



# Material Safety Data Sheet

<p><b>NFPA</b></p> 	<p><b>HMIS</b></p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr><td style="background-color: #00FFFF;">Health Hazard</td><td style="text-align: center; border: 1px solid black;">3</td></tr> <tr><td style="background-color: #FFCCCC;">Fire Hazard</td><td style="text-align: center; border: 1px solid black;">0</td></tr> <tr><td style="background-color: #FFFF00;">Reactivity</td><td style="text-align: center; border: 1px solid black;">0</td></tr> </table>	Health Hazard	3	Fire Hazard	0	Reactivity	0	<p><b>Personal Protective Equipment</b></p>  <p>See Section 15.</p>
Health Hazard	3							
Fire Hazard	0							
Reactivity	0							

Section 1. Chemical Product and Company Identification		Page Number: 1
<b>Common Name/Trade Name</b>	<b>Iodine Monochloride TS</b>	<b>Catalog Number(s).</b> I-166
		<b>CAS#</b> Mixture.
<b>Manufacturer</b>	SPECTRUM LABORATORY PRODUCTS INC. 14422 S. SAN PEDRO STREET GARDENA, CA 90248	<b>RTECS</b> Not applicable.
		<b>TSCA</b> TSCA 8(b) inventory: Hydrochloric acid; Water; Potassium Iodide; Potassium iodate; Chloroform
<b>Commercial Name(s)</b>	Not available.	<b>CI#</b> Not available.
<b>Synonym</b>	Not available.	<p style="color: blue; text-align: center;"><b>IN CASE OF EMERGENCY</b></p> <p style="color: blue; text-align: center;"><b>CHEMTREC (24hr) 800-424-9300</b></p> <p>CALL (310) 516-8000</p>
<b>Chemical Name</b>	Not applicable.	
<b>Chemical Family</b>	Not available.	
<b>Chemical Formula</b>	Not applicable.	
<b>Supplier</b>	SPECTRUM LABORATORY PRODUCTS INC. 14422 S. SAN PEDRO STREET GARDENA, CA 90248	

Section 2. Composition and Information on Ingredients					
Name	CAS #	Exposure Limits			% by Weight
		TWA (mg/m <sup>3</sup> )	STEL (mg/m <sup>3</sup> )	CEIL (mg/m <sup>3</sup> )	
1) Hydrogen chloride	7647-01-0		5	5	10-19
2) Water	7732-18-5				66.8-75.8
3) Potassium Iodide	7681-11-0				6.7
4) Potassium iodate	7758-05-6				4.2
5) Chloroform	67-66-3	2	9.78		3.3
<p><b>Toxicological Data on Ingredients</b></p> <p><b>Hydrogen chloride:</b> GAS (LC50): Acute: 4701 ppm 0.5 hours [Rat].</p> <p><b>Potassium Iodide</b> LD50: Not available. LC50: Not available.</p> <p><b>Potassium iodate</b> LD50: Not available. LC50: Not available.</p> <p><b>Chloroform:</b> ORAL (LD50): Acute: 695 mg/kg [Rat]. 36 mg/kg [Mouse]. 820 mg/kg [Guinea pig]. DERMAL (LD50): Acute: &gt;20000 mg/kg [Rabbit]. &gt;3980 mg/kg [Rat] VAPOR (LC50): Acute: 47702 mg/m<sup>3</sup> 4 hours [Rat]. 6000 mg/m<sup>3</sup> 6 hours [Rat]. 17200 mg/m<sup>3</sup> 2 hours [Mouse]. 6000 mg/m<sup>3</sup> 6 hours [Mouse]</p>					

