

SAFETY DATA SHEET

Preparation Date: 11/08/2013

Revision Date: 11/5/2018

Revision Number: G3

1. IDENTIFICATION

Product identifier

Product code: PH125
Product Name: LIQUEFIED PHENOL, USP

Other means of identification

Synonyms: Carbohic acid, liquified
CAS #: Mixture
RTECS # SJ3325000
CI#: Not available

Recommended use of the chemical and restrictions on use

Recommended use: Disinfectant.
Uses advised against No information available

Supplier: Spectrum Chemical Mfg. Corp
 14422 South San Pedro St.
 Gardena, CA 90248
 (310) 516-8000

Order Online At: <https://www.spectrumchemical.com>
Emergency telephone number Chemtrec 1-800-424-9300
Contact Person: Martin LaBenz (West Coast)
Contact Person: Ibad Tirmiz (East Coast)

2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous according to the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Considered a dangerous substance or mixture according to the Globally Harmonized System (GHS)

| | |
|--|---------------------------|
| Acute toxicity - Oral | Category 4 |
| Acute toxicity - Dermal | Category 3 |
| Acute toxicity - Inhalation (Gases) | Category 3 |
| Acute toxicity - Inhalation (Vapors) | Category 1 |
| Acute toxicity - Inhalation (Dusts/Mists) | Category 3 |
| Skin corrosion/irritation | Category 1 Sub-category B |
| Serious eye damage/eye irritation | Category 1 |
| Germ cell mutagenicity | Category 2 |
| Specific target organ toxicity (repeated exposure) | Category 2 |

Label elements

Danger

Hazard statements

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



Hazards not otherwise classified (HNOC)

Not Applicable

Other hazards

Not available

Precautionary Statements - Prevention

Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Wear protective gloves/protective clothing/eye protection/face protection
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Use only outdoors or in a well-ventilated area
Do not breathe dust/fume/gas/mist/vapors/spray
Wear respiratory protection

Precautionary Statements - Response

Immediately call a POISON CENTER or doctor/physician
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Immediately call a POISON CENTER or doctor/physician.
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
Wash contaminated clothing before reuse
IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
Rinse mouth
Do NOT induce vomiting

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

3. COMPOSITION/INFORMATION ON INGREDIENTS

| Components | CAS-No. | Weight % |
|------------|----------|----------|
| Phenol | 108-95-2 | 88-91 |

| | | |
|-------|-----------|------|
| Water | 7732-18-5 | 9-12 |
|-------|-----------|------|

4. FIRST AID MEASURES

First aid measures

- General Advice:** National Capital Poison Center in the United States can provide assistance if you have a poison emergency and need to talk to a poison specialist. Call 1-800-222-1222. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves. First aider needs to protect himself.
- Skin Contact:** Wash off immediately with soap and plenty of water. Continue flushing with plenty of water for at least 15 minutes. Remove all contaminated clothes and shoes. Immediate medical attention is required. Call a physician immediately.
- Eye Contact:** Flush eyes with water for 15 minutes. Immediate medical attention is required. Call a physician immediately.
- Inhalation:** Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. **WARNING!** It may be hazardous to the person providing aid to give mouth-to-mouth resuscitation when the inhaled or ingested material is toxic, infectious or corrosive. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Immediate medical attention is required. Call a physician immediately.
- Ingestion:** Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Immediate medical attention is required. Call a physician or Poison Control Center immediately.

Most important symptoms and effects, both acute and delayed

- Symptoms**
- Severe skin and eye irritation or burns
 - May cause gastrointestinal (digestive) tract burns
 - Can burn mouth, throat, and stomach
 - Dyspnea (Shortness of breath and difficulty breathing)
 - Rapid breathing
 - May cause build-up of fluid in the lungs (pulmonary edema)
 - May cause methemoglobinemia and cyanosis
 - May cause central nervous system effects
 - Pallor
 - Excessive sweating
 - Hypotension
 - Cardiac arrhythmias
 - Pupillary dilation

Indication of any immediate medical attention and special treatment needed

- Notes to Physician:** Treat symptomatically.

Protection of first-aiders

First-Aid Providers: Avoid exposure to blood or body fluids. Wear gloves and other necessary protective clothing. Dispose of contaminated clothing and equipment as bio-hazardous waste.

