

# Scientific Documentation

## Liquefied Phenol, USP

Not appropriate for regulatory submission.

Please visit [www.spectrumchemical.com](http://www.spectrumchemical.com) or contact Tech Services for the most up-to-date information contained in this information package.

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## Specification for Liquefied Phenol, USP (PH125)

Item Number	PH125
Item	Liquefied Phenol, USP
CAS Number	
Molecular Formula	C <sub>6</sub> H <sub>6</sub> O
Molecular Weight	
MDL Number	
Synonyms	Carbolic Acid

Test	Specification	
	Min	Max
ASSAY (C <sub>6</sub> H <sub>6</sub> O; by Wt.)	89.0 %	
CLARITY OF SOLUTION AND REACTION	CLEAR AND NEUTRAL ON ACID TO LITMUS	
STABILIZER		NONE/YES ?
DISTILLING RANGE		182.5°C
NONVOLATILE RESIDUE		0.05 %
ELEMENTAL IMPURITIES	AS REPORTED	
IDENTIFICATION (A)	WHITE PRECIPITATE FORMS	
IDENTIFICATION (B)	VIOLET COLOR PRODUCED	
CERTIFIED HALAL		
APPEARANCE		
EXPIRATION DATE		
DATE OF MANUFACTURE		
RESIDUAL SOLVENTS:	AS REPORTED	
CLASS 1 (solvent) / BENZENE	.	
CLASS 2 (solvent) / CYCLOHEXANE	.	
CLASS 2 (SOLVENT) / CUMENE	.	
CLASS 2 (solvent) / HEXANE	.	
CLASS 2 (SOLVENT) / METHANOL	.	
CLASS 2 (solvent) / METHYLISOBUTYLKETONE	.	

Test	Specification	
	Min	Max
CLASS 2 (solvent) / TOLUENE	.	
CLASS 3 (solvent) / ACETIC ACID	.	
CLASS 3 (solvent) / ACETONE	.	
CLASS 3 (solvent) / ANISOLE	.	
CLASS 3 (solvent) / ETHANOL	.	
CLASS 3 (solvent) / HEPTANE	.	
CLASS 3 (solvent) / METHYLETHYLKETONE	.	
CLASS 3 (solvent) / 2-PROPANOL	.	
MONOGRAPH EDITION		

***Spectrum Chemical Mfg Corp***

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<b>Corporate Headquarters:</b>	<b>West Coast Facility:</b>
769 Jersey Ave.	14422 S. San Pedro St.
New Brunswick, NJ 08901	Gardena, CA 90248
732.214.1300	310.516.8000

## Certificate Of Analysis

Item Number	PH125	Lot Number	1MK0045
Item	Liquefied Phenol, USP	Manufacturer Lot	20792520
Manufacturer Code	7209	Molecular Formula	C <sub>6</sub> H <sub>6</sub> O

TEST	SPECIFICATION		RESULT
	MIN	MAX	
ASSAY (C <sub>6</sub> H <sub>6</sub> O; by Wt.)	89.0 %		89.2 %
CLARITY OF SOLUTION AND REACTION	CLEAR AND NEUTRAL ON ACID TO LITMUS		CLEAR AND NEUTRAL ON ACID TO LITMUS
STABILIZER		NONE/YES ?	20 ppm (citric acid)
DISTILLING RANGE		182.5°C	180.0°C
NONVOLATILE RESIDUE		0.05 %	0.02 %
ELEMENTAL IMPURITIES	AS REPORTED		NO ELEMENTAL IMPURITIES PRESENT (M)
IDENTIFICATION (A)	WHITE PRECIPITATE FORMS		WHITE PRECIPITATE FORMS
IDENTIFICATION (B)	VIOLET COLOR PRODUCED		VIOLET COLOR PRODUCED
CERTIFIED HALAL			CERTIFIED HALAL
APPEARANCE			CLEAR COLORLESS LIQUID
EXPIRATION DATE			01-OCT-2025
DATE OF MANUFACTURE			01-OCT-2023
RESIDUAL SOLVENTS:	AS REPORTED		.
CLASS 1 (solvent) / BENZENE	.		<2 ppm (M)
CLASS 2 (solvent) / CYCLOHEXANE	.		<3880 (M)
CLASS 2 (SOLVENT) / CUMENE	.		<70 ppm (M)
CLASS 2 (solvent) / HEXANE	.		<290 ppm (M)
CLASS 2 (SOLVENT) / METHANOL	.		<3000 (M)
CLASS 2 (solvent) / METHYLISOBUTYLKETONE	.		<4500 (M)