**Section 3. Hazards Identification**

<b>Potential Acute Health Effects</b>	Very hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, inhalation. Hazardous in case of skin contact (corrosive, permeator), of eye contact (corrosive). Liquid or spray mist may produce tissue damage particularly on mucous membranes of eyes, mouth and respiratory tract. Skin contact may produce burns. Inhalation of the spray mist may produce severe irritation of respiratory tract, characterized by coughing, choking, or shortness of breath. Inflammation of the eye is characterized by redness, watering, and itching. Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering.
<b>Potential Chronic Health Effects</b>	<p><b>CARCINOGENIC EFFECTS:</b> Classified 3 (Not classifiable for human.) by IARC [Hydrogen chloride]. Classified + (Proven.) by NIOSH [Chloroform]. Classified A3 (Proven for animal.) by ACGIH, 2B (Possible for human.) by IARC [Chloroform]. Classified 2 (Some evidence.) by NTP [Chloroform].</p> <p><b>MUTAGENIC EFFECTS:</b> Mutagenic for mammalian somatic cells. [Chloroform]. Mutagenic for bacteria and/or yeast. [Chloroform].</p> <p><b>TERATOGENIC EFFECTS:</b> Not available.</p> <p><b>DEVELOPMENTAL TOXICITY:</b> Not available.</p> <p>The substance may be toxic to kidneys, liver, mucous membranes, heart, upper respiratory tract, skin, eyes, , central nervous system (CNS), teeth, thyroid.</p> <p>Repeated or prolonged exposure to the substance can produce target organs damage. Repeated or prolonged contact with spray mist may produce chronic eye irritation and severe skin irritation. Repeated or prolonged exposure to spray mist may produce respiratory tract irritation leading to frequent attacks of bronchial infection.</p>

**Section 4. First Aid Measures**

<b>Eye Contact</b>	Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention immediately.
<b>Skin Contact</b>	In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Cover the irritated skin with an emollient. Cold water may be used. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.
<b>Serious Skin Contact</b>	Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek immediate medical attention.
<b>Inhalation</b>	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.
<b>Serious Inhalation</b>	Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. <b>WARNING:</b> It may be hazardous to the person providing aid to give mouth-to-mouth resuscitation when the inhaled material is toxic, infectious or corrosive. Seek medical attention.
<b>Ingestion</b>	Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.
<b>Serious Ingestion</b>	Not available.

**Section 5. Fire and Explosion Data**

<b>Flammability of the Product</b>	Non-flammable.
<b>Auto-Ignition Temperature</b>	Not applicable.
<b>Flash Points</b>	Not applicable.
<b>Flammable Limits</b>	Not applicable.
<b>Products of Combustion</b>	Not available.
<b>Fire Hazards in Presence of Various Substances</b>	Not applicable.
<b>Explosion Hazards in Presence of Various Substances</b>	Non-explosive in presence of open flames and sparks, of shocks.
<b>Fire Fighting Media and Instructions</b>	Not applicable.

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**Special Remarks on Fire Hazards** Not available.

**Special Remarks on Explosion Hazards** Potassium iodide + Fluorine Perchlorate will explode on contact. (Potassium Iodide)

### Section 6. Accidental Release Measures

**Small Spill** Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container.

**Large Spill** Corrosive liquid.  
Stop leak if without risk. Absorb with DRY earth, sand or other non-combustible material. Do not get water inside container. Do not touch spilled material. Use water spray curtain to divert vapor drift. Prevent entry into sewers, basements or confined areas; dike if needed. Call for assistance on disposal. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

### Section 7. Handling and Storage

**Precautions** Keep container dry. Do not ingest. Do not breathe gas/fumes/ vapor/spray. Never add water to this product. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes. Keep away from incompatibles such as alkalis, moisture.

**Storage** Keep container tightly closed. Keep container in a cool, well-ventilated area. Sensitive to light. Store in light-resistant containers.

### Section 8. Exposure Controls/Personal Protection

**Engineering Controls** Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.

**Personal Protection** Face shield. Full suit. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Gloves. Boots.

**Personal Protection in Case of a Large Spill** Splash goggles. Full suit. Vapor respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

**Exposure Limits**

**Hydrogen chloride/Hydrochloric acid**  
 CEIL: 5 (ppm) from OSHA (PEL) [United States]  
 CEIL: 7 (mg/m<sup>3</sup>) from OSHA (PEL) [United States]  
 CEIL: 5 (ppm) from NIOSH [United States]  
 CEIL: 7 (mg/m<sup>3</sup>) from NIOSH [United States]  
 TWA: 1 STEL: 5 (ppm) [United Kingdom (UK)]  
 TWA: 2 STEL: 8 (mg/m<sup>3</sup>) [United Kingdom (UK)]  
 CEIL: 2 (ppm) from ACGIH (TLV) [United States]  
 CEIL: 2 (ppm) [Canada]  
 CEIL: 5 (ppm) [Canada]  
 CEIL: 7.5 (mg/m<sup>3</sup>) [Canada]

**Chloroform**  
 TWA: 10 (ppm) [Australia] Inhalation  
 TWA: 2 (ppm) from OSHA (PEL) [United States] Inhalation  
 STEL: 9.78 (mg/m<sup>3</sup>) from NIOSH Inhalation  
 STEL: 2 (ppm) from NIOSH Inhalation  
 TWA: 9.78 (mg/m<sup>3</sup>) from OSHA (PEL) [United States] Inhalation  
 TWA: 10 (ppm) from ACGIH (TLV) [United States] [1999] Inhalation  
 TWA: 2 (ppm) [United Kingdom (UK)] Inhalation  
 TWA: 9.9 (mg/m<sup>3</sup>) [United Kingdom (UK)] Inhalation

Consult local authorities for acceptable exposure limits.

**Section 9. Physical and Chemical Properties**

<b>Physical state and appearance</b>	Liquid.	<b>Odor</b>	Not available.
<b>Molecular Weight</b>	Not applicable.	<b>Taste</b>	Not available.
<b>pH (1% soln/water)</b>	Not available	<b>Color</b>	Clear Brown.
<b>Boiling Point</b>	The lowest known value is 61°C (141.8°F) (Chloroform). Weighted average: 98.27°C (208.9°F)		
<b>Melting Point</b>	May start to solidify at -63.5°C (-82.3°F) based on data for: Chloroform.		
<b>Critical Temperature</b>	The lowest known value is 263.33°C (506°F) (Chloroform).		
<b>Specific Gravity</b>	Weighted average: 1.1 (Water = 1)		
<b>Vapor Pressure</b>	The highest known value is 21.1 kPa (@ 20°C) (Chloroform). Weighted average: 3.13 kPa (@ 20°C)		
<b>Vapor Density</b>	The highest known value is 4.36 (Air = 1) (Chloroform). Weighted average: 0.79 (Air = 1)		
<b>Volatility</b>	Not available.		
<b>Odor Threshold</b>	The highest known value is 85 ppm (Chloroform)		
<b>Water/Oil Dist. Coeff.</b>	Not available.		
<b>Ionicity (in Water)</b>	Not available.		
<b>Dispersion Properties</b>	See solubility in water, methanol, diethyl ether, acetone.		
<b>Solubility</b>	Easily soluble in hot water. Soluble in cold water, methanol, diethyl ether. Partially soluble in acetone.		

**Section 10. Stability and Reactivity Data**

<b>Stability</b>	The product is stable.
<b>Instability Temperature</b>	Not available.
<b>Conditions of Instability</b>	Incompatible materials
<b>Incompatibility with various substances</b>	Reactive with metals, alkalis. Slightly reactive to reactive with oxidizing agents, reducing agents, combustible materials, organic materials, acids.
<b>Corrosivity</b>	Non-corrosive in presence of glass, of stainless steel(304), of stainless steel(316).

<b>Special Remarks on Reactivity</b>	<p>Reacts violently (moderate reaction with heat of evolution) with water especially when water is added to the product. Isolate hydrogen chloride from heat, direct, alkalis (reacts vigorously), organic materials, and oxidizers (especially nitric acid and chlorates), amines, copper and alloys (e.g. brass), hydroxides, zinc (galvanized materials), lithium silicide (incandescence), sulfuric acid(increase in temperature and pressure)</p> <p>Hydrogen chloride causes aldehydes and epoxides to violently polymerize.</p> <p>It reacts with oxidizers releasing chlorine gas.</p> <p>Hydrogen chloride gas is emitted when this product is in contact with sulfuric acid.</p> <p>Adsorption of Hydrochloric Acid onto silicon dioxide results in exothermic reaction.</p> <p>Hydrogen chloride causes aldehydes and epoxides to violently polymerize.</p> <p>Hydrogen chloride or Hydrochloric Acid in contact with the following can cause explosion or ignition on contact or other violent/vigorous reaction: Acetic anhydride, Alcohols + hydrogen cyanide, Aluminum, Aluminum phosphide, Aluminum-titanium alloys (with HCl vapor), 2-Amino ethanol, Ammonium, Ammonium hydroxide, 1,4-Benzoquinone diimine, Calcium acetylide (incandescence upon warming), Calcium carbide, Calcium phosphide, Carbon tetrachloride + silver perchlorate (produce trichloromethyl perchlorate), Cesium acetylene carbide, Cesium carbide, Cesium telluroacetylates, Chlorine + dinitroanilines (evolves gas), Chloroacetaldehyde oxime, Chlorosulfonic acid, Cyanogen chloride (when catalyzed by HCl), 1,1-Difluoroethylene, Dinitroanilines, Ethylene diamine, Ethyl 2-formylpropionate oxime (when generated by using HCl as a catalyst), Ethylene imine, Fluorine, HClO<sub>4</sub>, Hexalithium disilicide, Hydrogen peroxide, Lithium silicide, Metal acetylides, carbides, Magnesium boride, Methyl vinyl ether, Mercuric sulfate, Nitric acid + glycerol, Oleum, Perchloric acid, Potassium, Potassium permanganate, beta-Propiolactone, Propylene oxide, Rubidium acetylide, Rubidium carbide, Rubidium acetylene carbide, Silicon dioxide, Silver chlorite, Sodium (with aqueous HCl), Sodium 2-allyloxy-6-nitrophenylpyruvate oxime, Sodium hydroxide, Sodium tetraselenium, Sulfonic acid, Sulfuric acid, Tetraselenium tetranitride, 2,4,6-Tri(2-acetylhydrazino)-1,3,5-trinitrobenzene, Uranium phosphide, Vinyl acetate.</p> <p>Hydrogen chloride gas can react with formaldehyde to form bis(chloromethyl)ether, a human carcinogen.</p>
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Most metals, as well as certain coatings, plastics, and rubbers, are attacked by hydrogen chloride. Addition of hydrochloric acid to the following results in an exothermic reaction: Cesium cyanotridecahydrodecarborate(2-), Potassium ferricyanide, Vinylidene fluoride. Addition of hydrochloric acid to potassium ferrocyanide or ammonium hexacyanoferrate(II) results in an endothermic reaction. Hydrochloric acid in the presence of alcohol and glycols results in dehydration reactions.

(Hydrogen chloride)

**Special Remarks on Corrosivity**

This compound is highly corrosive when in solution (especially to most metals except: gold, mercury, platinum, silver, and tantalum). The anhydrous gas is not corrosive .

(Hydrogen chloride)

**Polymerization**

Will not occur.

### Section 11. Toxicological Information

**Routes of Entry**

Absorbed through skin. Dermal contact. Eye contact. Inhalation. Ingestion.

**Toxicity to Animals**

Acute oral toxicity (LD50): 36 mg/kg [Mouse]. (Chloroform).  
Acute dermal toxicity (LD50): >20000 mg/kg [Rabbit]. (Chloroform).  
Acute oral toxicity (LD50): 900 mg/kg [Rabbit]. (Hydrochloric acid)  
Acute toxicity of the vapor (LC50): 1108 ppm, 1 hours [Mouse]. (Hydrochloric acid)  
Acute toxicity of the vapor (LC50): 3124 ppm, 1 hours [Rat]. (Hydrochloric acid)

**Chronic Effects on Humans**

**CARCINOGENIC EFFECTS:** Classified 3 (Not classifiable for human.) by IARC [Hydrogen chloride]. Classified + (Proven.) by NIOSH [Chloroform]. Classified A3 (Proven for animal.) by ACGIH, 2B (Possible for human.) by IARC [Chloroform]. Classified 2 (Some evidence.) by NTP [Chloroform].  
**MUTAGENIC EFFECTS:** Mutagenic for mammalian somatic cells. [Chloroform]. Mutagenic for bacteria and/or yeast. [Chloroform].  
Contains material which may cause damage to the following organs: kidneys, liver, mucous membranes, heart, upper respiratory tract, skin, eyes, , central nervous system (CNS), teeth, thyroid.

**Other Toxic Effects on Humans**

Very hazardous in case of skin contact (irritant), of ingestion, .  
Hazardous in case of skin contact (corrosive, permeator), of eye contact (corrosive), of inhalation (lung corrosive).

**Special Remarks on Toxicity to Animals**

Lowest Published Lethal Dose:  
LDL [Mouse] - Route: Oral; Dose: 1862 mg/kg  
LDL[Rabbit] - Route: Oral; Dose: 916 mg/kg (Potassium Iodide)  
Lowest Published Lethal Dose:  
LDL [Mouse] - Route - Oral; Dose: 531 mg/kg  
LDL [Dog] - Route - Oral; Dose: 200 mg/kg  
Lethal Dose/Conc 50% Kill:  
LD50 [Mouse] - Route - Intraperitoneal; Dose: 136 mg/kg (Potassium Iodate)