5. FIRE-FIGHTING MEASURES

Extinguishing Media

- Suitable Extinguishing Media:** Dry chemical. Carbon dioxide (CO₂). Water spray mist or foam. Alcohol-resistant foam.

Unsuitable Extinguishing Media: No information available.

Specific hazards arising from the chemical

Hazardous Combustion Products: Carbon Monoxide, Carbon Dioxide.

Specific hazards: Combustible material. May be ignited by heat, sparks or flames. Containers may explode when heated. Contact with metals may evolve flammable hydrogen gas.

Special Protective Actions for Firefighters

Specific Methods: Dike fire-control water for later disposal; do not scatter the material. For larger fires, use water spray or fog. Cool containers with flooding quantities of water until well after fire is out.

Special Protective Equipment for Firefighters: As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions: Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Remove all sources of ignition. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Use personal protective equipment. Avoid contact with skin, eyes and clothing.

Environmental precautions Prevent further leakage or spillage if safe to do so. Prevent entry into waterways, sewers, basements or confined areas. Do not let product enter drains. Should not be released into the environment.

Methods and material for containment and cleaning up

Methods for containment Stop leak if you can do it without risk. Absorb spill with inert material (e.g. vermiculite, dry sand or earth).

Methods for cleaning up Use appropriate tools to put the spilled material in a suitable chemical waste disposal container. Use only non-sparking tools. Clean contaminated surface thoroughly.

7. HANDLING AND STORAGE

Precautions for safe handling

Technical Measures/Precautions:

Use only in area provided with appropriate exhaust ventilation. Remove all sources of ignition. Keep away from incompatible materials.

Safe Handling Advice

Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Do not ingest. Do not breathe vapors or spray mist. Keep away from heat and sources of ignition. Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Technical Measures/Storage Conditions:

Keep container tightly closed in a dry and well-ventilated place. Store at room temperature in the original container. Protect from light. Sensitive to light. Store in light-resistant containers. Store in a segregated and approved area. Store away from incompatible materials.

Incompatible Materials:

Oxidizing agents
Metals
Acids
Bases
isocyanates
nitrides
Acetaldehyde
amides
Formaldehyde
aliphatic amines

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Control parameters****National occupational exposure limits****United States**

| Components | CAS-No. | OSHA | NIOSH | ACGIH | AIHA WEEL |
|------------|-----------|---------------------------------------|---|-----------|-----------|
| Phenol | 108-95-2 | 5 ppm TWA 19 mg/m ³ TWA | 5 ppm TWA 19 mg/m ³ TWA 15.6 ppm Ceiling 15 min 60 mg/m ³ Ceiling 15 min | 5 ppm TWA | None |
| Water | 7732-18-5 | None | None | None | None |

Canada

| Components | CAS-No. | Canada - Alberta | Canada - British Columbia | Canada - Ontario | Canada - Quebec |
|------------|-----------|---------------------------------------|---------------------------|------------------|-----------------|
| Phenol | 108-95-2 | 5 ppm TWA 19 mg/m ³ TWA | 5 ppm TWA | None | None |
| Water | 7732-18-5 | None | None | None | None |

Australia and Mexico

| Components | CAS-No. | Australia | Mexico |
|------------|-----------|--------------------------------------|---|
| Phenol | 108-95-2 | 1 ppm TWA 4 mg/m ³ TWA | 5 ppm TWA 19 mg/m ³ TWA 10 ppm STEL 38 mg/m ³ STEL |
| Water | 7732-18-5 | None | None |

Appropriate engineering controls**Engineering measures to reduce exposure:**

Ensure adequate ventilation. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors and mist below their respective threshold limit value.

