1. IDENTIFICATION

Product identifier
Product Name Phenol / 1,1,2,2-Tetrachloroethane 50/50%
Other means of identification
Product Code 6375
UN/ID no. UN2810
Synonyms Phenol: phenol, CVD; Carbolic acid; phenic acid; phenyl acid; hydroxybenzene; monohydroxybenzene/ 1,1,2,2-Tetrachloroethane: TCE

Recommended use of the chemical and restrictions on use.
Recommended Use Laboratory chemicals.
Uses advised against No information available

Details of the supplier of the safety data sheet
Manufacturer Address
Harrell Industries, Inc.
2495 Commerce Drive
Rock Hill, SC 29730

www.harrellindustries.com

Emergency telephone number
Company Phone Number 803-327-6335
Fax Number 803-327-7808
24 Hour Emergency Phone Number 800 633-8253 (PERS)

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status
This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

<table>
<thead>
<tr>
<th>Hazard Class</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity - Oral</td>
<td>Category 3</td>
</tr>
<tr>
<td>Acute toxicity - Dermal</td>
<td>Category 1</td>
</tr>
<tr>
<td>Acute toxicity - Inhalation (Dusts/Mists)</td>
<td>Category 2</td>
</tr>
<tr>
<td>Skin corrosion/irritation</td>
<td>Category 1 Sub-category B</td>
</tr>
<tr>
<td>Serious eye damage/eye irritation</td>
<td>Category 1</td>
</tr>
<tr>
<td>Germ cell mutagenicity</td>
<td>Category 2</td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>Category 1B</td>
</tr>
<tr>
<td>Specific target organ toxicity (repeated exposure)</td>
<td>Category 2</td>
</tr>
</tbody>
</table>

Label elements

Emergency Overview

Danger

Hazard statements
Toxic if swallowed
Fatal in contact with skin
Fatal if inhaled
Causes severe skin burns and eye damage
Suspected of causing genetic defects
May cause cancer
May cause damage to organs through prolonged or repeated exposure

Phenol: Poison! Danger! May be fatal if swallowed, inhaled, or absorbed through skin. Rapidly absorbed through skin. Corrosive. Causes severe burns to every area of contact. Affects central nervous system, liver and kidneys. Combustible liquid and vapor. 
TCE: Harmful! Harmful if swallowed. Limited evidence of carcinogenic effect. Risk of serious damage to eyes. Possible carcinogen (US) Target organs: Liver and kidneys

<table>
<thead>
<tr>
<th>Appearance</th>
<th>Colorless to light pink liquid</th>
<th>Physical state</th>
<th>liquid</th>
<th>Odor</th>
<th>sharp, medicinal, sweet, tarry</th>
</tr>
</thead>
</table>

Precautionary Statements - Prevention
Do not handle until all safety precautions have been read and understood
Use personal protective equipment as required
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Do not get in eyes, on skin, or on clothing
Use only outdoors or in a well-ventilated area
Wear respiratory protection

Precautionary Statements - Response
Immediately call a POISON CENTER or doctor/physician
Phenol: Corrosive. Eye burns with redness and pain, blurred vision may occur. May cause severe damage and blindness. TCE: Causes irritation, redness, and pain. Contact may cause permanent eye damage.
Phenol: Corrosive. Rapidly absorbed through the skin with systematic poisoning effects to follow. Discoloration and severe burns may occur, but may be disguised by a loss in pain sensation. TCE: Causes irritation to skin. Symptoms include redness, itching and pain.
Phenol: Breathing vapor, dust or mist results in digestive disturbances (vomiting, difficulty in swallowing, diarrhea, loss of appetite). Will irritate, possibly burn, respiratory tract. Other symptoms listed under ingestion may also occur. TCE: Causes irritation to the respiratory tract. Symptoms may include coughing and shortness of breath. Overexposure may cause dizziness, headache, nausea, and possible fluid in the lungs. May cause liver, kidney or lung injury.
Phenol: Poison. Symptoms may include burning pain in mouth and throat, abdominal pain, nausea, vomiting, headache, dizziness, muscular weakness, central nervous system effects, increase in heart rate, irregular breathing, coma, and possibly death. Acute exposure is also associated with kidney and liver damage. Ingestion of 1 gram has been lethal to humans. TCE: Causes irritation to the gastrointestinal tract. Symptoms may include nausea, vomiting and diarrhea. May cause sore throat and abdominal pain. May cause liver or kidney injury.

