1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND THE COMPANY/UNDERTAKING

Product Name: Phenol, pure
Product Code: IB05160 & IB05164
Recommend Use: For further manufacturing use only
Not for human or animal drug use

Synonyms:
- ACIDE CARBOLIQUE (FRENCH) * BAKER’S P AND S LIQUID AND OINTMENT
- BENZENOL * CARBOLIC ACID * CARBOLSAURE (GERMAN) * FENOL (DUTCH, POLISH) *
- FENOLO (ITALIAN) * HYDROXYBENZENE *
- MONOHYDROXYBENZENE * MONOPHENOL * NCI-C50124 * OXYBENZENE *
- PHENIC ACID * PHENOL (ACGIH: OSHA) * PHENOL ALCOHOL * PHENYLIC ALCOHOL *
- PHENOL, MOLTEN (UN2312) (DOT) * PHENOL, SOLID (UN1671) (DOT) *
- PHENOL SOLUTIONS (UN2821) (DOT) * RCRA WASTE NUMBER U188 *
- UN1671 (DOT) * UN2312 (DOT) * UN2821 (DOT) *

Company: IBI SCIENTIFIC
9861 Kapp Court
Peosta, IA  52068

Emergency Tele. Number: 3E Company (Acct# 9027) 1-800-451-8346 / (001) 760-602-8703
Company Tele. Number: 1-800-253-4942 / (001) 563-690-0484
E-Mail Address: info@ibisci.com

2. HAZARDOUS IDENTIFICATION

GHS – Classification

Classification:
- Skin Corrosion/Irritation 1B Serious Eye Damage/Irritant 1 Acute Toxicity Inhalation 3
- Acute Toxicity Dermal 3 Acute Toxicity Oral 4 Germ Cell Mutagenicity 2 Specific
- Target Organ Toxicity (repeated) 2 Aquatic Hazard (acute) 3

Signal Word: Danger

Hazard Statements:
- H302-Harmful if swallowed * H311-Toxic in contact with skin * H331-Toxic if inhaled
- * H314-Causes severe skin burns and eye damage * H341-Suspected of causing genetic *
- H371-May cause damage to organs (acute) * H373-May cause damage to organs through prolonged or repeated exposure * H402-Harmful to aquatic life.
Precautionary Statements: P202-Do not handle until all safety precautions have been read and understood * P210-Keep away from heat/sparks/open flames/hot surfaces – No smoking * P260-Do not breathe dust/fume/gas/mist/vapors/spray * P280-Wear protective gloves/protective clothing/eye protection/face protection * P309+P311-If exposed or you feel unwell: Call a Poison Center or doctor/physician.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name: Phenol, pure
EC No.: EEC No. 203-632-7
REACH Reg. No.: Not Available
CAS No.: 108-95-2
Weight %: 95-100
Classification: T; R23/24/25 * C; R34 * Xn; R48/20/21/22 * Mutagen Cat. 3; R68

4. FIRST AID MEASURES

Eye Contact: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
Skin Contact: For severe burns, immediate medical attention is required. Remove contaminated clothing/shoes immediately. Blot from skin to avoid further spread. Rapid decontamination is critical. Immediately wash off with plenty of water, then with polyethylene glycol (PEG) solution and plenty of water. Apply PEG/EtOH solution liberally to affected area. Leave for 15-30 seconds, then water with water. Continue cycle of PEG/EtOH solution – water for at least 15 minutes. (PEG/EtOH solution consists of 2 parts polyethylene glycol 400 to 1 part ethanol. For external use only.) Wash off with soap and water. Obtain medical attention. Wash contaminated clothing before use.
Inhalation: Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.
Ingestion: Immediate medical attention is required. Never give anything by mouth to an unconscious person.
Notes to Physician: Treat symptomatically.
Protection of First-Aiders: Use personal protective equipment. Avoid contact with skin, eyes, and clothing. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation.

5. FIRE FIGHTING MEASURES

Flammable Properties: Flammable when in liquid form
Flash Point: 79°C
Suitable Extinguishing Media: Dry chemical, CO₂, water spray, alcohol-resistant foam
Hazardous Combustion Products: Carbon oxides
Explosion Data
Sensitivity to Mechanical Impact: Not sensitive
Sensitivity to Static Discharge: Not sensitive
Specific Hazard Arising from the Chemical: Use water spray to cool fire-exposed containers
Protective Equip. & Precautions for Firefighters: As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equiv.) and full protective gear.
6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Avoid contact with skin, eyes, and clothing. Use personal protective equipment. Ensure adequate ventilation. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.