Individual protection measures, such as personal protective equipment**Personal Protective Equipment**

Product code: PH125

Product name: LIQUEFIED PHENOL,
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| | |
|----------------------------------|---|
| Eye protection: | Face-shield. |
| Skin and body protection: | Chemical resistant apron Long sleeved clothing Gloves If working with large quantities: Chemical resistant protective suit Boots |
| Respiratory protection: | Vapor respirator. Be sure to use an approved/certified respirator or equivalent. |
| Hygiene measures: | Avoid contact with skin, eyes and clothing. When using, do not eat, drink or smoke. Wash hands and face before breaks and immediately after handling the product. |

9. PHYSICAL AND CHEMICAL PROPERTIES

| | | |
|---|---|--|
| Physical state: Liquid | Appearance: No information available. | Color: Colorless. Light pink. Light yellow. |
| Odor: Aromatic. Acrid. Somewhat sickening sweet. | Taste No information available. | Formula: No information available |
| Molecular/Formula weight (g/mole): No information available | Flammability: No information available | Flashpoint (°C/°F): >90.56 °C/>195°F |
| Flash Point Tested according to: Open cup | Autoignition Temperature (°C/°F): No information available | Lower Explosion Limit (%): No information available |
| Upper Explosion Limit (%): No information available | Melting point/range(°C/°F): No information available | Decomposition temperature(°C/°F): No information available |
| Boiling point/range(°C/°F): No information available | Bulk density: No information available | Density (g/cm3): No information available |
| Specific gravity: 1.05 | pH: No information available | Vapor pressure @ 20°C (kPa): No information available |
| Evaporation rate: No information available | Vapor density: No information available | VOC content (g/L): No information available |
| Odor threshold (ppm): No information available | Partition coefficient (n-octanol/water): No information available | Viscosity: No information available |
| Miscibility: No information available | Solubility: Soluble in Water | |

10. STABILITY AND REACTIVITY

Reactivity

Contact of phenol with peroxodisulfuric acid may cause explosion
The combination of phenol with acetaldehyde results in violent condensaton
The combination of phenol with 1,3-butadiene, and born trifluoride diethyl ether complex results in an intense exothermic reaction
The combination of phenol with isocyanates results in heat generation and violent polymerization
The combination of phenol with nitrides results in heat and flammable gas generation
Violent reaction with aluminum chloride and nitromethane at 110 deg. C.
Hot phenol reacts with metals

A combination of phenol with mineral oxidizing acids results in fire
 Violent reaction with phenol and aluminum chloride + nitrobenzene at 120 deg. C.
 Potential for an explosive reaction exists when phenol comes into contact with formaldehyde or sodium nitrate + trifluoroacetic acid
 Mixtures of air and 3-10% phenol are explosive
 Phenol + sodium nitrite causes explosion on heating
 When heated, phenol evolves flammable vapors which will form explosive mixtures with air
 Phenol + calcium hypochlorite results in an exothermic reaction producing toxic fumes which may ignite

Chemical stability

Stability: Stable under recommended storage conditions.

Possibility of Hazardous Reactions: Hazardous polymerization does not occur

Conditions to avoid: Heat. Ignition sources. Exposure to light. Turns pink or red on exposure to light.
 Incompatible materials.

Incompatible Materials: Oxidizing agents
 Metals
 Acids
 Bases
 isocyanates
 nitrides
 Acetaldehyde
 amides
 Formaldehyde
 aliphatic amines

Hazardous decomposition products: Carbon monoxide. Carbon dioxide.

Other Information

Corrosivity: Severe corrosive effect on Brass
 Minor corrosive effect on bronze

Special Remarks on Corrosivity: No information available

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Principal Routes of Exposure:

Ingestion. Inhalation. Skin.

Acute Toxicity

The following values are calculated based on chapter 3.1 of the GHS document

| | |
|-------------------------------|-----------|
| ATEmix (oral) | 360 mg/kg |
| ATEmix (dermal) | 716 mg/kg |
| ATEmix (inhalation-gas) | 795 mg/l |
| ATEmix (inhalation-dust/mist) | 0.6 mg/l |
| ATEmix (inhalation-vapor) | 0.4 mg/l |

Component Information

| | |
|---------|----------|
| Phenol | |
| CAS-No. | 108-95-2 |

LD50/oral/rat = 340 mg/kg Oral LD50 Rat; 317 mg/kg Oral LD50 Rat

LD50/oral/mouse = 270 mg/kg
LD50/dermal/rabbit = 630 mg/kg Dermal LD50 Rabbit
LD50/dermal/rat = 669 mg/kg; 525 mg/kg
LC50/inhalation/rat = 316 mg/m³ 4 h
LC50/inhalation/mouse = No information available
Other LD50 or LC50 information = No information available

| | |
|---------|-----------|
| Water | |
| CAS-No. | 7732-18-5 |

LD50/oral/rat = > 90 mL/kg Oral LD50 Rat
LD50/oral/mouse = No information available
LD50/dermal/rabbit = No information available
LD50/dermal/rat = No information available
LC50/inhalation/rat = No information available
LC50/inhalation/mouse = No information available
Other LD50 or LC50 information = No information available