Precautionary Statements - Storage
Store locked up
Store in a well-ventilated place. Keep container tightly closed

Precautionary Statements - Disposal
Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)
Not applicable

Other Information
Toxic to aquatic life with long lasting effects Very toxic to aquatic life
4. FIRST AID MEASURES

**Description of first aid measures**

**Eye contact**
Immediately flush eyes with gentle but large stream of water for at least 15 minutes, lifting upper and lower eyelids occasionally. Call a physician immediately.

**Skin contact**
In case of skin contact, immediately flush skin with large amounts of water while removing contaminated clothing and shoes. As soon as possible, repeatedly apply polyethylene glycol to affected area. Destroy contaminated clothing and shoes. Flush skin with water for at least 30 minutes. It is very important to avoid rubbing or wiping affected parts which would aggravate irritation and cause product dispersion. Continue treatment until the burned area changes color from white to pink. Expect that this can take a long period of time (20 minutes or more). The polyethylene glycol application should be done during transportation to the hospital. If polyethylene glycol is not available, flush with water for at least 30 minutes prior to going to hospital. Get medical attention immediately.

**Inhalation**
Remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

**Ingestion**
If swallowed, immediately administer castor oil or other vegetable oil. Never give anything by mouth to an unconscious person. Be ready to induce vomiting at the advice of a physician or poison control center. Castor oil (or vegetable oil) dosage should be between 15 and 30 cc. Get medical attention immediately.

**Most important symptoms and effects, both acute and delayed**

**Symptoms**
CHRONIC: Phenol: Repeated exposure may cause symptoms described for acute poisoning as well as eye and skin discoloration. TCE: Repeated or high exposures may cause kidney or liver damage, may affect the lungs. Repeated skin exposure can cause dryness, cracking of skin and rash.

**Indication of any immediate medical attention and special treatment needed**

**Note to physicians**
In case of phenol poisoning, start first aid immediately, then get medical attention. People administering first aid should take precautions to avoid contact with phenol. A phenol antidote kit (castor oil or other vegetable oil, polyethylene glycol 300) should be available in any phenol work area. Actions to be taken in case of phenol poisoning should be planned and practiced before beginning work with phenol. Castor oil and or polyethylene glycol can be given by a first aid responder before medical help arrives. Treat phenol ingestion with gastric lavage using 40% aqueous Bacto-Peptone milk or water until phenolic odor is eliminated. Then give 15 to 50 cc castor or vegetable oil. Debride necrotic skin. Monitor vital signs, fluid status, electrolytes, BUN, renal and hepatic function, and electrocardiogram. Manage sedation, seizures renal failure, and fluid electrolyte imbalances symptomatically as indicated.

5. FIRE-FIGHTING MEASURES

**Suitable extinguishing media**
Water spray. Alcohol foam. Carbon dioxide (CO2). Dry chemical. Water spray may be used to keep fire exposed containers cool.

**Unsuitable extinguishing media**
Caution: Use of water spray when fighting fire may be inefficient.

**Specific hazards arising from the chemical**
No information available.

**Hazardous combustion products** Emits toxic fumes under fire conditions.

**Explosion data**
- Sensitivity to Mechanical Impact: None.
- Sensitivity to Static Discharge: None.

**Protective equipment and precautions for firefighters**
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Structural firefighter's protective clothing is ineffective for fires involving this material. Stay away from sealed containers. Water may be used to keep fire exposed containers cool and to flush spills away from exposures and to dilute spills to non-flammable mixtures.

### 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures**

**Personal precautions**
Ventilate area of leak or spill. Remove all sources of ignition. Wear appropriate personal protective equipment. Isolate hazard area. Keep unnecessary and unprotected personnel from entering.

**Environmental precautions**
See Section 12 for additional ecological information.

**Methods and material for containment and cleaning up**

**Methods for containment**
Contain and recover liquid when possible. Collect liquid in an appropriate container or absorb and place into an chemical waste container.

**Methods for cleaning up**
Absorb with inert materials (e.g., vermiculite, dry sand, earth). Do not use combustible materials, such as saw dust. Do not flush to sewer!! Dry lime or soda ash may be used to neutralize spills.

