G.J. CHEMICAL COMPANY, INC. SAFETY DATA SHEET

1. PRODUCT IDENTIFIER

1.1 PRODUCT NAME:--------> Phenol 1.2% Water Solution

PRODUCT NUMBER(S):-----> 230200

TRADE NAMES/SYNONYMS:-> Hydroxybenzene

1.2 RELEVANT IDENTIFIED USES OF THE SUBSTANCE OR MIXTURE AND USES ADVISED AGAINST
RECOMMENDED USE: Manufacture of substances. Laboratory chemicals, Process solvent
USES ADVISED AGAINST: Use by Consumer.

1.3 DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET

Company: G.J. CHEMICAL CO., INC.
Address: 40 VERONICA AVENUE
SOMERSET, NJ 08873
Telephone: 1-973-589-1450
Fax: 1-973-589-3072

1.4 Emergency Telephone Number
Emergency Phone: 1-800-424-9300 (CHEMTREC)

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29CFR 1910
Acute toxicity, Oral (Category 3), H301
Acute toxicity, Inhalation (Category 3), H331
Acute toxicity, Dermal (Category 3), H311
Skin corrosion (Category 1B), H314
Serious eye damage (Category 1), H318
Germ cell mutagenicity (Category 2), H341
Specific target organ toxicity - repeated exposure (Category 2), H373
Acute aquatic toxicity (Category 3), H402
Chronic aquatic toxicity (Category 2), H411

2.2 GHS Label elements, including precautionary statements

Pictogram

GHS06 GHS08 GHS05 GHS09

Signal word DANGER

Hazard statement(s):
H301 + H311 + H331 Toxic if swallowed, in contact with skin or if inhaled
H314 Causes severe skin burns and eye damage.
H318 Causes serious eye damage
H341 Suspected of causing genetic defects.
H373 May cause damage to organs through prolonged or repeated exposure.
H402 Harmful to aquatic life.
H411 Toxic to aquatic life with long lasting effects.

Precautionary statement(s)
Prevention:
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P260 Do not breathe dust/ fume/ gas/ mist/ vapors/ spray.
P264 Wash skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
P273 Avoid release to the environment.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
Response:
P301 + P310 + P330 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Rinse mouth.
P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor/ physician.
P305 + P351 + P338 + P310 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.
P308 + P313 IF exposed or concerned: Get medical advice/ attention.
P362 Take off contaminated clothing and wash before reuse.
P391 Collect spillage.
Storage:
P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
P405 Store locked up.

Disposal:
P501 Dispose of contents/ container to an approved waste disposal plant.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS
Vesicant. Rapidly absorbed through skin.

3. INGREDIENTS

3.1 SUBSTANCE: Not applicable
3.2 MIXTURE:

Ingredient	CAS No.	% by WT. Range	CLASSIFICATION
Water	7732-18-5	98.7-98.9	Not a hazardous substance or mixture.
	EC-No.231-791-2		
Phenol	108-95-2	1.1-1.3	Acute toxicity, Oral (Category 4), H301
	EC-No.203-632-7		Acute toxicity, Inhalation (Category 3), H331
	Index-No.604-001-00-2		Acute toxicity, Dermal (Category 3), H311
Reg.-No. 01-2119471329-32-XXXX			Skin corrosion (Category 1B), H314
			Serious eye damage (Category 1), H318
			Germ cell mutagenicity (Category 2), H341
			STOT-RE (Category 2), H373
			Acute aquatic toxicity (Category 3), H402
			Chronic aquatic toxicity (Category 2), H411

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4. FIRST-AID MEASURES

4.1 DESCRIPTION OF FIRST AID MEASURES:

INHALATION: PHENOL 1.2% SOLUTION
***FIRST AID*- Remove from exposure to fresh air, restore breathing use oxygen if needed. Keep warm and quiet. Immediately notify a physician.**

EYE CONTACT (Splash): PHENOL 1.2% SOLUTION
***FIRST AID*- Immediately flush eyes with water for 15 minutes. Hold eyelids open for complete irrigation. Remove contact lenses, if worn, after initial flush. Continue rinsing eyes during transport to hospital. Immediately take to a physician.**

SKIN CONTACT (Splash): PHENOL 1.2% SOLUTION
***FIRST AID*- Immediately remove contaminated clothing form patient. Remove phenol with polyethylene glycol 300 or 400 or soap and**

water. Continue washing with soap and water or deluge quantities of water for at least 15 minutes. Get medical attention.