Product Information

LD50/oral/rat =
VALUE- Acute Tox Oral = No information available

LD50/oral/mouse =
Value - Acute Tox Oral = No information available

LD50/dermal/rabbit
VALUE-Acute Tox Dermal = No information available

LD50/dermal/rat
VALUE -Acute Tox Dermal = No information available

LC50/inhalation/rat
VALUE-Vapor = No information available
VALUE-Gas = No information available
VALUE-Dust/Mist = No information available

LC50/Inhalation/mouse
VALUE-Vapor = No information available
VALUE - Gas = No information available
VALUE - Dust/Mist = No information available

Symptoms

Skin Contact: Causes skin burns. Phenol burns may be severe, but painless due to damage to the nerve endings causing numbness. The skin may turn white and opaque or dull gray and wrinkled. Later, it may turn gray-white or yellowish brown and may be deeply eroded and scarred. Black Gangrene may occur at the sight of contact. It may be absorbed through the skin. If absorbed through skin it may cause systemic effects. Toxic in contact with skin. If absorbed through the skin it may affect behavior/central nervous system and cause central nervous system effects. If absorbed through the skin, it may affect the liver and kidneys (nephritis, hematuria) and may induce cardiac arrhythmias.

Eye Contact: Causes eye burns. Corrosive to the eyes and may cause severe damage including blindness.

Inhalation Severely irritating to the upper respiratory tract. It can irritate the lungs. It may cause pulmonary edema. Can cause dyspnea (shortness of breath and difficulty breathing). May affect respiration (respiratory depression). May affect

behavior/central nervous system (somnolence). Inhalation of large amounts of vapor may be fatal. Volatility is low at room temperature, but hazard increases as temperature rises. Harmful contamination of the air will be reached rather slowly on evaporation of this substance at 20 deg. C. Inhalation of large quantities can cause system effects similar to that of ingestion.

Ingestion

Harmful if swallowed. Causes digestive or gastrointestinal tract burns. Corrosive to the mouth, throat, and stomach. There is burning pain in the mouth and throat as well as white necrotic lesions in the mouth, esophagus and stomach. Ingestion may cause nausea, vomiting, diarrhea. May cause loss of appetite. May cause abdominal pain. May cause gastrointestinal bleeding. May cause pallor. May cause excessive sweating. May cause hemolytic anemia. May cause metabolic acidosis. May affect the cardiovascular system (hypotension). May cause methemoglobinemia, (the formation of methemoglobin in the blood which causes deficient oxygenation of the blood due to decreased available hemoglobin). Signs and symptoms of methemoglobinemia include shortness of breath, cyanosis (a bluish discoloration of the skin, lips, mucous membranes), mental status changes such as headache, mental impairment, fatigue, muscular weakness, exercise intolerance, lightheadedness, dizziness, incoordination, seizures, and loss of consciousness. Arterial blood with elevated methemoglobin levels has a characteristic chocolate-brown color as compared to normal bright red oxygen containing arterial blood. Severe methemoglobinemia is characterized by bradycardia or tachycardia (slow or fast heart beat), dysrhythmias, seizures, coma and death. It may cause central nervous system depression. May affect behavior/central nervous system (convulsions/seizures). May affect behavior/central nervous system (tremors, muscle twitching). May affect behavior/central nervous system (dizziness, headache). May affect behavior/central nervous system (hallucinations, drowsiness, nervousness, twitching, delirium). May affect respiration (dyspnea - difficulty breathing and shortness of breath). May affect respiration (tachypnea (rapid breathing)). May cause tinnitus. May cause pupillary dilation. May affect eyes (pinpoint pupils). May cause dim vision. May affect urinary system (kidneys). May affect liver.

Aspiration hazard

No information available.