### 7. HANDLING AND STORAGE

**Precautions for safe handling**

**Advice on safe handling**
Handle in accordance with good industrial hygiene and safety practice.

**Conditions for safe storage, including any incompatibilities**

**Storage Conditions**
Keep in a tightly closed container. Store in a cool, dry, ventilated area away from sources of heat or ignition. Protect against physical damage. Store separately from reactive or combustible materials, and out of direct sunlight. [Outside or detached storage is preferred for the TCE component, but outside storage would need to be out of direct sunlight for the phenol component.] Inside storage should be in a standard flammable liquids storage room or cabinet. All phenol workers should be properly trained on its hazards and the proper protective measures required. This training should also include emergency actions. All phenol operations should be enclosed to eliminate any potential exposure routes. Containers of this material may be hazardous when empty since they retain product residues (vapors, liquid); observe all warnings and precautions listed for the product.

**Incompatible materials**
Phenol: Oxidizers, aluminum chloride and nitrobenzene, calcium hypochlorite, butadiene, halogens, formaldehyde, mineral oxidizing acids, isocyanates, sodium nitrite and many other materials. Hot liquid phenol will attack aluminum, magnesium, lead, and zinc metals. TCE: Strong oxidizing agents, strong bases.

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Control parameters**
### Exposure Guidelines

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>NIOSH IDLH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phenol 108-95-2</td>
<td>TWA: 5 ppm S*</td>
<td>TWA: 5 ppm</td>
<td>IDLH: 250 ppm</td>
</tr>
<tr>
<td></td>
<td>(vacated) TWA: 5 ppm</td>
<td>TWA: 19 mg/m³ (vacated) TWA: 5 ppm</td>
<td>Ceiling: 15.6 ppm 15 min</td>
</tr>
<tr>
<td></td>
<td>(vacated)</td>
<td>TWA: 19 mg/m³</td>
<td>Ceiling: 60 mg/m³ 15 min</td>
</tr>
<tr>
<td>1,1,2,2-Tetrachloroethane 79-34-5</td>
<td>TWA: 1 ppm S*</td>
<td>TWA: 5 ppm (vacated) TWA: 1 ppm</td>
<td>TWA: 5 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA: 35 mg/m³</td>
<td>TWA: 1 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(vacated) TWA: 7 mg/m³</td>
<td>TWA: 7 mg/m³</td>
</tr>
</tbody>
</table>

### Appropriate engineering controls

**Engineering Controls**
- Showers
- Eyewash stations
- Ventilation systems.

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

**Eye/face protection**
Use chemical safety goggles and/or full face shield. Maintain eye wash fountain and quick-drench facilities in work area.

**Skin and body protection**
Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

**Respiratory protection**
If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

**General Hygiene Considerations**
Handle in accordance with good industrial hygiene and safety practice.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

**Information on basic physical and chemical properties**

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks • Method</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Physical state</strong></td>
<td>liquid</td>
<td></td>
</tr>
<tr>
<td><strong>Appearance</strong></td>
<td>Colorless to light pink liquid</td>
<td></td>
</tr>
<tr>
<td><strong>Color</strong></td>
<td>colorless to light pink</td>
<td></td>
</tr>
<tr>
<td><strong>Odor</strong></td>
<td>sharp, medicinal, sweet, tarry</td>
<td></td>
</tr>
<tr>
<td><strong>Odor threshold</strong></td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td><strong>Property</strong></td>
<td><strong>Values</strong></td>
<td></td>
</tr>
<tr>
<td>pH</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Melting point / freezing point</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Boiling point / boiling range</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Flash point</td>
<td>79 °C / 174 °F</td>
<td></td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Flammability Limit in Air</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Upper flammability limit</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Lower flammability limit</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Vapor density</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Relative density</td>
<td>1.281±0.002@25°C</td>
<td></td>
</tr>
<tr>
<td>Water solubility</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Solubility in other solvents</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Partition coefficient</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Autoignition temperature</td>
<td>715 °C / 1319 °F</td>
<td></td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No information available</td>
<td></td>
</tr>
</tbody>
</table>

---

**Page 5 / 10**
**Kinematic viscosity**  No information available
**Dynamic viscosity**  No information available
**Explosive properties**  No information available
**Oxidizing properties**  No information available

### Other Information

- **Softening point**  No information available
- **Molecular weight**  No information available
- **VOC Content (%)**  No information available
- **Density**  No information available
- **Bulk density**  No information available

### 10. STABILITY AND REACTIVITY

**Reactivity**

No data available

**Chemical stability**

Stable under ordinary conditions of use and storage.