TEST	SPECIFICATION		RESULT
	MIN	MAX	
CLASS 2 (solvent) / TOLUENE	.		<890 ppm (M)
CLASS 3 (solvent) / ACETIC ACID	.		<5000 ppm (M)
CLASS 3 (solvent) / ACETONE	.		<5000 ppm (M)
CLASS 3 (solvent) / ANISOLE	.		<5000 ppm (M)
CLASS 3 (solvent) / ETHANOL	.		<5000 ppm (M)
CLASS 3 (solvent) / HEPTANE	.		<5000 ppm (M)
CLASS 3 (solvent) / METHYLETHYLKETONE	.		<5000 ppm (M)
CLASS 3 (solvent) / 2-PROPANOL	.		<5000 ppm (M)
MONOGRAPH EDITION			(USP-NF) 2023

Certificate of Analysis Results Entered By:

HBERMUDEZ  
Hernan Bermudez  
04-DEC-23 13:48:32

Spectrum Chemical Mfg Corp  
14422 South San Pedro Street  
Gardena 90248 CA



Certificate of Analysis Results Approved By:

SHANSEN  
Selin Hansen  
05-DEC-23 13:28:40

**All pharmaceutical ingredients are tested using current edition of applicable pharmacopeia.**

**Read and understand label and SDS before handling any chemicals. All Spectrum's chemicals are for manufacturing, processing, repacking or research purposes by experienced personnel only. It is the customer's responsibility to provide adequate hazardous material training and ensure that appropriate Personal Protective Equipment (PPE) is used before handling any chemical.**

The Elemental Impurities standards implemented by USP and other Pharmaceutical Compendia reflect a growing understanding of the toxicology of trace levels of elemental impurities that can remain in drug substances originating from either raw materials or manufacturing processes. Identifying and quantifying impurities can be critical to predicting the best possible patient outcomes. Elemental Impurities has been a requirement of all products meeting USP/NF, EP and BP monographs since January 1, 2018. More information can be found in USP sections <232> Elemental Impurities – Limits and <233> Elemental Impurities – Procedures. Data for drug substances furnished by Spectrum Chemical Mfg. Corp can be used to ensure that patient daily exposures by oral administration to the selected elements are not exceeded in the formulation of pharmaceutical products.

Spectrum Chemical Mfg. Corp. repackages Active Pharmaceutical Ingredient chemicals provided by other manufacturers and suppliers. For traceability purposes, Spectrum's Certificate of Analysis contains an identifier code unique to each manufacturer or supplier, as well as the chemical's lot number provided on the original manufacturer Certificate of Analysis. This material is manufactured by A & C American Chemicals Ltd at 3010 rue de Baene, Saint Laurent, Quebec H4S 1L2, Canada. Copies of the original Certificate of Analysis are available upon request from your Spectrum Sales Representative or by calling Spectrum's Quality Department at 1-800-772-8786.

# SAFETY DATA SHEET

# spectrum®



Revision date 03-December-2021

Revision Number 2

## 1. Identification

### Product identifier

**Product Name** LIQUEFIED PHENOL, USP

### Other means of identification

**Product Code(s)** PH125

**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 A
Serious eye damage/eye irritation	Category 1
Germ cell mutagenicity	Category 2
Specific target organ toxicity (repeated exposure)	Category 2
Flammable liquids	Category 4

### 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  
Combustible liquid



**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  
Keep away from flames and hot surfaces. - No smoking  
Keep cool

#### **Precautionary Statements - Response**

Specific treatment (see .? on this label)  
Specific treatment is urgent (see .? on this label)  
Immediately call a POISON CENTER or doctor  
Specific treatment (see .? on this label)  
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  
In case of fire: Use CO<sub>2</sub>, dry chemical, or foam to extinguish

#### **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 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>	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. Get immediate medical advice/attention.
<b>Skin contact</b>	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Get immediate medical advice/attention.
<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>	Remove all sources of ignition. 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

<b>Symptoms</b>	Coughing and/ or wheezing. Difficulty in breathing. Burning sensation.
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#### Indication of any immediate medical attention and special treatment needed

<b>Note to physicians</b>	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.
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### 5. Fire-fighting measures

<b>Suitable Extinguishing Media</b>	Dry chemical. Carbon dioxide (CO <sub>2</sub> ). water spray. Alcohol resistant foam.
<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>	Keep product and empty container away from heat and sources of ignition. In the event of fire, cool tanks with water spray. The product causes burns of eyes, skin and mucous membranes. Thermal decomposition can lead to release of irritating gases and vapors.
<b>Hazardous combustion products</b>	Carbon Monoxide, Carbon Dioxide.
<b>Explosion data</b>	
<b>Sensitivity to mechanical impact</b>	none.
<b>Sensitivity to static discharge</b>	yes.
<b>Special protective equipment for fire-fighters</b>	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

<b>Personal precautions</b>	Evacuate personnel to safe areas. Use personal protective equipment as required. See section 8 for more information. Take precautionary measures against static discharges. Do not touch or walk through spilled material. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Do not breathe vapor or mist. Keep people away from and upwind of spill/leak. Attention! Corrosive material.
<b>Other information</b>	Refer to protective measures listed in Sections 7 and 8.

### Methods and material for containment and cleaning up

<b>Methods for containment</b>	Stop leak if you can do it without risk. Do not touch or walk through spilled material. Dike far ahead of liquid spill for later disposal.
<b>Methods for cleaning up</b>	Take precautionary measures against static discharges. Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.

## 7. Handling and storage

### Precautions for safe handling

<b>Advice on safe handling</b>	Use personal protection equipment. Do not breathe vapor or mist. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Take precautionary measures against static discharges. 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. 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.
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### Conditions for safe storage, including any incompatibilities

<b>Storage Conditions</b>	Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Keep in properly labeled containers. Store in accordance with the particular national regulations. Store in accordance with local regulations. Keep out of the reach of children. Store locked up. Protect from moisture. Store away from other materials.
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## 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 108-95-2	No data available	5 ppm TWA 19 mg/m <sup>3</sup> TWA	-

## Appropriate engineering controls

### Engineering controls

Showers  
Eyewash stations  
Ventilation systems.

## Individual protection measures, such as personal protective equipment

### Eye/face protection

Tight sealing safety goggles. Face protection shield.

### Hand protection

Wear suitable gloves. Impervious gloves.

### Skin and body protection

Wear suitable protective clothing. Long sleeved clothing. Chemical resistant apron.

### Respiratory protection

When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

### General hygiene considerations

Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Do not breathe vapor or mist.

## **9. Physical and chemical properties**

### Information on basic physical and chemical properties

Physical state	Liquid
Appearance	Clear
Color	Colorless; light yellow; light pink
Odor	Aromatic and sweet
Odor threshold	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	no data available	None known
Melting point / freezing point	no data available	None known
Boiling point / boiling range	no data available	None known
Flash point	> 91 °C / 195.8 °F	None known
Evaporation rate	no data available	None known
Flammability (solid, gas)	no data available	None known
Flammability Limit in Air		None known
Upper flammability or explosive limits	No data available	
Lower flammability or explosive limits	No data available	
Vapor pressure	No data available	None known
Vapor density	no data available	None known
Relative density	1.05	None known
Water solubility	No data available	None known

<b>Solubility(ies)</b>	Soluble in water	None known
<b>Partition coefficient</b>	No data available	None known
<b>Autoignition temperature</b>	no data available	None known
<b>Decomposition temperature</b>		None known
<b>Kinematic viscosity</b>	no data available	None known
<b>Dynamic viscosity</b>	No data available	None known

#### Other information

<b>Explosive properties</b>	No information available
<b>Oxidizing properties</b>	No information available
<b>Softening point</b>	No information available
<b>Molecular weight</b>	No information available
<b>VOC Content (%)</b>	No information available
<b>Liquid Density</b>	No information available
<b>Bulk density</b>	No information available

## **10. Stability and reactivity**

<b>Reactivity</b>	No information available.
<b>Chemical stability</b>	Stable under normal conditions.
<b>Possibility of hazardous reactions</b>	None under normal processing.
<b>Conditions to avoid</b>	Heat, flames and sparks. 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.
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## Acute toxicity

### Numerical measures of toxicity

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

ATEmix (inhalation-gas) 795.50 ppm

ATEmix (inhalation-dust/mist) 0.57 mg/l

### Unknown acute 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 108-95-2	= 340 mg/kg ( Rat )	= 630 mg/kg ( Rabbit )	= 316 mg/m <sup>3</sup> ( Rat ) 4 h
Water 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 108-95-2	-	Group 3 - Not classifiable - Monograph 71 [1999] 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 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)	-	EC50: 10.2 - 15.5mg/L (48h, Daphnia magna) EC50: 4.24 - 10.7mg/L (48h, Daphnia magna)

		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, Lepomis macrochirus) LC50: =13.5mg/L (96h, Lepomis macrochirus) LC50: =27.8mg/L (96h, Brachydanio rerio) LC50: =31mg/L (96h, Poecilia reticulata) LC50: =32mg/L (96h, Pimephales promelas)		
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**Persistence and degradability** No information available.  
**Bioaccumulation** Inherently biodegradable.

#### Component Information

Chemical name	Partition coefficient
Phenol 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 108-95-2	1000 lb final RQ 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) (AEGLe(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** 03-December-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**



**Certification of Compliance with current Good Manufacturing Practices**

Dear Valued Customer:

Spectrum Chemical Mfg Corp certifies that the following product(s) is produced, processed, packaged and held in compliance with current Good Manufacturing Practices (cGMP) in accordance with the applicable parts of 21 CFR, parts 210 and 211 of the Code of Federal Regulations.

Catalog Number	Product Name
PH125	Liquefied Phenol, USP

Spectrum is an FDA registered and inspected Drug Establishment. Our United States Food and Drug Administration (USFDA) Registration numbers are as follows:

Spectrum-Gardena, CA: 2020632  
Spectrum-New Brunswick, NJ: 2246824

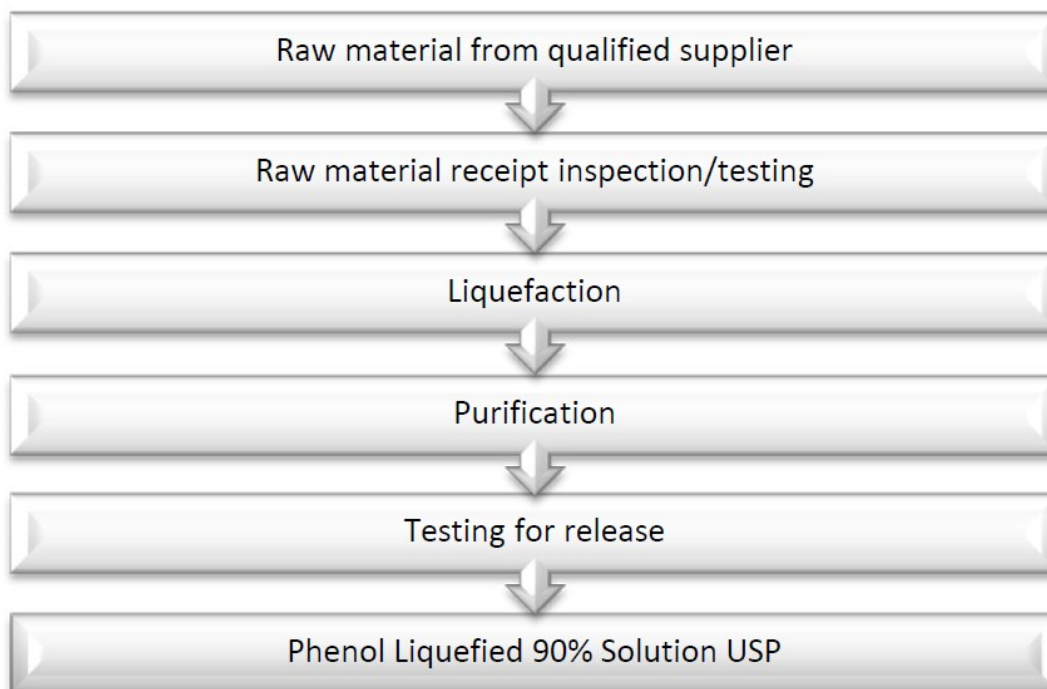
Thank you for your interest in Spectrum products. If we may be of further assistance, please feel free to contact the Quality Assurance department at 310-516-8000 or via email at [qualityassurance@spectrumchemical.com](mailto:qualityassurance@spectrumchemical.com)

Sincerely,

A handwritten signature in black ink, appearing to read "Oralia Chavez".

Oralia Chavez  
Quality Assurance Specialist

## Manufacturing Process Flowchart [Liquefied Phenol, USP] (PH125)



### CORPORATE HEADQUARTERS

769 Jersey Avenue

New Brunswick, NJ 08901

PHONE 732.214.1300

FAX 732.246.7132

### WEST COAST FACILITY

14422 South San Pedro Street

Gardena, California 90248

PHONE 310.516.8000

FAX 310.516.9843

## PH125, Liquefied Phenol, USP

### Source Statement

The above mentioned catalog item is manufactured by chemical synthesis. No animal or plant derived products are used in the manufacturing process.

### BSE/TSE Statement

The above mentioned catalog item does not contain nor is manufactured using any animal derived products and is therefore, BSE/TSE free.

### Allergen Statement

The above mentioned catalog item does not contain any of the following:

- Milk
- Egg
- Fish
- Shellfish
- Tree Nuts
- Wheat
- Peanuts
- Soy
- Cereals containing Gluten
- Celery
- Mustard
- Sesame Seed
- Corn
- Latex
- Sulfites > 10 ppm

### EU Fragrance Allergen Statement

The above mentioned catalog item does not contain any of the 26 EU fragrance allergens listed in Annex III lines 67-92. These substances are not intentionally added to the following chemical and therefore are not expected to be present.

### GMO Statement

The above mentioned catalog item is manufactured without the use of genetically modified organisms and is therefore GMO free.

### Melamine Statement

The above mentioned catalog does not use or add melamine to the manufacturing process and is considered melamine-free.

## Nitrosamine Statement

Based on knowledge of the manufacturing process, nitrosamine impurities are not known or suspected to be present in this material.

## Animal Testing Statement

The above mentioned catalog item has not been tested on animals.

## Organic Compliance Statement

The above mentioned catalog item has not been produced using GMOs, irradiation, ethylene oxide (EtO) or sewage sludge.

## Shelf Life Statement

The above mentioned catalog item is typically assigned a shelf life of 24 months from the date of manufacture. The actual assigned shelf life for any specific lot should be referenced on the Certificate of Analysis.

## Other Chemicals Statement

Spectrum does not have any reason to suspect the above mentioned catalog item contains any of the following chemicals. This product does not come into contact with these chemicals during packaging or storage:

- Aflatoxins
- Antibiotics
- Bisphenol A (BPA)
- CMR Substances
- Parabens
- Pesticides
- Phthalates



**RE: Elemental Impurities - Liquefied Phenol, USP (Cat# PH125)**

To Whom It May Concern:

Thank you for your interest in Spectrum high quality chemicals.

The above mentioned material complies with the USP<232>, <233> Elemental Impurities and the ICH Q3D Elemental Impurities Guideline. No Class 1, Class 2A, Class 2B or Class 3 elemental impurities are likely to be present. These substances are not used in the production process, are not intentionally added or known to be present in the above mentioned material.

This information is subject to change and is intended for risk assessment only. It is responsibility of the end user to evaluate suitability of any chemical for the intended use as well as to assess compound-specific limits of daily intake of metal impurities. For lot-specific information, please refer to the respective Certificate of Analysis.

If you have any further questions, please contact us by telephone at 1(800)772-8786 Option 2, or by email at [TechServices@spectrumchemical.com](mailto:TechServices@spectrumchemical.com).

Sincerely,

Technical Services  
Spectrum Chemical Mfg. Corp.

This document has been produced electronically and is valid without a signature.

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New Brunswick, NJ 08901

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WEST COAST FACILITY

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Gardena, California 90248

PHONE 310.516.8000

FAX 310.516.9843



**RE: Residual Solvents - Liquefied Phenol, USP (Cat# PH125)**

To Whom It May Concern:

Thank you for your interest in Spectrum high quality chemicals.

The above mentioned catalog item complies with the requirements of USP <467> Residual Solvents and ICH Q3C Residual Solvents Guideline. The following solvents are likely to be present:

Residual Solvent	Class	Expected Concentration
Benzene	1	< 2 PPM
Cyclohexane	2	< 3880 PPM
Cumene	2	< 70 PPM
Hexane	2	< 290 PPM
Methanol	2	< 3000 PPM
Methylisobutylketone	2	< 4500 PPM
Toluene	2	< 890 PPM
Acetic Acid	3	< 5000 PPM
Acetone	3	< 5000 PPM
Anisole	3	< 5000 PPM
Ethanol	3	< 5000 PPM
Heptane	3	< 5000 PPM
Methylethylketone	3	< 5000 PPM
2-Propanol	3	< 5000 PPM

No other solvents are used or produced in the manufacturing process of this material.

For lot-specific information, please refer to the respective Certificate of Analysis.

If you have any further questions, please contact us by telephone at 1(800)772-8786 Option 2, or by email at [TechServices@spectrumchemical.com](mailto:TechServices@spectrumchemical.com).

Sincerely,

Technical Services  
Spectrum Chemical Mfg. Corp.

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## Label Information

The Spectrum label presents technical and safety information in an easily understood format. Our technical specialists stay abreast of the latest requirements of the Globally Harmonized System for Classification and Labelling of Chemicals (GHS), as well as the Occupational Safety and Health Administration (OSHA), the Food and Drug Administration (FDA) and other government regulatory agencies in order to ensure compliance, accuracy and concise hazard communication. Below you will find a typical label example for this catalog item.

**Exp. Date:** 00-00-0000



**DANGER**

- Fatal if inhaled • Toxic in contact with skin • Harmful if swallowed • Causes severe skin burns and eye damage • Suspected of causing genetic defects • May cause damage to organs through prolonged or repeated exposure • Combustible liquid.
- Obtain special instructions before use • Do not handle until all safety precautions have been read and understood • Do not eat, drink or smoke when using this product • Wear respiratory protection, eye protection, face protection, protective gloves, protective clothing • Do not breathe mist or vapors • Use only outdoors or in a well-ventilated area • Wash face, hands and any exposed skin thoroughly after handling.

**FIRST AID:** Immediately call a POISON CENTER or physician. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF SWALLOWED: Rinse mouth. DO NOT induce vomiting.

**KEEP FROM CHILDREN**



**PH125      SIZ SY**

### Liquefied Phenol

(Carbolic Acid)

USP



**CAUTION:** For manufacturing, processing or repacking.  
**Read and understand the label and Safety Data Sheet (SDS) prior to use.**

DOT: UN2821, Phenol solution, 6.1, PG II

**Chemical Emergency: (800)424-9300**

[www.SpectrumChemical.com](http://www.SpectrumChemical.com)

Components:

Phenol ..... CAS 108-95-2

Water ..... CAS 7732-18-5

Manufacturer/Supplier Code ..... ?

Manufacturer Lot Number..... ?

Assay (C<sub>6</sub>H<sub>5</sub>O; by Wt.) ..... Min. 89.0%

Clarity of Solution and Reaction ..... To pass test

Stabilizer (?) ..... ?

**MAXIMUM LIMITS**

Distilling Range ..... 182.5°C

Nonvolatile Residue ..... 0.05%

Elemental Impurities ..... As reported

Residual Solvents ..... To pass test

**LIGHT AND AIR SENSITIVE:** Keep tightly closed in light-resistant containers.

**FLUSHED WITH NITROGEN**

Repackaged by Spectrum as:

B 18/K10GHS-A    ?    Lot No. XQ####

### Spectrum Chemical Mfg Corp

#### Corporate Headquarters:

769 Jersey Ave.  
New Brunswick, NJ 08901  
732.214.1300

#### West Coast Facility:

14422 S. San Pedro St.  
Gardena, CA 90248  
310.516.8000