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

Chronic Toxicity

Prolonged or repeated inhalation may cause bronchitis with coughing, phlegm, and/or shortness of breath. Prolonged or repeated ingestion may affect the liver, and kidneys. Prolonged or repeated ingestion may affect the liver (jaundice, liver function tests impaired). Prolonged or repeated ingestion may affect the blood (changes in red blood cell count). Prolonged or repeated ingestion may affect behavior/central nervous system. Prolonged or repeated ingestion may affect the cardiovascular system. Prolonged or repeated ingestion may affect the brain. Prolonged or repeated inhalation may affect the liver. Prolonged or repeated inhalation may affect the kidneys. Prolonged or repeated inhalation may affect the cardiovascular system. Prolonged or repeated ingestion may affect the blood (anemia). Prolonged or repeated inhalation may affect the blood (changes in serum composition). Signs and symptoms of chronic inhalation exposure may include headache, cough, weakness, fatigue, anorexia, vomiting, insomnia, nervousness, weight loss, paresthesia, ochronosis, and albuminuria. Other signs and symptoms of chronic exposure to phenol include vertigo, muscle aches and weakness, dark urine, nephritis, and hepatitis.

Sensitization:

No information available.

Mutagenic Effects:

May affect genetic material
Animal experiments showed mutagenic effects

Mutagenic effects in mammalian somatic cells
 Experiments with human lymphocytes have shown mutagenic effects
 Experiments with animal lymphocytes have shown mutagenic effects
 Mutations in microorganisms

Carcinogenic effects: Not considered carcinogenic.

| Components | CAS-No. | IARC | ACGIH - Carcinogens | NTP | OSHA HCS - Carcinogens | Australia - Notifiable Carcinogenic Substances | Australia - Prohibited Carcinogenic Substances |
|------------|-----------|---|---|------------|------------------------|--|--|
| Phenol | 108-95-2 | Group 3 - Not Classifiable - Monograph 71 [1999] Monograph 47 [1989] | A4 Not Classifiable as a Human Carcinogen | Not listed | Not listed | Not listed | Not listed |
| Water | 7732-18-5 | Not listed | Not listed | Not listed | Not listed | Not listed | Not listed |

ACGIH (American Conference of Governmental Industrial Hygienists)

A4 - Not Classifiable as a Human Carcinogen

IARC (International Agency for Research on Cancer)

Group 3 - Not classifiable as to its carcinogenicity to humans

NTP (National Toxicology Program)

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

Reproductive toxicity No data is available

Reproductive Effects: No information on reproductive toxicity effects on humans was found
Developmental Effects: There is limited evidence that Phenol may damage the developing fetus in animals
 No information on developmental toxicity effects on humans was found

Teratogenic Effects: No information available

Specific Target Organ Toxicity

STOT - single exposure No information available.
STOT - repeated exposure May cause damage to organs through prolonged or repeated exposure.
Target Organs: Central nervous system. Cardiovascular system. Heart. Kidneys. Liver. Eyes. Skin. Respiratory system. Lungs. Blood. Methemoglobin formation.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity effects: Aquatic environment.

Phenol - 108-95-2

Freshwater Algae Data: 46.42 mg/L EC50 *Pseudokirchneriella subcapitata* 96 h 0.0188 - 0.1044 mg/L EC50 *Pseudokirchneriella subcapitata* 96 h 187 - 279 mg/L EC50 *Desmodesmus subspicatus* 72 h

Freshwater Fish Species Data: 11.9 - 50.5 mg/L LC50 *Pimephales promelas* 96 h flow-through 1 20.5 - 25.6 mg/L LC50 *Pimephales promelas* 96 h static 1 32 mg/L LC50 *Pimephales promelas* 96 h 1 5.449 - 6.789 mg/L LC50 *Oncorhynchus mykiss* 96 h flow-through 1 7.5 - 14 mg/L LC50 *Oncorhynchus mykiss* 96 h static 1 4.23 - 7.49 mg/L LC50 *Oncorhynchus mykiss* 96 h semi-static 1 11.9 - 25.3 mg/L LC50 *Lepomis macrochirus* 96 h flow-through 1 11.5 mg/L LC50 *Lepomis macrochirus* 96 h semi-static 1 34.09 - 47.64 mg/L LC50 *Poecilia reticulata* 96 h static 1 31 mg/L LC50 *Poecilia reticulata* 96 h semi-static 1 27.8 mg/L LC50 *Brachydanio rerio* 96 h 1 0.00175 mg/L LC50 *Cyprinus carpio* 96 h semi-static 1 33.9 - 43.3 mg/L LC50 *Oryzias latipes* 96 h flow-through 1 23.4 - 36.6 mg/L LC50 *Oryzias latipes* 96 h

Water Flea Data: static 1 5.0 - 12.0 mg/L LC50 Oncorhynchus mykiss 96 h 1 13.5 mg/L LC50 Lepomis macrochirus 96 h static 1
4.24 - 10.7 mg/L EC50 Daphnia magna 48 h 10.2 - 15.5 mg/L EC50 Daphnia magna 48 h

Persistence and degradability: No information available

Bioaccumulative potential: No information available.

Mobility: No information available.

13. DISPOSAL CONSIDERATIONS

Disposal Methods

Waste from residues / unused products:

Waste must be disposed of in accordance with Federal, State and Local regulation.

Contaminated packaging:

Empty containers should be taken for local recycling, recovery or waste disposal

| Components | CAS-No. | RCRA - F Series Wastes | RCRA - K Series Wastes | RCRA - P Series Wastes | RCRA - U Series Wastes |
|------------|-----------|------------------------|------------------------|------------------------|------------------------|
| Phenol | 108-95-2 | None | None | None | U188 |
| Water | 7732-18-5 | None | None | None | None |

14. TRANSPORT INFORMATION

DOT

UN-No: UN2821
Proper Shipping Name: Phenol solutions
Hazard Class: 6.1
Subsidiary Class: No information available
Packing group: II
Emergency Response Guide Number: 153
Marine Pollutant: No data available
DOT RQ (lbs): No information available
Special Provisions: IB2, T7, TP2
Symbol(s): [DOT]: (R4) - Identifies a material that is a hazardous substance that has a reportable quantity (RQ) of 1000 pounds (454 Kilograms).
Description: UN2821, Phenol solutions, 6.1, II

TDG (Canada)

UN-No: UN2821
Proper Shipping Name: Phenol solution
Hazard Class: 6.1
Subsidiary Risk: No information available
Packing Group: II
Marine Pollutant: No Information available
Description: UN2821, Phenol solution, 6.1, II

ADR

UN-No: UN2821
Proper Shipping Name: Phenol solution
Hazard Class: 6.1
Packing Group: II

Product code: PH125

Product name: LIQUEFIED PHENOL,
USP

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Subsidiary Risk: No information available
Description: UN2821, Phenol solution, 6.1, II

IMO / IMDG

UN-No: UN2821
Proper Shipping Name: Phenol solutions
Hazard Class: 6.1
Subsidiary Risk: No information available
Packing Group: II
Marine Pollutant: No information available
EMS: F-A
Description: UN2821, Phenol solution, 6.1, II

RID

UN-No: UN2821
Proper Shipping Name: Phenol solution
Hazard Class: 6.1
Subsidiary Risk: 6.1
Packing Group: II
Description: UN2821, Phenol solution, 6.1, II

ICAO

UN-No: UN2821
Proper Shipping Name: Phenol solution
Hazard Class: 6.1
Subsidiary Risk: No information available
Packing Group: II
Description: UN2821, Phenol solution, 6.1, II
Special Provisions: A3

IATA

UN-No: UN2821
Proper Shipping Name: Phenol solution
Hazard Class: 6.1
Subsidiary Risk: No information available
Packing Group: II
ERG Code: 6L
Special Provisions: No information available
Description: UN2821, Phenol solution, 6.1, II

15. REGULATORY INFORMATION

International Inventories

| Components | CAS-No. | U.S. TSCA | KOREA KECL | Philippines (PICCS) | Japan ENCS | CHINA | Australia (AICS) | EINECS-No. |
|---------------|-----------|-------------------|---------------------|---------------------|--------------------|---------|------------------|----------------------|
| <i>Phenol</i> | 108-95-2 | PresentACTIV E | Present KE-28209 | Present | Present (3)-481 | Present | Present | Present 203-632-7 |
| <i>Water</i> | 7732-18-5 | PresentACTIV E | Present KE-35400 | Present | Not present | Present | Present | Present 231-791-2 |