**Possibility of Hazardous Reactions**

None under normal processing.

**Hazardous polymerization**  Will not occur.

**Conditions to avoid**

Heat, flames, ignition sources and incompatibles.

**Incompatible materials**

Phenol: Oxidizers, aluminum chloride and nitrobenzene, calcium hypochlorite, butadiene, halogens, formaldehyde, mineral oxidizing acids, isocyanates, sodium nitrite and many other materials. Hot liquid phenol will attack aluminum, magnesium, lead, and zinc metals. TCE: Strong oxidizing agents, strong bases.

**Hazardous Decomposition Products**

Phenol: Carbon dioxide and carbon monoxide may form when heated to decomposition. Toxic gases and vapors may be released if involved in a fire. TCE: Carbon dioxide, carbon monoxide, and hydrogen chloride gas.

### 11. TOXICOLOGICAL INFORMATION

**Information on likely routes of exposure**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Inhalation LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phenol 108-95-2</td>
<td>317 mg/kg (Rat) 340 mg/kg (Rat)</td>
<td>630 mg/kg (Rabbit)</td>
<td>-</td>
</tr>
<tr>
<td>1,1,2,2-Tetrachloroethane 79-34-5</td>
<td>250 mg/kg (Rat)</td>
<td>6400 mg/kg (Rabbit)</td>
<td>= 8.6 mg/L (Rat) 4 h</td>
</tr>
</tbody>
</table>

**Information on toxicological effects**

**Symptoms**

No information available.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Carcinogenicity**

The table below indicates whether each agency has listed any ingredient as a carcinogen

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>IARC</th>
<th>NTP</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phenol 108-95-2</td>
<td>-</td>
<td>Group 3</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1,1,2,2-Tetrachloroethane 79-34-5</td>
<td>A3</td>
<td>Group 2A</td>
<td>Group 2B</td>
<td>X</td>
</tr>
</tbody>
</table>

**Numerical measures of toxicity - Product Information**

The following values are calculated based on chapter 3.1 of the GHS document.
12. ECOLOGICAL INFORMATION

Toxic to aquatic life.

Ecotoxicity

When released into the soil, this material is expected to readily biodegrade. When released into the soil, this material is not expected to leach into groundwater. When released into the soil, this material may evaporate to a moderate extent. When released into the soil, this material is expected to have a half-life between 1 and 10 days. When released into water, this material is expected to readily biodegrade. When released into water, this material is not expected to evaporate significantly. When released into water, this material is expected to have a half-life between 10 and 30 days. This material has an estimated bioconcentration factor (BCF) of less than 100. This material is not expected to significantly bioaccumulate. When released into the air, this material is expected to be readily degraded by reaction with photochemically produced hydroxyl radicals. When released into the air, this material may be moderately degraded by photolysis. When released into the air, this material is expected to have a half-life of less than 1 day.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Algae/aquatic plants</th>
<th>Fish</th>
<th>Crustacea</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phenol</td>
<td>46.42; 96 h Pseudokirchneriella subcapitata mg/L EC50 0.0188 - 0.1044; 96 h Pseudokirchneriella subcapitata mg/L EC50 static 187 - 279; 72 h Desmodesmus subspicatus mg/L EC50 static</td>
<td>11.9 - 50.5; 96 h Pimephales promelas mg/L LC50 flow-through 20.5 - 25.6; 96 h Pimephales promelas mg/L LC50 static 32: 96 h Pimephales promelas mg/L LC50 5.449 - 6.789; 96 h Oncorhynchus mykiss mg/L LC50 flow-through 7.5 - 14; 96 h Oncorhynchus mykiss mg/L LC50 static 4.23 - 7.49; 96 h Oncorhynchus mykiss mg/L LC50 semi-static 5.0 - 12.0; 96 h Oncorhynchus mykiss mg/L LC50 13.5; 96 h Lepomis macrochirus mg/L LC50 static 11.9 - 25.3; 96 h Lepomis macrochirus mg/L LC50 flow-through 11.5; 96 h Lepomis macrochirus mg/L LC50 semi-static 34.09 - 47.64; 96 h Poecilia reticulata mg/L LC50 static 31: 96 h Poecilia reticulata mg/L LC50 semi-static 27.8; 96 h Brachydanio rerio mg/L LC50 0.00175; 96 h Cyprinus carpio mg/L LC50 semi-static 33.9 - 43.3; 96 h Oryzias latipes mg/L LC50 flow-through 23.4 - 36.6; 96 h Oryzias latipes mg/L LC50 static</td>
<td>4.24 - 10.7; 48 h Daphnia magna mg/L EC50 Static 10.2 - 15.5; 48 h Daphnia magna mg/L EC50</td>
</tr>
<tr>
<td>1,1,2,2-Tetrachloroethane</td>
<td>40.7 - 344; 96 h Pseudokirchneriella subcapitata mg/L EC50 31.4 - 188; 72 h Pseudokirchneriella subcapitata mg/L EC50 47: 96 h Desmodesmus subspicatus mg/L EC50 static</td>
<td>19.9 - 20.7; 96 h Pimephales promelas mg/L LC50 flow-through 20 - 22; 96 h Lepomis macrochirus mg/L LC50 static</td>
<td>16 - 35: 48 h Daphnia magna mg/L EC50 16 - 35: 48 h Daphnia magna mg/L EC50 Static</td>
</tr>
</tbody>
</table>