INGESTION: PHENOL 1.2% SOLUTION

***FIRST AID*- Do NOT induce vomiting of conscious patient. Never give anything by mouth to an unconscious person. Consult a physician or poison control center, treat symptomatically.**

4.2 MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED:

Eye: Exerts a strong corrosive action. May cause corneal damage;

Skin: Toxic if absorbed through skin. A serious burn or poisoning may occur if the chemical is not removed promptly; Phenol absorbed through the skin may cause collapse or sudden death.

Inhalation: Toxic if inhaled. Irritation of the respiratory tract.

Ingestion: Toxic if swallowed. Causes burning of the mouth and throat followed by abdominal pain and distress.

Chronic: Chronic poisoning, following prolonged exposures to low concentrations of phenol vapors or mists, may result in digestive disturbances, nervous disorders and skin eruption. Chronic poisoning can cause damage to the kidneys or liver and may be fatal. Lethal oral doses of phenol for adults have ranged from 1 to 10 gm. Cyanosis, muscular weakness, and collapse may occur within a few minutes after ingestion. Tremors and convulsions are occasionally observed.

Medical Conditions Aggravated by Exposure: Skin contact may aggravate an existing dermatitis.

4.3 INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED:

Notes to Physician: In cases of phenol ingestion, careful gastric lavage or induction of emesis is desirable to reduce systemic absorption. However it is contraindicated if corrosion or esophageal injury has occurred. If no esophageal injury is present, emesis may be induced by syrup of ipecac if activated charcoal or demulcents have not been given by rescue personnel.

Activated charcoal should precede gastric lavage. If charcoal is not available, gastric lavage using olive or salad oil is recommended. Follow gastric lavage with 60ml of castor oil to dissolve phenol and retard its absorption. Then follow with 30-60 ml of Fleets Phospho-Soda diluted 1:4 in water as a cathartic.

Systemic Problems:

(a) Shock may occur but should be treated conservatively because of uncertain cardiac or renal status. Only severe circulatory collapse should be treated with intravenous infusions.

(b) Watch for development of pulmonary edema.

(c) Morphine or Demerol may be used for pain.

(d) External heat in moderation may be beneficial to maintain body temperature.

5. FIRE FIGHTING MEASURES

Flash Point: N.E. **LEL %:N.E.**

Auto-ignition Temp: 715°C (1319°F) for Phenol 100% UEL %:N.E.

5.1 SUITABLE EXTINGUISHING MEDIA: Foam--> x CO_2--> x Dry Chemical--> x Water-fog--> x Other-->

Unsuitable extinguishing media: Do not use waterjet.

5.2 SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE: VAPORS MAY BE COMBUSTIBLE. Keep containers tightly closed. Isolate from all sources of ignition. Closed containers may explode when exposed to extreme heat.

CONDITIONS OF FLAMMABILITY: Flammable in the presence of a source of ignition when the temperature is above the flash point.

HAZARDOUS COMBUSTION PRODUCTS: Highly dependent on combustion conditions. A complex mixture of airborne solids, liquids, and gases including carbon monoxide, carbon dioxide, carbon oxides and other unidentified organic compounds evolve when this material undergoes combustion.

