, 48 hours
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	5.59 - 11.6 mg/l, 96 hours
p-Isopropyltoluene (CAS 99-87-6)			
<b>Aquatic</b>			
Fish	LC50	Sheepshead minnow (Cyprinodon variegatus)	36 - 64 mg/l, 96 hours
p-Xylene (CAS 106-42-3)			
<b>Aquatic</b>			
Crustacea	EC50	Water flea (Daphnia magna)	3.55 - 6.31 mg/l, 48 hours
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	2.6 mg/l, 96 hours
Styrene (CAS 100-42-5)			
<b>Aquatic</b>			
Crustacea	EC50	Water flea (Daphnia magna)	3.3 - 7.4 mg/l, 48 hours
Fish	LC50	Sheepshead minnow (Cyprinodon variegatus)	5.1 - 16 mg/l, 96 hours
Tetrachloroethene (CAS 127-18-4)			
<b>Aquatic</b>			
Crustacea	EC50	Water flea (Daphnia magna)	6.1 - 9 mg/l, 48 hours
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	4.82 mg/l, 96 hours
Toluene (CAS 108-88-3)			
<b>Aquatic</b>			
Crustacea	EC50	Water flea (Daphnia magna)	5.46 - 9.83 mg/l, 48 hours
Fish	LC50	Coho salmon,silver salmon (Oncorhynchus kisutch)	8.11 mg/l, 96 hours

Components	Species	Test Results
Trichloroethene (CAS 79-01-6)		
<b>Aquatic</b>		
Fish	LC50	Flagfish (Jordanella floridae)
		3.1 mg/l, 96 hours

\* Estimates for product may be based on additional component data not shown.

#### Persistence and degradability

#### Bioaccumulative potential

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

1,2,3-Trichlorobenzene	4.05
1,2,4-Trichlorobenzene	4.02
1,2-Dichlorobenzene	3.43
1,3-Dichlorobenzene	3.53
1,4-Dichlorobenzene	3.44
2-Chlorotoluene	3.42
4-Chlorotoluene	3.33
Benzene	2.13
Bromobenzene	2.99
Chlorobenzene	2.89
Ethylbenzene	3.15
Hexachloro-1,3-butadiene	4.78
Isopropylbenzene	3.66
Methanol	-0.77
m-Xylene	3.2
Naphthalene	3.3
n-Butylbenzene	4.38
n-Propylbenzene	3.69
o-Xylene	3.12
p-Isopropyltoluene	4.1
p-Xylene	3.15
sec-Butylbenzene	4.57
Styrene	2.95
tert-Butylbenzene	4.11
Tetrachloroethene	3.4
Toluene	2.73
Trichloroethene	2.61

**Mobility in soil** No data available.

**Other adverse effects** The product contains volatile organic compounds which have a photochemical ozone creation potential.

### 13. Disposal considerations

**Disposal instructions** Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.

**Local disposal regulations** Dispose in accordance with all applicable regulations.

**Hazardous waste code** The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

**Waste from residues / unused products** Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

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

### 14. Transport information

<b>DOT</b>	
<b>UN number</b>	UN1230
<b>UN proper shipping name</b>	Methanol, solution (Methanol RQ = 5297 LBS), MARINE POLLUTANT (1,2-Dichlorobenzene, 1,2,4-Trichlorobenzene)
<b>Transport hazard class(es)</b>	
<b>Class</b>	3

<b>Subsidiary risk</b>	-
<b>Label(s)</b>	3
<b>Packing group</b>	II
<b>Environmental hazards</b>	
<b>Marine pollutant</b>	Yes
<b>Special precautions for user</b>	Read safety instructions, SDS and emergency procedures before handling.
<b>Special provisions</b>	IB2, T7, TP2
<b>Packaging exceptions</b>	150
<b>Packaging non bulk</b>	202
<b>Packaging bulk</b>	242

#### IATA

<b>UN number</b>	UN1230
<b>UN proper shipping name</b>	Methanol solution (Methanol)
<b>Transport hazard class(es)</b>	
<b>Class</b>	3
<b>Subsidiary risk</b>	6.1(PGI, II)
<b>Packing group</b>	II
<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.
<b>Other information</b>	
<b>Passenger and cargo aircraft</b>	Allowed with restrictions.
<b>Cargo aircraft only</b>	Allowed with restrictions.