Persistence and degradability

Bioaccumulation

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Partition coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phenol</td>
<td>1.47</td>
</tr>
<tr>
<td>1,1,2,2-Tetrachloroethane</td>
<td>2.39</td>
</tr>
</tbody>
</table>

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS
Waste treatment methods

Disposal of wastes

Disposal should be in accordance with applicable regional, national and local laws and regulations. Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility.

Contaminated packaging

Do not reuse container.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>RCRA</th>
<th>RCRA - Basis for Listing</th>
<th>RCRA - D Series Wastes</th>
<th>RCRA - U Series Wastes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phenol 108-95-2</td>
<td>U188</td>
<td>Included in waste streams: F039, K001, K022, K087 Included in waste stream: K060</td>
<td>-</td>
<td>U188</td>
</tr>
<tr>
<td>1,1,2,2-Tetrachloroethane 79-34-5</td>
<td>U209</td>
<td>Included in waste streams: F024, F025, F039, K019, K020, K030, K073, K095, K150</td>
<td>-</td>
<td>U209</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1,1,2,2-Tetrachloroethane 79-34-5</td>
<td>Category I - Volatiles</td>
<td>-</td>
<td>Toxic waste number F025</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Waste description: Condensed light ends, spent filters and filter aids, and spent desiccant wastes from the production of certain chlorinated aliphatic hydrocarbons, by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one to and including five, with varying amounts and positions of chlorine substitution.</td>
<td></td>
</tr>
</tbody>
</table>

This product contains one or more substances that are listed with the State of California as a hazardous waste.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>California Hazardous Waste Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phenol 108-95-2</td>
<td>Toxic, Corrosive</td>
</tr>
<tr>
<td>1,1,2,2-Tetrachloroethane 79-34-5</td>
<td>Toxic</td>
</tr>
</tbody>
</table>

14. TRANSPORT INFORMATION

DOT

UN/ID no. UN2810
Proper shipping name Toxic Liquids, Organic, N.O.S., (Phenol/Tetrachloroethane 50/50%)
Hazard Class 6.1
Packing Group II
Reportable Quantity (RQ) 100 lbs (45.4 kg)
Marine pollutant Toxic to aquatic life.

TDG

UN/ID no. UN2810
Proper shipping name Toxic Liquids, Organic, N.O.S., (Phenol/Tetrachloroethane 50/50%)
Hazard Class 6.1
Packing Group II

MEX

UN/ID no. UN2810
Proper shipping name Toxic Liquids, Organic, N.O.S., (Phenol/Tetrachloroethane 50/50%)
Hazard Class: 6.1  
Packing Group: II  

ICAO (air)  
- UN/ID no.: UN2810  
- Proper shipping name: Toxic Liquids, Organic, N.O.S., (Phenol/Tetrachloroethane 50/50%)  
- Hazard Class: 6.1  
- Packing Group: II  

IATA  
- UN/ID no.: UN2810  
- Proper shipping name: Toxic Liquids, Organic, N.O.S., (Phenol/Tetrachloroethane 50/50%)  
- Hazard Class: 6.1  
- Packing Group: II  