5.3 ADVICE FOR FIREFIGHTERS: Keep unnecessary people away; isolate hazard area and deny entry. Avoid breathing vapors, stay upwind. Do not enter fire area without structural fire fighter's protective equipment including NIOSH/MSHA approved self-contained breathing apparatus (SCBA) in positive pressure mode. Use water spray to knock down vapors. Use halon, carbon dioxide extinguisher or dry powder for small fires. Large fires are best controlled by alcohol foam, fog, and water spray. Move container from fire area if you can do it without risk. Apply cooling water to sides of containers that are exposed to flames until well after fire is out. Stay away from ends of tanks. For massive fire in cargo area, use unmanned hose holder or monitor nozzles; if this is impossible, withdraw from area and let fire burn. Withdraw immediately in case of rising sound from venting safety device or any discoloration of tank due to fire. Isolate for 1/2 mile in all directions if tank, rail car or tank truck is involved in fire (1990 Emergency Response Guidebook, DOT P 1800.5, guide page 26). Extinguish only if fire can be stopped. Use flooding amounts of water as a fog; solid streams may be ineffective. Cool containers with flooding amounts of water from as far a distance as possible. Avoid breathing vapors; keep upwind. If fire is uncontrollable or containers are exposed to direct flame, water may be ineffective (NFPA 325M, Fire Hazard Properties of Flammable Liquids, Gases, and Volatile Solids, 1991). Fire fighters should wear full protective clothing and NIOSH/MSHA approved self-contained breathing apparatus (SCBA) with full face-piece operated in the pressure demand or other positive pressure mode. Water may be used to flush spills away from exposures and to dilute spills to non-flammable mixtures. Do Not Use: Water in straight hose stream will scatter and spread fire and should not be used. Caution! Water containing Phenol can also cause burns to personnel.

6. ACCIDENTAL RELEASE MEASURES

6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES: Eliminate heat and ignition sources in the vicinity of the spill or released vapor. Highly toxic, do not touch spilled material. Immediately evacuate all nonessential people. Verify that responders are properly trained and wearing appropriate respiratory equipment and fire resistant protective clothing during cleanup operations. For large spills evacuate downwind areas as conditions warrant to prevent exposure and to allow vapors or fumes to dissipate. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.

6.2 ENVIRONMENTAL PRECAUTIONS:
Keep out of water sources, drains and sewers. Do not flush into surface water or sanitary sewer system.

6.3 METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING UP:
Methods for cleanup and containment:
Use explosion proof equipment. Shut off valves, contain spill, keep out of water sources and sewers, for smaller spills add non-flammable absorbent in spill area. For large spills use foam on spill to minimize vapors clean up by vacuuming then using non-flammable absorbent.
Methods for disposal:
Place all saturated absorbent, using non-sparking tools, in an approved container for disposal. Minimize breathing vapors and skin contact, ventilate confined areas, open all windows and doors, assure conformity with applicable government regulations. Spills of Phenol solution should be reported to appropriate Federal, State and Local Environmental Agencies.

REPORTABLE QUANTITY (RQ):
Phenol - 1000 POUNDS; Phenol 1.2 % Solution - 83333lbs.
The Superfund Amendments and Reauthorization Act (SARA) Section 304 requires that a release equal to or greater than the reportable quantity for this substance be immediately reported to the local emergency planning committee and the state emergency response commission (40 CFR 355.40). If the release of this substance is reportable under CERCLA Section 103, the national response center must be notified immediately at (800) 424-8882 or (202) 426-2675 in the metropolitan Washington, D. C. area (40 CFR 302.6).

6.4 REFERENCE TO OTHER SECTIONS: See Sections 8 and 13.

7. HANDLING AND STORAGE

7.1 PRECAUTIONS FOR SAFE HANDLING: Liquid quickly evaporates and forms vapor (fumes), which can catch fire and burn with explosive violence. Invisible vapor spreads easily and can be set on fire by many sources, such as pilot lights, welding equipment, and electrical motors and switches. Shut off valves, contain spill, keep out of water sources and sewers, add absorbent in spill area. Minimize breathing vapors and skin contact, ventilate confined areas, open all windows and doors, assure conformity with applicable government regulations.

Keep all nonessential people away. Highly toxic, do not touch spilled material.

Avoid contact with skin and eyes. Avoid inhalation of vapor or mist. Avoid work practices that may release volatile components in the atmosphere. Avoid contaminating soil or releasing material into sewage and drainage systems. Use non-sparking tools to open or close containers.

Advice on general occupational hygiene:
Wash hands before breaks and after work. Keep away from food, drink and animal feeding stuffs. When using do not smoke.

STATIC HAZARD: Electrostatic charge may accumulate and create a hazardous condition when handling this material. To minimize this hazard, bonding and grounding may be necessary but may not be sufficient. For more information refer to OSHA Standard 29CFR 1910.106 "Flammable and Combustible Liquids" and National Fire Protection Association (NFPA 77) "Recommended Practice on Static Electricity".

7.2 CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES:
Follow maximum allowed pile heights specified in the BOCA codes or the NFPA manual. Local fire authorities should be notified for storage of this material in any quantity. Local permits are required for storage in warehouse quantities. Recommended storage temperature: 15 - 25°C. Store large quantities only in cool, dry areas in buildings designed to comply with OSHA 1910.106. Keep containers tight and upright to prevent leakage. Do not contact with oxidizing materials. Keep containers closed when not in use. Do not take internally. Storage class (TRGS 510): 6.1B: Non-combustible, acute toxic Cat. 1 and 2 / very toxic hazardous materials

CONTAINER WARNINGS: Metal containers should be Bonded and Grounded when pouring. Avoid free fall of liquid in excess of a few inches. Empty containers release residue and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, or expose such containers to heat, sparks, static electricity or other sources of ignition. Do not attempt to clean. "Empty" drums should be completely drained, properly bunged and promptly returned to a drum re-conditioner.

7.3 SPECIFIC END USES: Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

8. EXPOSURE CONTROL (PERSONAL PROTECTION)

8.1 CONTROL PARAMETERS:

Ingredient	CAS No.	% by WT. Range	Exposure Limits
Water	7732-18-5 EC-No.231-791-2	98.7-98.9	N.E.

Phenol	**108-95-2**	**1.1-1.3**	**5ppm TWA (ACGIH)**
	EC-No.203-632-7		**5ppm TWA (OSHA Z-1)**
	Index-No.604-001-00-2		**5ppm TWA (NIOSH)**
	Reg.-No. 01-2119471329-32-XXXX		**15.6ppm Ceiling (NIOSH)**

Key: **(PEL) = Permissible Exposure Limit OSHA**
(TLV) = Threshold Limit Value OSHA & ACGIH
(STEL) = Short Term Exposure Limit ACGIH
(WEEL) = USA. Workplace Environmental Exposure Levels
(TWA) = Time Weighted Average
CAS = Chemical Abstracts Registry Number
IDLH = Immediate Danger to Life and Health
N.E. =None Established

8.2 EXPOSURE CONTROLS

EXPOSURE GUIDELINES: Consider the potential hazards of this material (Section 2), applicable exposure limits, job activities, and other substances in the work place when designing engineering controls and selecting personal protective equipment. If engineering controls or work practices are not adequate to prevent exposure to harmful levels of this material, the personal protective equipment listed below is recommended.

ENGINEERING CONTROLS: Provide general dilution or local exhaust ventilation in volume and pattern to keep concentrations within permitted exposure limits. All areas should be ventilated in accordance with OSHA Regulation 29 CFR Part 1910. Explosion proof motors should be used in mechanical ventilation.

RESPIRATORY PROTECTION: The specific respirator selected must be based on contamination levels found in the work place, must not exceed the working limits of the respirator and be jointly approved by the National Institute for Occupational Safety and Health and the Mine Safety and Health Administration (NIOSH-MSHA):

Exposure from 5 to <50ppm; use NIOSH/MSHA approved chemical cartridge respirator with organic cartridge with a dust and mist filter. For exposure 50 to <100ppm; use NIOSH/MSHA approved full face respirator with organic vapor canister with dust and mist filter. For exposure 100ppm and above; use NIOSH/MSHA approved positive pressure self-contained respiratory protection, (SCBA) demand type.

BODY CLOTHING: Employee must wear appropriate protective (impervious) clothing and equipment to prevent repeated or prolonged contact with this substance. Use chemical resistant apron or other impervious clothing. Remove and wash contaminated clothing before reuse.

SKIN PROTECTION: Employee must wear appropriate protective gloves to prevent contact with this substance. Butyl Rubber chemical resistant gloves.

HYGIENE: Use good personal hygiene practices, wash hands before eating, drinking, smoking or using toilet facilities.

EYE/FACE PROTECTION: Use safety eyewear with splash-guards or face shield. Contact lenses should not be worn.
Emergency shower and eyewash should be easily accessible to the work area.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES:

Phenol 1.2% solution
Appearance----------> Clear liquid
Color----------> Colorless
Odor----------> Mild odor
Odor Threshold---------- > No data available
pH---------- > No data available
Molecular Weight---------- > No data available
Melting/Freezing Point----------> No data available
Boiling Range ----------> 100°C (212°F)
Specific Gravity---------- > 0.996 @20°C (68°F)
Vapor Pressure---------- > 17.1mmHg@20°C (68°F)
Vapor Density (air=1)----------> 2.6
Water Solubility---------- > Soluble
Partition Coefficient n-Octanol/Water- > No data available
Evaporation Rate (Butyl Acetate=1)----> 0.355
Flash Point----------> No data available
Upper Flammability Limit----------> No data available
Lower Flammability Limit----------> No data available
Auto-Ignition Temperature----------> 715°C (1319°F) for Phenol 100%
Decomposition Temperature----------> No data available
Viscosity----------> No data available

Explosive Properties----------> No data available
Oxidizing Properties----------> No data available

9.2 Other Information: No data Available

10. STABILITY AND REACTIVITY INFORMATION

10.1 REACTIVITY: No data available.

10.2 CHEMICAL STABILITY: Unstable ( ) Stable (X)

10.3 POSSIBILITY OF HAZARDOUS REACTIONS: No data available

HAZARDOUS POLYMERIZATION: May occur ( ) Will not occur (X)

10.4 CONDITIONS TO AVOID: Heat, Sparks, Pilot Lights, Static Electricity, and Open Flame.

10.5 INCOMPATIBLE MATERIALS: Strong oxidizing agents, isocyanates, acetaldehyde, calcium hypochlorite, peroxomonosulfuric acid, nitrobenzene, sodium nitrite, aluminum chloride, peroxydisulfuric acid, 1,3-butadiene, boron trifluoride diethyl ether. Hot phenol solution is discolored. The discoloration of Phenol solution is catalyzed by iron and copper or copper alloys.

10.6 HAZARDOUS DECOMPOSITION PRODUCTS: Fumes, Smoke, Carbon Monoxide, Aldehydes and other decomposition products where combustion is not complete.

11. TOXICOLOGICAL INFORMATION

11.1 INFORMATION ON TOXICOLOGICAL EFFECTS:

Routes of Entry: Inhalation--> x Skin--> x Ingestion--> x Eye--> x

ACUTE HEALTH EFFECTS:

Effects of overexposure:

Eye> Exerts a strong corrosive action. May cause corneal damage;

Skin> Toxic if absorbed through skin. A serious burn or poisoning may occur if the chemical is not removed promptly; Phenol absorbed through the skin may cause collapse or sudden death.

Inhalation> Toxic if inhaled. Irritation of the respiratory tract.

Ingestion> Toxic if swallowed. Causes burning of the mouth and throat followed by abdominal pain and distress.

Chronic: Chronic poisoning, following prolonged exposures to low concentrations of phenol vapors or mists, may result in digestive disturbances, nervous disorders and skin eruption. Chronic poisoning can cause damage to the kidneys or liver and may be fatal. Lethal oral doses of phenol for adults have ranged from 1 to 10 gm. Cyanosis, muscular weakness, and collapse may occur within a few minutes after ingestion. Tremors and convulsions are occasionally observed.

Medical Conditions Aggravated by Exposure> Skin contact may aggravate an existing dermatitis.

ACUTE TOXICITY:

The effects of overexposure shown in Section III are based on acute toxicity profiles. Typical values are:

Ingredient	Oral LD50 (Rat)	Skin LD50(Rabbit)	Inhalation LC50

Phenol	317mg/kg	630mg/kg	900mg/m^3/8hr
Water	90ml/kg		

The Following data are for pure Phenol:

SKIN CORROSION/IRRITATION: Skin - Rabbit Result: Severe skin irritation - 24 h

SERIOUS EYE DAMAGE/EYE IRRITATION: Eyes - Rabbit Result: Corrosive (OECD Test Guideline 405)

RESPIRATORY OR SKIN SENSITIZATION: No data available.