**Special Remarks on Chronic Effects on Humans**

May cause adverse reproductive effects and birth defects based on animal data. May affect genetic material based on animal data (Potassium Iodide)  
May affect genetic material (possible mutagen) and cause adverse reproductive effects(embryotoxicity and fetotoxicity) Suspected carcinogen (tumorigenic) and teratogen based on animal data.  
Human: passes the placental barrier, detected in maternal milk.  
(Chloroform)  
May cause adverse reproductive effects (fetotoxicity).  
May affect genetic material.  
(Hydrochloric Acid)

**Special Remarks on other Toxic Effects on Humans**

Acute Potential Health Effects:  
This product contains Hydrochloric acid which can cause the following effects:  
Skin: Corrosive. Causes severe skin irritation and burns.  
Eyes: Corrosive. Causes severe eye irritation/conjunctivitis, burns, corneal necrosis.  
Inhalation: May be fatal if inhaled. Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract. Inhalation of hydrochloric acid fumes produces nose, throat, and laryngeal burning, and irritation, pain and inflammation, coughing, sneezing, choking sensation, hoarseness, laryngeal spasms, upper respiratory tract edema, chest pains, as well as headache, and palpitations. Inhalation of high concentrations can result in corrosive burns, necrosis of bronchial epithelium, constriction of the larynx and bronchi, nasospetal perforation, glottal closure, dyspnea, bronchitis. Chemical pneumonitis and pulmonary edema can also occur, particularly if exposure is prolonged. May affect the liver.  
Acute exposure via inhalation or ingestion can also cause erosion of tooth enamel.  
This product also contains Chloroform which can have the following effects when inhaled: It can affect behavior/Nervous system (CNS depressant, fatigue, dizziness, nervousness, giddiness, euphoria, loss of coordination and judgement, weakness, hallucinations, muscle contraction/spasticity, general anesthetic, spastic paralysis, headache), anorexia (neurological and gastrointestinal symptoms resembling chronic alcoholism), and possibly coma and death. May affect the liver, kidneys and gastrointestinal tract (nausea, vomiting).

Ingestion: May be fatal if swallowed. Causes irritation and burning, ulceration, or perforation of the gastrointestinal tract and resultant peritonitis, gastric hemorrhage and infection. Can also cause nausea, vomiting (with "coffee ground" emesis), diarrhea (possibly with blood), thirst, difficulty swallowing, salivation, chills, fever, uneasiness, shock, strictures and stenosis (esophageal, gastric, pyloric). May affect behavior/central nervous system (excitement, convulsions, somnolence, muscle weakness), the cardiovascular system (weak rapid pulse, tachycardia), respiration (shallow respiration, difficulty breathing), and urinary system (kidneys- renal failure, nephritis), liver.

This product also contains Potassium Iodide which may also cause the following health effects:

Serum-sickness type of hypersensitivity such as fever, arthralgia, lymph node enlargement, and eosinophilia may appear. Thrombotic thrombocytopenic purpura, and fatal periarteritis nodosa attributed to hypersensitivity to iodide has been described.

Chronic Potential Health Effects:

Prolonged or repeated skin contact may cause dermatitis.

Prolonged or repeated eye contact with vapor/mist can cause conjunctivitis

Prolonged or repeated inhalation and/or ingestion may affect liver, bleeding of nose and gums, nasal and oral mucosal ulceration, conjunctivitis, respiratory tract (changes in pulmonary function, chronic bronchitis, overt respiratory tract abnormalities), teeth (yellowing of teeth and erosion of tooth enamel), kidneys, and behavior (muscle contraction or spasticity).

Prolonged or repeated ingestion may also affect the liver (necrotic lesions, hepatitis), blood (anemia, changes in cell count), metabolism (anorexia, weight loss), endocrine system (spleen).

This product contains Chloroform which may also cause the following chronic health effects when inhaled:

Prolonged or repeated inhalation of chloroform may affect the liver (hepatitis, jaundice, hepatocellular necrosis), metabolism (weight loss), respiration (fibrosis, pneumoconiosis), behavior/central nervous system (symptoms similar to acute inhalation), blood, musculoskeletal system, and kidneys.

This product contains Potassium Iodide which can have the following chronic health effects when ingested:

Prolonged or repeated ingestion of potassium iodide can lead to iodism characterized by salivation, nasal discharge, sneezing, conjunctivitis, fever, headache, laryngitis, bronchitis, stomatitis, parotitis, anemia, and skin rashes. Chronic ingestion may also affect metabolism (anorexia), and thyroid gland (hypothyroidism, goiter). Furthermore, chronic ingestion of iodides (in animals) during pregnancy has resulted in fetal deaths, severe goiter and cretinoid appearance of the newborn.