Methods for Containment: Prevent further leakage or spillage, if safe to do so.

Methods for Cleaning Up: Avoid dust formation. Pick up and transfer to properly labeled containers. Ventilate area and wash spill site after material pickup is complete.

7. HANDLING AND STORAGE


Storage: Keep container tightly closed in a dry, cool, and well-ventilated place. Hygroscopic. Protect from light. Keep away from heat and sources of ignition.


8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Chemical Name: Phenol, pure - #108-95-2
ACGIH TLV: TWA: 5ppm
OSHA PEL: TWA: 5ppm * TWA: 19mg/m³
NIOSH IDLH: IDLH: 250ppm * Ceiling: 15.6 * Ceiling: 60mg/m³ * TWA: 5ppm * TWA: 19mg/m³

Engineering Measures: Showers, Eyewash Stations, Ventilation Systems

Personal Protective Equipment
Eye/Face Protection: Safety glasses with slide-shields.
Skin & Body Protection: Wear protective gloves/clothing.
Respiratory Protection: If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: White
Odor: Phenolic medicinal sweetish odor
Odor Threshold: No information available
Decomposition Temp. °C: No information available
Freezing Point: No information available
Initial Boiling Point: No information available
Physical State: Solid
pH: <6.0
Flash Point: 79°C
Method: Closed cup
Flammable Properties: Flammable when in liquid form
Autoignition Temp. °C: 715°C / 1319°F
Boiling Point/Range: 182°C / 360°F
Melting Point/Range: 39-41°C / 102-106°F
Flammability Limits (Air): Upper-1.3 * Lower-8.6
Explosive Properties: No information available
Oxidizing Properties: No information available
Evaporation Rate: No information available
MMHG @ 37.8°C: No data available
Vapor Density: No data available
Specific Gravity: No data available
Density: 3.24
Solubility: No information available
Partition Coefficient (n-octanol/water): No data available
Viscosity: No information available

10. STABILITY AND REACTIVITY
Stability:
Stable under recommended storage conditions. Unstable if heated.
Incompatible Products:
Sodium nitrite. Moisture. Formaldehyde.
Conditions to Avoid:
Hazardous Decomposition Products:
Carbon oxides. May emit toxic fumes under fire conditions.
Hazardous Polymerization:
Hazardous polymerization does not occur.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity
Product Information: Highly toxic. Corrosive, causes burns.
Chemical Name: Phenol, pure - #108-95-2
LD50 Oral: 317mg/kg (Rat)
LD50 Dermal: 630mg/kg (Rabbit)
LC50 Inhalation: 316mg/m³ (Rat) 4h

Chronic Toxicity
Chronic Toxicity: Suspected mutagen.
Target Organ Effects: Liver, Kidneys, Central nervous system (CNS).

12. ECOLOGICAL INFORMATION
Ecotoxicity:
Toxic to aquatic organisms
Chemical Name: Phenol, pure - #108-95-2
Toxicity to Algae:
EC50 = 187-279mg/L (72h)
EC50 = 46.42mg/L (96h)
EC50 = 0.0188 -0.1044mg/L (96h)
LC50 = 20.5-25.6mg/L Pimephales promelas (96h)
LC50 = 23.4-36.6mg/L Oryzias latipes (96h)
LC50 = 33.9-43.3mg/L Oryzias latipes (96h)
LC50 = 34.09-47.64mg/L Poecilia reticulate (96h)
LC50 = 5.0-12.0mg/L Oncorhynchus mykiss (96h)
LC50 = 0.00175mg/L Cyprinus carpio (96h)
LC50 = 13.5mg/L Lepomis macrochirus (96h)
LC50 = 27.8mg/L Brachydanio rerio (96h)
LC50 = 4.23-7.49mg/L Oncorhynchus mykiss (96h)
LC50 = 5.449-6.789mg/L Oncorhynchus mykiss (96h)
LC50 = 7.5-14mg/L Oncorhynchus mykiss (96h)
LC50 = 31mg/L Poecilia reticulate (96h)
LC50 = 32mg/L Pimephales promelas (96h)
LC50 = 11.9-25.3mg/L Lepomis macrochirus (96h)
LC50 = 11.5mg/L Lepomis macrochirus (96h)
LC50 = 11.9-50.5mg/L Pimephales promelas (96h)

Daphnia Magna (Water Flea): LC50 = 13mg/L (48h)
EC50 = 23.0mg/L (48h)

Log Pow 1.47

13. DISPOSAL CONSIDERATIONS

Water Disposal Method: Dispose of material in accordance with all federal, state, and local regulations.
Contaminated Packaging: Dispose of in accordance with all federal, state, and local regulations.

14. TRANSPORT INFORMATION

IATA
UN# UN1671
Proper Shipping Name PHENOL, SOLID
Hazardous Class 6.1
Packing Group II

US DOT
UN# UN1671
Proper Shipping Name PHENOL, SOLID
Hazardous Class 6.1
Packing Group II

15. TOXICOLOGICAL INFORMATION

REACH Title VII Restrictions

Chemical Name: Phenol, pure - #108-95-2
Dangerous Substances: >=0.1% (weight)
Organic Solvents: Not applicable
Harmful Substances Whose Names are to be indicated on the Label: Not applicable
Pollution Release and Transfer Registry (Css II): Not applicable
Pollution Release and Transfer Registry (Class I): Not applicable
Poison and Deleterious Substances Control Law: Not applicable
ISHA – Harmful Substances Prohibited for Manufacturing, Importing, Transferring, or Supplying: Not applicable
ISHA – Harmful Substances Requiring Permission: Not applicable
Toxic Chemical Classification Listing (TCCL): 97-1-332, 5% or more in mixtures
Toxic Release Inventory (TRI) – Group I: Not applicable
Toxic Release Inventory (TRI) – Group II: >=1.0%

International Inventories

TSCA: Complies
EINECS/ELINCS: Complies
ENCS: Complies
IECSC: Complies
KECL: Does not complies
PICCS: Complies
AICS: Complies
SAFETY DATA SHEET
IB05160 & IB05164 - PHENOL, SOLID

U.S. Federal Regulations
SARA 313
Section 313 of Title III of the superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical/chemicals which are subject to the reporting requirements of the Act & Title 40 of the Code of Federal Regulations, part 372.

Chemical Name: Phenol, pure - #108-95-2
Weight (%): 95 - 100
SARA 313 – Threshold (%): 1.0

SARA 311/312 Hazard Categories
Acute Health Hazard Yes
Chronic Health Hazard Yes
Fire Hazard No
Sudden Release of Pressure Hazard No
Reactive Hazard No

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

Chemical Name: Phenol, pure - #108-95-2
CWA - RQs: -
CWA – Toxic Pollutants: -
CWA - Priority Pollutants: -
CWA – Hazardous Substance: X

Clean Air Act
This product contains the following substances which are listed hazardous air pollutants (HAPS) under Section 112 of the Clean Air Act.

Chemical Name: Phenol, pure - #108-95-2
Weight (%): 95 - 100
HAPS data: Present
VOC Chemicals: Group III
Class 1 Ozone Depleters: -
Class 2 Ozone Depleters: -

CERCLA
Chemical Name: Phenol, pure - #108-95-2
Hazardous Substances RQs 1000lbs
Extremely Hazardous Sub. RQs: 1000lbs

U.S. State Regulations
California Proposition 65
This product does not contain any Proposition 65 chemicals.

State
Massachusetts X
New Jersey X
Pennsylvania X
Illinois
Rhode Island X

International Regulations
Mexico
Chemical Name: Phenol, pure - #108-95-2
Carcinogen Status: -
Exposure Limits: Mexico: TWA = 5ppm
Mexico: TWA = 19mg/m³

Canada
WHMIS Hazard Class
D1A – Very Toxic materials
D1B – Toxic materials
E – Corrosive materials

16. OTHER INFORMATION

Issuing Date: 2-Jan-1998
Revision Date: 21-May-2015
Revision Note: From MSDS to SDS
Recommended Restrictions: No information available
Disclaimer: The information provided on this SDS 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 guide for safe handling, use, processing, storage, transportation, disposal, and release; & is not to be considered as 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 material or in any process, unless specified in the test.

End of Safety Data Sheet