#### IMDG

<b>UN number</b>	UN1230
<b>UN proper shipping name</b>	METHANOL SOLUTION (Methanol), MARINE POLLUTANT (1,2,3-Trichlorobenzene, 1,2,4-Trichlorobenzene)
<b>Transport hazard class(es)</b>	
<b>Class</b>	3
<b>Subsidiary risk</b>	6.1(PGI, II)
<b>Packing group</b>	II
<b>Environmental hazards</b>	
<b>Marine pollutant</b>	Yes
<b>EmS</b>	F-E, S-D
<b>Special precautions for user</b>	Read safety instructions, SDS and emergency procedures before handling.
1,2,3-Trichlorobenzene	
1,2,4-Trichlorobenzene	

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

#### DOT





IATA; IMDG



Marine pollutant



General information

IMDG Regulated Marine Pollutant. DOT Regulated Marine Pollutant.

## 15. Regulatory information

US federal regulations

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

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

Trichloroethene (CAS 79-01-6)

0.1 % One-Time Export Notification only.

### CERCLA Hazardous Substance List (40 CFR 302.4)

1,2,3-Trichlorobenzene (CAS 87-61-6)

Listed.

1,2,4-Trichlorobenzene (CAS 120-82-1)

Listed.

1,2-Dichlorobenzene (CAS 95-50-1)

Listed.

1,3-Dichlorobenzene (CAS 541-73-1)

Listed.

1,4-Dichlorobenzene (CAS 106-46-7)

Listed.

Benzene (CAS 71-43-2)

Listed.

Chlorobenzene (CAS 108-90-7)

Listed.

Ethylbenzene (CAS 100-41-4)

Listed.

Hexachloro-1,3-butadiene (CAS 87-68-3)

Listed.

Isopropylbenzene (CAS 98-82-8)

Listed.

Methanol (CAS 67-56-1)

Listed.

m-Xylene (CAS 108-38-3)

Listed.

Naphthalene (CAS 91-20-3)

Listed.

n-Propylbenzene (CAS 103-65-1)

Listed.

o-Xylene (CAS 95-47-6)

Listed.

p-Xylene (CAS 106-42-3)

Listed.

Styrene (CAS 100-42-5)

Listed.

Tetrachloroethene (CAS 127-18-4)

Listed.

Toluene (CAS 108-88-3)

Listed.

Trichloroethene (CAS 79-01-6)

Listed.

### SARA 304 Emergency release notification

Not regulated.

### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Benzene (CAS 71-43-2)

Cancer  
Central nervous system  
Blood  
Aspiration  
Skin  
Eye  
respiratory tract irritation  
Flammability

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**Hazard categories** Immediate Hazard - Yes  
 Delayed Hazard - Yes  
 Fire Hazard - Yes  
 Pressure Hazard - No  
 Reactivity Hazard - No

**SARA 302 Extremely hazardous substance**

Not listed.

**SARA 311/312 Hazardous chemical** No

**SARA 313 (TRI reporting)**

Chemical name	CAS number	% by wt.
1,4-Dichlorobenzene	106-46-7	0.2
Benzene	71-43-2	0.2
Ethylbenzene	100-41-4	0.2
Methanol	67-56-1	94.4
Naphthalene	91-20-3	0.2
Styrene	100-42-5	0.2
Tetrachloroethene	127-18-4	0.2
Trichloroethene	79-01-6	0.2

**Other federal regulations****Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

1,2,4-Trichlorobenzene (CAS 120-82-1)  
 1,4-Dichlorobenzene (CAS 106-46-7)  
 Benzene (CAS 71-43-2)  
 Chlorobenzene (CAS 108-90-7)  
 Ethylbenzene (CAS 100-41-4)  
 Hexachloro-1,3-butadiene (CAS 87-68-3)  
 Isopropylbenzene (CAS 98-82-8)  
 Methanol (CAS 67-56-1)  
 m-Xylene (CAS 108-38-3)  
 Naphthalene (CAS 91-20-3)  
 o-Xylene (CAS 95-47-6)  
 p-Xylene (CAS 106-42-3)  
 Styrene (CAS 100-42-5)  
 Tetrachloroethene (CAS 127-18-4)  
 Toluene (CAS 108-88-3)  
 Trichloroethene (CAS 79-01-6)

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Not regulated.

**Safe Drinking Water Act (SDWA)** Not regulated.

**Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and Chemical Code Number**

Toluene (CAS 108-88-3) 6594

**Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))**

Toluene (CAS 108-88-3) 35 %WV

**DEA Exempt Chemical Mixtures Code Number**

Toluene (CAS 108-88-3) 594

**FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace**

Styrene (CAS 100-42-5) Other Flavoring Substances with OSHA PEL's

**US state regulations** WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

**US - California Proposition 65 - CRT: Listed date/Carcinogenic substance**

1,4-Dichlorobenzene (CAS 106-46-7) Listed: January 1, 1989  
 Benzene (CAS 71-43-2) Listed: February 27, 1987  
 Ethylbenzene (CAS 100-41-4) Listed: June 11, 2004  
 Hexachloro-1,3-butadiene (CAS 87-68-3) Listed: May 3, 2011  
 Isopropylbenzene (CAS 98-82-8) Listed: April 6, 2010  
 Naphthalene (CAS 91-20-3) Listed: April 19, 2002  
 Styrene (CAS 100-42-5) Listed: April 22, 2016

Tetrachloroethene (CAS 127-18-4) Listed: April 1, 1988  
Trichloroethene (CAS 79-01-6) Listed: April 1, 1988

**US - California Proposition 65 - CRT: Listed date/Developmental toxin**

Benzene (CAS 71-43-2) Listed: December 26, 1997  
Methanol (CAS 67-56-1) Listed: March 16, 2012  
Toluene (CAS 108-88-3) Listed: January 1, 1991  
Trichloroethene (CAS 79-01-6) Listed: Jan 31, 2014

**US - California Proposition 65 - CRT: Listed date/Male reproductive toxin**

Benzene (CAS 71-43-2) Listed: December 26, 1997  
Trichloroethene (CAS 79-01-6) Listed: Jan 31, 2014

**US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))**

1,2,3-Trichlorobenzene (CAS 87-61-6)  
1,2,4-Trichlorobenzene (CAS 120-82-1)  
1,2,4-Trimethylbenzene (CAS 95-63-6)  
1,2-Dichlorobenzene (CAS 95-50-1)  
1,3,5-Trimethylbenzene (CAS 108-67-8)  
1,3-Dichlorobenzene (CAS 541-73-1)  
1,4-Dichlorobenzene (CAS 106-46-7)  
2-Chlorotoluene (CAS 95-49-8)  
4-Chlorotoluene (CAS 106-43-4)  
Benzene (CAS 71-43-2)  
Chlorobenzene (CAS 108-90-7)  
Ethylbenzene (CAS 100-41-4)  
Hexachloro-1,3-butadiene (CAS 87-68-3)  
Isopropylbenzene (CAS 98-82-8)  
Methanol (CAS 67-56-1)  
m-Xylene (CAS 108-38-3)  
Naphthalene (CAS 91-20-3)  
n-Butylbenzene (CAS 104-51-8)  
n-Propylbenzene (CAS 103-65-1)  
o-Xylene (CAS 95-47-6)  
p-Xylene (CAS 106-42-3)  
sec-Butylbenzene (CAS 135-98-8)  
Styrene (CAS 100-42-5)  
tert-Butylbenzene (CAS 98-06-6)  
Tetrachloroethene (CAS 127-18-4)  
Toluene (CAS 108-88-3)  
Trichloroethene (CAS 79-01-6)

**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)	No
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

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

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, including date of preparation or last revision**

**Issue date** 11-13-2014  
**Revision date** 08-02-2018

**Version #**  
**NFPA ratings**

03  
Health: 4  
Flammability: 3  
Instability: 0

**Disclaimer**

The above information is believed to be correct on the date it was last revised and must not be considered all inclusive. The information has been obtained only by a search of available literature and is only a guide for handling the chemicals. OSHA regulations require that if other hazards become evident, an upgraded SDS must be made available to the employee within three months. RESPONSIBILITY for updates lies with the employer and not with CHEM SERVICE, Inc.

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