IMDG  
- UN/ID no.: UN2810  
- Proper shipping name: Toxic Liquids, Organic, N.O.S., (Phenol/Tetrachloroethane 50/50%)  
- Hazard Class: 6.1  
- Packing Group: II  

RID  
- UN/ID no.: UN2810  
- Proper shipping name: Toxic Liquids, Organic, N.O.S., (Phenol/Tetrachloroethane 50/50%)  
- Hazard Class: 6.1  
- Packing Group: II  

ADR  
- UN/ID no.: UN2810  
- Proper shipping name: Toxic Liquids, Organic, N.O.S., (Phenol/Tetrachloroethane 50/50%)  
- Hazard Class: 6.1  
- Packing Group: II  

ADN  
- UN Number: UN2810  
- Proper shipping name: Toxic Liquids, Organic, N.O.S., (Phenol/Tetrachloroethane 50/50%)  

15. REGULATORY INFORMATION

International Inventories
- TSCA: Complies  
- DSL/NDSL: Complies  
- EINECS/ELINCS: Complies  
- ENCS: Complies  
- IECSC: Complies  
- KECL: Complies  
- PICCS: Complies  
- AICS: Complies  

Legend:
- TSCA - United States Toxic Substances Control Act Section 8(b) Inventory  
- DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List  
- EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances  
- ENCS - Japan Existing and New Chemical Substances  
- IECSC - China Inventory of Existing Chemical Substances  
- KECL - Korean Existing and Evaluated Chemical Substances  
- PICCS - Philippines Inventory of Chemicals and Chemical Substances  
- AICS - Australian Inventory of Chemical Substances  

US Federal Regulations

SARA 313  
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>SARA 313 - Threshold Values %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phenol - 108-95-2</td>
<td>1.0</td>
</tr>
<tr>
<td>1,1,2,2-Tetrachloroethane - 79-34-5</td>
<td>1.0</td>
</tr>
</tbody>
</table>

SARA 311/312 Hazard Categories  
Acute health hazard: Yes
Chronic Health Hazard  Yes
Fire hazard Yes
Sudden release of pressure hazard No
Reactive Hazard No

CWA (Clean Water Act)
This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CWA - Reportable Quantities</th>
<th>CWA - Toxic Pollutants</th>
<th>CWA - Priority Pollutants</th>
<th>CWA - Hazardous Substances</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phenol 108-95-2</td>
<td>1000 lb</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>1,1,2,2-Tetrachloroethane 79-34-5</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>-</td>
</tr>
</tbody>
</table>

CERCLA
This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Hazardous Substances RQs</th>
<th>CERCLA/SARA RQ</th>
<th>Reportable Quantity (RQ)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phenol 108-95-2</td>
<td>1000 lb</td>
<td>1000 lb</td>
<td>RQ 1000 lb final RQ</td>
</tr>
<tr>
<td>1,1,2,2-Tetrachloroethane 79-34-5</td>
<td>100 lb 1 lb</td>
<td>-</td>
<td>RQ 100 lb final RQ  RQ 45.4 kg final RQ RQ 1 lb final RQ RQ 0.454 kg final RQ</td>
</tr>
</tbody>
</table>

US State Regulations

California Proposition 65
This product contains the following Proposition 65 chemicals

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>California Proposition 65</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,1,2,2-Tetrachloroethane 79-34-5</td>
<td>Carcinogen</td>
</tr>
</tbody>
</table>

U.S. State Right-to-Know Regulations

This product may contain substances regulated by state right-to-know regulations

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>New Jersey</th>
<th>Massachusetts</th>
<th>Pennsylvania</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phenol 108-95-2</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>1,1,2,2-Tetrachloroethane 79-34-5</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

<table>
<thead>
<tr>
<th>NFPA</th>
<th>Health hazards 3</th>
<th>Flammability 2</th>
<th>Instability 0</th>
<th>Physical and Chemical Properties</th>
</tr>
</thead>
<tbody>
<tr>
<td>HMIS</td>
<td>Health hazards 3</td>
<td>Flammability 2</td>
<td>Physical hazards 0</td>
<td>Personal protection X</td>
</tr>
</tbody>
</table>

Issue Date 23-Apr-2015
Revision Date 23-Sep-2015
Revision Note No information available

Disclaimer
The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet