

# SAFETY DATA SHEET

# spectrum®



Revision date 07-July-2021

Revision Number 3

## 1. Identification

### Product identifier

**Product Name** PHENOL, LIQUEFIED, REAGENT

### Other means of identification

**Product Code(s)** P1070

**UN/ID no** UN2821

**Synonyms** None

### Recommended use of the chemical and restrictions on use

**Recommended use** No information available

**Restrictions on use** No information available

### Details of the supplier of the safety data sheet

#### Supplier Address

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

### Emergency telephone number

**Emergency Telephone** Chemtrec 1-800-424-9300

## 2. Hazard(s) identification

### Classification

|  |                           |
|--|---------------------------|
| 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                |

### Hazards not otherwise classified (HNOC)

Not applicable

### 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



**Appearance** Clear

**Physical state** Liquid

**Odor** Aromatic and sweet

### **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  
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  
Call a POISON CENTER or doctor if you feel unwell  
IF ON SKIN (or hair): 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  
IF SWALLOWED: Call a POISON CENTER or doctor 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

### **Unknown acute toxicity**

- 0 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity
- 0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)
- 0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

### Other information

No information available.

## 3. Composition/information on ingredients

### Substance

Not applicable.

## Mixture

| Chemical name | CAS No    | Weight-% | Trade secret |
|---------------|-----------|----------|--------------|
| Phenol        | 108-95-2  | 88 - 91  | *            |
| Water         | 7732-18-5 | 9 - 12   | *            |

\*The exact percentage (concentration) of composition has been withheld as a trade secret.

## 4. First-aid measures

### Description of first aid measures

|   |  |
|---|--|
| <b>General advice</b>                     | Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.  |
| <b>Inhalation</b>                         | If breathing has stopped, give artificial respiration. Get medical attention immediately. Remove to fresh air. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. If breathing is difficult, (trained personnel should) give oxygen. Delayed pulmonary edema may occur. Get immediate medical advice/attention.   |
| <b>Eye contact</b>                        | Get immediate medical advice/attention. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area. Remove contact lenses, if present and easy to do. Continue rinsing.   |
| <b>Skin contact</b>                       | Get immediate medical advice/attention. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.  |
| <b>Ingestion</b>                          | Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Get immediate medical advice/attention.  |
| <b>Self-protection of the first aider</b> | Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Do not breathe vapor or mist. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Use personal protective equipment as required. See section 8 for more information. Avoid contact with skin, eyes or clothing. |

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

**Symptoms** Coughing and/ or wheezing. Difficulty in breathing. Burning sensation.

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

**Note to physicians** Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated. Do not give chemical antidotes. Asphyxia from glottal edema may occur. Marked decrease in blood pressure may occur with moist rales, frothy sputum, and high pulse pressure.

## 5. Fire-fighting measures

|   |  |
|---|--|
| <b>Suitable Extinguishing Media</b>               | Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.                                |
| <b>Large Fire</b>                                 | CAUTION: Use of water spray when fighting fire may be inefficient.   |
| <b>Unsuitable extinguishing media</b>             | Do not scatter spilled material with high pressure water streams.  |
| <b>Specific hazards arising from the chemical</b> | The product causes burns of eyes, skin and mucous membranes. Thermal decomposition can lead to release of irritating gases and vapors. |

**Hazardous combustion products** Carbon Monoxide, Carbon Dioxide.

**Explosion data**

**Sensitivity to mechanical impact** none.

**Sensitivity to static discharge** none.

**Special protective equipment for fire-fighters** Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

**6. Accidental release measures**

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

**Personal precautions** Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required. Evacuate personnel to safe areas. Do not breathe vapor or mist. Keep people away from and upwind of spill/leak. Attention! Corrosive material.

**Other information** Refer to protective measures listed in Sections 7 and 8.

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

**Methods for containment** Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Pick up and transfer to properly labeled containers.

**7. Handling and storage**

**Precautions for safe handling**

**Advice on safe handling** Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Take off contaminated clothing and wash before reuse. Do not breathe vapor or mist. In case of insufficient ventilation, wear suitable respiratory equipment. Handle product only in closed system or provide appropriate exhaust ventilation. Do not eat, drink or smoke when using this product. Remove contaminated clothing and shoes.

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

**Storage Conditions** Sensitive to light. Store in light-resistant containers. Air sensitive. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children. Store locked up. Protect from moisture. Store away from other materials.

**8. Exposure controls/personal protection**

**Control parameters**

**Exposure Limits** The following ingredients are the only ingredients of the product above the cut-off level (or level that contributes to the hazard classification of the mixture) which have an exposure limit applicable in the region for which this safety data sheet is intended or other recommended limit. At this time, the other relevant constituents have no known exposure limits from the sources listed here.

| Chemical name      | ACGIH TLV         | OSHA PEL                              | NIOSH IDLH |
|--------------------|-------------------|---------------------------------------|------------|
| Phenol<br>108-95-2 | No data available | 5 ppm TWA<br>19 mg/m <sup>3</sup> TWA | -          |

**Appropriate engineering controls**



## 10. Stability and reactivity

|   |   |
|---|---|
| <b>Reactivity</b>                         | No information available.   |
| <b>Chemical stability</b>                 | Stable under recommended storage conditions.                        |
| <b>Possibility of hazardous reactions</b> | None under normal processing.                                       |
| <b>Conditions to avoid</b>                | Excessive heat. Exposure to air or moisture over prolonged periods. |
| <b>Incompatible materials</b>             | Acids. Bases. Oxidizing agent.                                      |
| <b>Hazardous decomposition products</b>   | None known based on information supplied.                           |

## 11. Toxicological information

### Information on likely routes of exposure

#### Product Information

|                     |   |
|---------------------|---|
| <b>Inhalation</b>   | Specific test data for the substance or mixture is not available. Fatal if inhaled. (based on components). Corrosive by inhalation. Inhalation of corrosive fumes/gases may cause coughing, choking, headache, dizziness, and weakness for several hours. Pulmonary edema may occur with tightness in the chest, shortness of breath, bluish skin, decreased blood pressure, and increased heart rate. Inhaled corrosive substances can lead to a toxic edema of the lungs. Pulmonary edema can be fatal.                 |
| <b>Eye contact</b>  | Specific test data for the substance or mixture is not available. Causes serious eye damage. (based on components). Corrosive to the eyes and may cause severe damage including blindness. May cause irreversible damage to eyes.   |
| <b>Skin contact</b> | Specific test data for the substance or mixture is not available. Corrosive. (based on components). Causes burns. Toxic in contact with skin.   |
| <b>Ingestion</b>    | Specific test data for the substance or mixture is not available. Causes burns. (based on components). Ingestion causes burns of the upper digestive and respiratory tracts. May cause severe burning pain in the mouth and stomach with vomiting and diarrhea of dark blood. Blood pressure may decrease. Brownish or yellowish stains may be seen around the mouth. Swelling of the throat may cause shortness of breath and choking. May cause lung damage if swallowed. May be fatal if swallowed and enters airways. |

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

|                 |  |
|-----------------|--|
| <b>Symptoms</b> | Coughing and/ or wheezing. Difficulty in breathing. Redness. Burning. May cause blindness. |
|-----------------|--|

### Acute toxicity

#### Numerical measures of toxicity

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

|                                      |              |
|--------------------------------------|--------------|
| <b>ATEmix (dermal)</b>               | 715.90 mg/kg |
| <b>ATEmix (inhalation-gas)</b>       | 795.50 ppm   |
| <b>ATEmix (inhalation-dust/mist)</b> | 0.57 mg/l    |

#### Unknown acute toxicity

- 0 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity
- 0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)
- 0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

#### Component Information

| Chemical name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|---------------|-----------|-------------|-----------------|
|---------------|-----------|-------------|-----------------|

|                    |                     |                        |                                     |
|--------------------|---------------------|------------------------|-------------------------------------|
| Phenol<br>108-95-2 | = 340 mg/kg ( Rat ) | = 630 mg/kg ( Rabbit ) | = 316 mg/m <sup>3</sup> ( Rat ) 4 h |
| Water<br>7732-18-5 | 90 mL/kg ( Rat )    | -                      | -                                   |

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

|  |  |
|--|--|
| <b>Skin corrosion/irritation</b>         | Classification based on data available for ingredients. Causes burns.  |
| <b>Serious eye damage/eye irritation</b> | Classification based on data available for ingredients. Risk of serious damage to eyes. Causes burns.                                |
| <b>Respiratory or skin sensitization</b> | No information available.  |
| <b>Germ cell mutagenicity</b>            | Contains a known or suspected mutagen. Classification based on data available for ingredients. Suspected of causing genetic defects. |
| <b>Carcinogenicity</b>                   | No information available.  |

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

| Chemical name      | ACGIH | IARC   | NTP | OSHA |
|--------------------|-------|--|-----|------|
| Phenol<br>108-95-2 | -     | Group 3 - Not classifiable<br>- Monograph 71 [1999]<br>Monograph 47 [1989] | -   | -    |

### Legend

|                                 |  |
|---------------------------------|--|
| <b>Reproductive toxicity</b>    | No information available.  |
| <b>STOT - single exposure</b>   | No information available.  |
| <b>STOT - repeated exposure</b> | May cause damage to organs through prolonged or repeated exposure. |
| <b>Target organ effects</b>     | liver, kidney, respiratory system, Eyes, Skin.                     |
| <b>Aspiration hazard</b>        | No information available.  |
| <b>Other adverse effects</b>    | No information available.  |
| <b>Interactive effects</b>      | No information available.  |

## 12. Ecological information

### Ecotoxicity

| Chemical name      | Algae/aquatic plants  | Fish  | Toxicity to microorganisms | Crustacea   |
|--------------------|---|---|----------------------------|---|
| Phenol<br>108-95-2 | EC50: 0.0188 - 0.1044mg/L (96h, Pseudokirchneriella subcapitata) EC50: 187 - 279mg/L (72h, Desmodesmus subspicatus) EC50: =46.42mg/L (96h, Pseudokirchneriella subcapitata) | LC50: 11.9 - 25.3mg/L (96h, Lepomis macrochirus) LC50: 11.9 - 50.5mg/L (96h, Pimephales promelas) LC50: 20.5 - 25.6mg/L (96h, Pimephales promelas) LC50: 23.4 - 36.6mg/L (96h, Oryzias latipes) LC50: 33.9 - 43.3mg/L (96h, Oryzias latipes) LC50: 34.09 - 47.64mg/L (96h, Poecilia reticulata) LC50: 4.23 - 7.49mg/L (96h, Oncorhynchus mykiss) LC50: 5.0 - 12.0mg/L (96h, Oncorhynchus mykiss) LC50: 5.449 - 6.789mg/L (96h, Oncorhynchus mykiss) LC50: 7.5 - 14mg/L (96h, Oncorhynchus mykiss) LC50: =0.00175mg/L (96h, Cyprinus carpio) LC50: =11.5mg/L (96h, | -                          | EC50: 10.2 - 15.5mg/L (48h, Daphnia magna) EC50: 4.24 - 10.7mg/L (48h, Daphnia magna) |

|  |  |  |  |  |
|--|--|--|--|--|
|  |  | Lepomis macrochirus)<br>LC50: =13.5mg/L (96h,<br>Lepomis macrochirus)<br>LC50: =27.8mg/L (96h,<br>Brachydanio rerio) LC50:<br>=31mg/L (96h, Poecilia<br>reticulata) LC50:<br>=32mg/L (96h,<br>Pimephales promelas) |  |  |
|--|--|--|--|--|

**Persistence and degradability** No information available.  
**Bioaccumulation** Inherently biodegradable.

**Component Information**

| Chemical name      | Partition coefficient |
|--------------------|-----------------------|
| Phenol<br>108-95-2 | 1.5                   |

**Other adverse effects** No information available.

**13. Disposal considerations**

**Waste treatment methods**

**Waste from residues/unused products** Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

**Contaminated packaging** Do not reuse empty containers.

**14. Transport information**

**DOT**

**UN/ID no** UN2821  
**Proper Shipping Name:** Phenol solutions  
**Hazard class** 6.1  
**Packing group:** II  
**Special Provisions** IB2, T7, TP2  
**Marine Pollutant** Severe Marine Pollutant  
**Description:** UN2821, Phenol solutions, 6.1, II  
**Emergency Response Guide Number** 153

**TDG**

**UN-No:** UN2821  
**Proper Shipping Name:** Phenol solution  
**Hazard class** 6.1  
**Packing Group:** II  
**Description:** UN2821, Phenol solution, 6.1, II

**MEX**

**UN-No** UN2821  
**Proper Shipping Name** Phenol solution  
**Hazard class** 6.1  
**Packing Group** II  
**Description** UN2821, Phenol solution, 6.1, II

**ICAO (air)**

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



**Special Provisions** A3  
**Description:** UN2821, Phenol solution, 6.1, II

**IATA**

**UN number** UN2821  
**Proper Shipping Name:** Phenol solution  
**Transport hazard class(es)** 6.1  
**Packing group** II  
**Description:** UN2821, Phenol solution, 6.1, II