U.S. Regulations

Phenol

Massachusetts RTK: Present
New Jersey RTK Hazardous Substance List: 1487
New Jersey (EHS) List: 1487 500 lb TPQ
New Jersey - Discharge Prevention - List of Hazardous Substances: Present
Pennsylvania RTK: Environmental hazard

Pennsylvania RTK - Environmental Hazard List Present

Minnesota - Hazardous Substance List: Present

New York Release Reporting - List of Hazardous Substances:

1000 lb RQ

1 lb RQ

Louisiana Reportable Quantity List for Pollutants: 1000lbfinal RQ

454kgfinal RQ

California Directors List of Hazardous Substances: Present

FDA - 21 CFR - Total Food Additives 175.105, 175.300, 175.380, 175.390, 176.170, 177.1210, 177.1580, 177.2410, 177.2600
- List Sourced from EAFUS

California Prop. 65: Safe Drinking Water and Toxic Enforcement Act of 1986.

Chemicals Known to the State of California to Cause Cancer:

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Chemicals Known to the State of California to Cause Reproductive Toxicity:

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

| Components | CAS-No. | Carcinogen | Developmental Toxicity | Male Reproductive Toxicity | Female Reproductive Toxicity: |
|------------|-----------|------------|------------------------|----------------------------|-------------------------------|
| Phenol | 108-95-2 | Not Listed | Not Listed | Not Listed | Not Listed |
| Water | 7732-18-5 | Not Listed | Not Listed | Not Listed | Not Listed |

CERCLA/SARA

| Components | CAS-No. | CERCLA - Hazardous Substances and their Reportable Quantities | Section 302 Extremely Hazardous Substances and TPQs | Section 302 Extremely Hazardous Substances and RQs | Section 313 - Chemical Category | Section 313 - Reporting de minimis |
|------------|-----------|---|---|--|---------------------------------|------------------------------------|
| Phenol | 108-95-2 | 1000 lb final RQ 454 kg final RQ | 1000 lb EPCRA RQ | None | None | 1.0 % de minimis concentration |
| Water | 7732-18-5 | None | None | None | None | None |

U.S. TSCA

| Components | CAS-No. | TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS) | TSCA 8(d) -Health and Safety Reporting |
|------------|-----------|---|--|
| Phenol | 108-95-2 | Not Applicable | Not Applicable |
| Water | 7732-18-5 | Not Applicable | Not Applicable |

Canada

WHMIS 2015 - GHS Classifications

WHMIS 2015 Hazard Classification Information:

Component

Phenol

108-95-2 (88-91)

WHMIS 2015 Hazard Classification

Acute toxicity - Oral - Category 4: H302 Harmful if swallowed.;
Acute toxicity - Dermal - Category 3: H311 Toxic in contact with skin.;
Acute toxicity - Inhalation - Category 1: H330 Fatal if inhaled.;
Health Hazard Not Otherwise Classified - Category 1: Causes severe damage to the respiratory tract; Skin corrosion/irritation - Category 1: H314 Causes severe skin burns and eye damage.;
Serious Eye Damage/Eye Irritation - Category 1: H318 Causes serious eye damage.;
Specific target organ toxicity - Single exposure - Category 1: H370 Causes damage to organs.;
Specific target organ toxicity - Repeated exposure - Category 2: H373 May cause damage to organs through prolonged or repeated exposure.
Not a dangerous product according to HPR classification criteria

Water

7732-18-5 (9-12)

Product code: PH125

Product name: LIQUEFIED PHENOL,
USP

13 / 16

Canada Hazardous Products Regulation This product has been classified according to the hazard criteria of the HPR (Hazardous Products Regulation) and the SDS contains all of the information required by the HPR

| Components | WHMIS Ingredient Disclosure List - |
|------------|------------------------------------|
| Phenol | 1 % |