### Section 12. Ecological Information

<b>Ecotoxicity</b>	Not available.
<b>BOD5 and COD</b>	Not available.
<b>Products of Biodegradation</b>	Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.
<b>Toxicity of the Products of Biodegradation</b>	The products of degradation are as toxic as the product itself.
<b>Special Remarks on the Products of Biodegradation</b>	Not available.

### Section 13. Disposal Considerations

<b>Waste Disposal</b>	Waste must be disposed of in accordance with federal, state and local environmental control regulations.
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### Section 14. Transport Information

<b>DOT Classification</b>	Class 8: Corrosive material
<b>Identification</b>	: Hydrochloric acid solution UNNA: 1789 PG: II
<b>Special Provisions for Transport</b>	Not available.
<b>DOT (Pictograms)</b>	

**Section 15. Other Regulatory Information and Pictograms**

**Federal and State Regulations**

California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer, birth defects or other reproductive harm, which would require a warning under the statute: Chloroform  
 California prop. 65 (no significant risk level): Chloroform: 0.02 mg/day (value)  
 California prop. 65: This product contains the following ingredients for which the State of California has found to cause birth defects which would require a warning under the statute: Chloroform  
 California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer which would require a warning under the statute: Chloroform  
 New York release reporting list: Hydrochloric acid; Chloroform  
 Pennsylvania RTK: Hydrochloric acid; Chloroform  
 Minnesota: Hydrochloric acid; Chloroform  
 Michigan critical material: Chloroform  
 Massachusetts RTK: Hydrochloric acid; Chloroform  
 Massachusetts spill list: Hydrochloric acid; Chloroform  
 New Jersey: Hydrochloric acid; Chloroform  
 New Jersey spill list: Hydrochloric acid; Chloroform  
 Louisiana spill reporting: Hydrochloric acid; Chloroform  
 California Director's List of Hazardous Substances: Hydrochloric acid; Chloroform  
 TSCA 8(b) inventory: Hydrochloric acid; Water; Potassium Iodide; Potassium iodate; Chloroform  
 TSCA 4(a) proposed test rules: Hydrochloric acid  
 TSCA 8(d) H and S data reporting: Chloroform: effective: 6/1/87; sunset: 6/1/97  
 SARA 302/304/311/312 extremely hazardous substances: Hydrochloric acid; Chloroform  
 SARA 313 toxic chemical notification and release reporting: Hydrochloric acid 50%; Chloroform 3.3%  
 CERCLA: Hazardous substances.: Hydrochloric acid: 5000 lbs. (2268 kg); Chloroform: 10 lbs. (4.536 kg);

**California Proposition 65 Warnings**

California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer which would require a warning under the statute: Chloroform  
 California prop. 65: This product contains the following ingredients for which the State of California has found to cause birth defects which would require a warning under the statute: No products were found.

**Other Regulations**

OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).

**Other Classifications**


**WHMIS (Canada)** CLASS E: Corrosive liquid.

**DSCL (EEC)** R34- Causes burns. S26- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S36/37/39- Wear suitable protective clothing, gloves and eye/face protection. S45- In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

**HMIS (U.S.A.)**

Health Hazard	3
Fire Hazard	0
Reactivity	0
Personal Protection	0

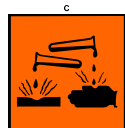
**National Fire Protection Association (U.S.A.)**

Health  Flammability  
 Reactivity  
 Specific hazard

**WHMIS (Canada) (Pictograms)**



**DSCL (Europe) (Pictograms)**



**TDG (Canada) (Pictograms)**

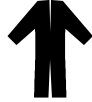


ADR (Europe)  
(Pictograms)

## Protective Equipment



Gloves.



Full suit.



Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate.



Face shield.

## Section 16. Other Information

MSDS Code 1168S

References Not available.

Other Special Considerations Not available.

Validated by Sonia Owen on 3/11/2013.

Verified by Sonia Owen.

Printed 3/11/2013.

CALL (310) 516-8000

Notice to Reader

All chemicals may pose unknown hazards and should be used with caution. This Material Safety Data Sheet (MSDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this MSDS. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this MSDS is based on technical data judged to be reliable, Spectrum Quality Products, Inc. assumes no responsibility for the completeness or accuracy of the information contained herein.