**IMDG**

**UN number** UN2821  
**Proper shipping name** Phenol solution  
**Transport hazard class(es)** 6.1  
**Packing group** II  
**EmS-No** F-A, S-A  
**Marine pollutant** NP1  
**Description** UN2821, Phenol solution, 6.1, II

**RID**

**UN number** UN2821  
**Proper Shipping Name:** Phenol solution  
**Transport hazard class(es)** 6.1  
**Packing group** II  
**Classification code** T1  
**Description:** UN2821, Phenol solution, 6.1, II  
**Labels** 6.1

**ADR**

**UN number** 2821  
**Proper Shipping Name:** Phenol solution  
**Transport hazard class(es)** 6.1  
**Packing group** II  
**Classification code** T1  
**Tunnel restriction code** (D/E)  
**Description:** 2821, Phenol solution, 6.1, II, (D/E)  
**Labels** 6.1

**ADN**

**UN/ID No** UN2821  
**Proper shipping name** Phenol solution  
**Transport hazard class(es)** 6.1  
**Packing Group** II  
**Classification code** T1  
**Special Provisions** 802  
**Description** UN2821, Phenol solution, 6.1, II  
**Hazard label(s)** 6.1  
**Limited quantity (LQ)** 100 ml  
**ventilation** VE02  
**Equipment Requirements** PP, EP, TOX, A

**15. Regulatory information**

**International Inventories**

**TSCA** Complies

**DSL/NDSL** Complies

**EINECS/ELINCS** Complies

**ENCS** This product complies with ENCS:

**IECSC** This product complies with China:

**KECL** Complies

**PICCS** Complies

**AICS**

All the constituents of this material are listed on the Australian Inventory of Chemical Substances (AICS).

**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

**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.

| Chemical name     | SARA 313 - Threshold Values % |
|-------------------|-------------------------------|
| Phenol - 108-95-2 | 1.0                           |

**SARA 311/312 Hazard Categories**

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

**CWA (Clean Water Act)**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

**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).

| Chemical name      | Hazardous Substances RQs            | Extremely Hazardous Substances RQs |
|--------------------|-------------------------------------|------------------------------------|
| Phenol<br>108-95-2 | 1000 lb final RQ<br>454 kg final RQ | -                                  |

**US State Regulations****California Proposition 65**

This product does not contain any Proposition 65 chemicals.

**U.S. State Right-to-Know Regulations**

This product does not contain any substances regulated under applicable state right-to-know regulations

**U.S. EPA Label Information**

**EPA Pesticide Registration Number** Not applicable

**16. Other information****NFPA**

**Health hazards** 4

**Flammability** 2

**Instability** 0

**Physical and chemical properties** -

**HMIS**

**Health hazards** \* 4

**Flammability** 2

**Physical hazards** 0

**Personal protection** X

*Chronic Hazard Star Legend*

\* = Chronic Health Hazard

**Key or legend to abbreviations and acronyms used in the safety data sheet**

**Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

|         |                             |      |                                  |
|---------|-----------------------------|------|----------------------------------|
| TWA     | TWA (time-weighted average) | STEL | STEL (Short Term Exposure Limit) |
| Ceiling | Maximum limit value         |      |                                  |

**Key literature references and sources for data used to compile the SDS**

Agency for Toxic Substances and Disease Registry (ATSDR)

U.S. Environmental Protection Agency ChemView Database

European Food Safety Authority (EFSA)

EPA (Environmental Protection Agency)

Acute Exposure Guideline Level(s) (AEGL(s))

U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act

U.S. Environmental Protection Agency High Production Volume Chemicals

Food Research Journal

Hazardous Substance Database

International Uniform Chemical Information Database (IUCLID)

Japan GHS Classification

Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)

NIOSH (National Institute for Occupational Safety and Health)

National Library of Medicine's ChemID Plus (NLM CIP)

National Library of Medicine's PubMed database (NLM PUBMED)

National Toxicology Program (NTP)

New Zealand's Chemical Classification and Information Database (CCID)

Organization for Economic Co-operation and Development Environment, Health, and Safety Publications

Organization for Economic Co-operation and Development High Production Volume Chemicals Program

Organization for Economic Co-operation and Development Screening Information Data Set

World Health Organization

**Revision date** 07-July-2021

**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**