Inventory

| Components | CAS-No. | Canada (DSL) | Canada (NDSL) |
|------------|-----------|--------------|---------------|
| Phenol | 108-95-2 | Present | Not Listed |
| Water | 7732-18-5 | Present | Not Listed |

| Components | CAS-No. | CEPA Schedule I - Toxic Substances |
|------------|-----------|---|
| Phenol | 108-95-2 | Not listed |
| Water | 7732-18-5 | Not listed |
| Components | CAS-No. | CEPA - 2010 Greenhouse Gases Subject to Mandatory Reporting |
| Phenol | 108-95-2 | Not listed |
| Water | 7732-18-5 | Not listed |

EU Classification

EU GHS - SV - CLP 1272/2008

| Components | CAS-No. | EU GHS - SV - CLP (1272/2008) |
|------------|----------|---|
| Phenol | 108-95-2 | <p>Acute toxicity - Oral - Acute Tox. 3: H301 Toxic if swallowed. (Minimum classification); Acute toxicity - Dermal - Acute Tox. 3: H311 Toxic in contact with skin. (Minimum classification); Acute toxicity - Inhalation - Acute Tox. 3: H331 Toxic if inhaled. (Minimum classification); Skin corrosion/irritation - Skin Corr. 1B: H314 Causes severe skin burns and eye damage. (C >= 3 %; Concentration limits for acute toxicity cannot be translated into GHS from the DSD especially when minimum classifications are given); Germ cell mutagenicity - Muta. 2: H341 Suspected of causing genetic defects.; Specific target organ toxicity - Repeated exposure - STOT RE 2: H373 May cause damage to organs through prolonged or repeated exposure. (Minimum classification; No information to prove exclusion of certain routes of exposure)604-001-00-2</p> <p>Skin corrosion/irritation - Skin Corr. 1B: H314 Causes severe skin burns and eye damage. (C >= 3 %; Concentration limits for acute toxicity cannot be translated into GHS from the DSD especially when minimum classifications are given); Skin corrosion/irritation - Skin Irrit. 2: H315 Causes skin irritation. (1 % <= C <3 %; Concentration limits for acute toxicity cannot be translated into GHS from the DSD especially when minimum classifications are given); Serious Eye</p> |

| | | |
|-------|-----------|---|
| | | Damage/Eye Irritation - Eye Irrit. 2: H319 Causes serious eye irritation. (1 % ≤ C < 3 %; Concentration limits for acute toxicity cannot be translated into GHS from the DSD especially when minimum classifications are given)604-001-00-2 |
| Water | 7732-18-5 | |

EU - CLP (1272/2008)

R-phrases(s)

R34 - Causes burns.

R68 - Possible risk of irreversible effects.

R23/24/25 - Toxic by inhalation, in contact with skin and if swallowed.

R48/20/21/22 - Also harmful: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed

S -phrase(s)

S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S28 - After contact with skin, wash immediately with plenty of water

S45 - In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

S 1/2 - Keep locked up and out of the reach of children.

S24/25 - Avoid contact with skin and eyes.

S36/37/39 - Wear suitable protective clothing, gloves and eye/face protection.

| Components | CAS-No. | Classification | Concentration Limits: | Safety Phrases |
|------------|-----------|---|---|----------------------------------|
| Phenol | 108-95-2 | T; R23/24/25 C; R34 Xn; R48/20/21/22 Muta.Cat.3; R68 | 10%≤C T; R23/24/25 3%≤C<10% Xn; R20/21/22 3%≤C C; R34 1%≤C<3% Xi; R36/38 | S: (1/2)-24/25-26-28-36/37/39 |
| Water | 7732-18-5 | | No information | |

The product is classified in accordance with Annex VI to Directive 67/548/EEC

Indication of danger:

T - Toxic

C - Corrosive.

Xn - Harmful.



16. OTHER INFORMATION

Preparation Date: 11/08/2013
Revision Date: 11/5/2018
Prepared by: Sonia Owen

Disclaimer:

All chemicals may pose unknown hazards and should be used with caution. This Safety Data Sheet (SDS) 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 SDS. The physical properties reported in this SDS are obtained from the literature and do not constitute product specifications. Information contained herein does not constitute a warranty, whether expressed or implied, as to the safety, merchantability or fitness of the goods for a particular purpose. Spectrum Chemicals & Laboratory Products, Inc. assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied. 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 SDS is based on technical data judged to be reliable, Spectrum assumes no responsibility for the completeness or accuracy of the information contained herein.

End of Safety Data Sheet