MUTAGENIC EFFECTS: Phenol has been found to be mutagenic in some vitro assays. Germ cell mutagenicity: In vitro tests showed mutagenic effects

CARCINOGEN STATUS- Phenol This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP, or EPA classification.
IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
OSHA: No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

REPRODUCTIVE TOXICITY: No data available.
Specific target organ toxicity - single exposure (Globally Harmonized System)
No data available
Specific target organ toxicity - repeated exposure (Globally Harmonized System)
May cause damage to organs through prolonged or repeated exposure.

ASPIRATION HAZARD: No data available

11.2 ADDITIONAL INFORMATION: Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., spasm, inflammation and edema of the larynx, spasm, inflammation and edema of the bronchi, pneumonitis, pulmonary edema, burning sensation, Cough, wheezing, laryngitis, Shortness of breath, Headache, Nausea, Vomiting, Circulatory collapse, tachypnea, paralysis, Convulsions, Coma., necrosis of mouth and G.I. Tract, Jaundice, respiratory failure, cardiac arrest

12. ECOLOGICAL INFORMATION

The Following data are for pure Phenol:

DANGEROUS TO AQUATIC LIFE IN HIGH CONCENTRATIONS
May be dangerous if it enters water intakes.
Notify local health and pollution control officials.
Notify operators of nearby water intakes.

12.1 AQUATIC TOXICITY:
Toxicity to fish:

LC50 - Leuciscus idus (Golden orfe) - 14.00 - 25.00 mg/l - 48 h
LC50 - Carassius auratus (goldfish) - 36.10 - 68.80 mg/l - 96 h

Toxicity to daphnia and other aquatic invertebrates:
EC50 - Daphnia magna (Water flea) - 56.00 mg/l - 48 h
and other aquatic invertebrates

Toxicity to algae:
EC50 - Chlorella vulgaris (Fresh water algae) - 370.00 mg/l - 96 h

12.2 PERSISTANCE AND DEGRADABILITY: Biodegradation: >99.5% in 7 days. Readily Biodegradable.

12.3 BIOACCUMULATIVE POTENTIAL: Danio rerio (zebra fish) - 5 h - 2 mg/l; Does not bio-accumulate.
Biochemical Oxygen Demand (BOD lb./lb.; acclimated bacteria): 1.68
Bio-concentration Factor (BCF): 17.5
Chemical Oxygen Demand: Chemical Oxygen Demand: (COD, lb./lb.): 2.38(theoretical)

12.4 MOBILITY IN SOIL: No data available.

12.5 RESULTS OF PBT AND vPvB:
PBT assessment results: This substance is not classified as PBT or vPvB.

12.6 OTHER ADVERSE EFFECTS: Toxic to aquatic life with long lasting effects.

13. DISPOSAL CONSIDERATIONS

13.1 WASTE TREATMENT METHODS: Hazard characteristic and regulatory waste stream classification can change with product use. Accordingly it is the responsibility of the user to determine the proper storage, transportation, treatment and or disposal methodologies for spent materials and residues at time of disposition. Dispose in accordance with all applicable disposal regulations. Incinerate under controlled conditions in a permitted facility.

CONTAMINATED PACKAGING: Dispose of as unused product

The information offered here is for the product as shipped. Use and/or alterations to the product such as mixing with other materials may significantly change the characteristics of the material and alter the RCRA classification and the proper disposal method.
RCRA: The unused product is a RCRA hazardous waste if discarded. The RCRA ID number is: Phenol - U188.
If the waste is a spent solvent, the appropriate spent solvent code should be

used.
DISPOSAL MUST BE IN ACCORDANCE WITH STANDARDS APPLICABLE TO GENERATORS OF HAZARDOUS WASTE, 48 CFR 262

14. TRANSPORT INFORMATION

Land Transport (DOT)
14.1 USDOT ID Number----------> UN2821
14.2 USDOT Shipping Name----------> Phenol Solution
14.3 USDOT Hazard Classification-------> 6.1, Poison
USDOT Label Codes----------> 6.1
14.4 USDOT Package Code----------> III
14.5 Marine Pollutant----------> No
14.6 Special precautions for user--------> Yes
Emergency Response Guide--------> 153
Reportable quantity----------> 83333lbs. – Solution

Sea Transport (IMDG)
14.1 ID Number----------> UN2821
14.2 Proper shipping name----------> PHENOL SOLUTION
14.3 Hazard Classification----------> 6.1, Poison
Label Codes----------> 6.1
14.4 Package Code----------> III
14.5 Marine Pollutant----------> Yes
14.6 Special precautions for user----------> Yes
EMS-Number----------> F-A, S-A

Air Transport (IATA)
14.1 ID Number----------> UN2821
14.2 Proper shipping name----------> Phenol Solution
14.3 Hazard Classification----------> 6.1, Poison
Label Codes----------> 6.1
14.4 Package Code----------> III
14.5 Environmental hazard----------> No
14.6 Special precautions for user----------> Yes

15. REGULATORY INFORMATION

15.1 SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS/LEGISLATION SPECIFIC FOR THE SUBSTANCE OR MIXTURE:

SARA TITLE III (Superfund Amendment and Reauthorization Act)

SECTION 302 AND 304: Extremely Hazardous Substance List (40 CFR 355) – Listed: Phenol CAS 108-95-2; 500lb lower threshold TPQ, 10000lb upper threshold TPQ
SECTION 313: Toxic Chemicals Listing (40 CFR 372.65) - Listed
Phenol CAS 108-95-2
SECTION 311/312: Hazard Categorization (40 CFR 370) - Acute Health Hazard, Chronic Health Hazard

CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act)
SECTION 102(A) Hazardous Substances (40 CFR 302.4) - Listed
Phenol CAS 108-95-2 Reportable Quantity: Phenol 100% - 1000lbs. Phenol 1.2% Solution - 83333lbs.
SECTION 101(14) Reportable Quantity: Phenol 100% - 1,000lbs. Phenol 1.2% Solution – 83333lbs.

Massachusetts Right to Know Components
Phenol CAS-No. 108-95-2

Pennsylvania Right to Know Components
Phenol CAS-No. 108-95-2
Water 7732-18-5

New Jersey Right to Know Components
Phenol CAS-No. 108-95-2
Water 7732-18-5

California Prop. 65 Components
This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

TSCA (Toxic Substance Control Act)
Phenol CAS-No. 108-95-2 and Water CAS 7732-18-5 are listed on the TSCA Inventory.

15.2 CHEMICAL SAFETY ASSESSMENT: A chemical safety assessment has not been carried out for this mixture.

16. OTHER INFORMATION:

HMIS (Hazardous Materials Identification System)

Hazard Rating:
4-Extreme
3-High

2-Moderate
1-Slight
0-Insignificant

NFPA RATINGS (SCALE 0-4): Health=3 Fire=2 Reactivity=0
HMIS RATINGS (SCALE 0-4) Health=3 Fire=2 Reactivity=0 PPE=J

Hazard statement(s) from Section 2 and 3:
H301 + H311 + H331 Toxic if swallowed, in contact with skin or if inhaled
H314 Causes severe skin burns and eye damage.
H318 Causes serious eye damage
H341 Suspected of causing genetic defects.
H373 May cause damage to organs through prolonged or repeated exposure.
H402 Harmful to aquatic life.
H411 Toxic to aquatic life with long lasting effects.

Date of preparation--------> March 11, 1996
Revision Number----------> 1.6
Revision Content----------> General update all sections
Revision Date----------> November 5, 2018
Prepared by----------> T.G. Fenstermaker, Jr.

Acronyms:

ACGIH - American Conference of Governmental Industrial Hygenists
AIHA - American Industrial Hygiene Association
ANSI - American Nation Standards Institute
API - American Petroleum Institute
CERCLA - Comprehensive Emergency Response, Compensation, and Liability Act
DOT - U.S. Department of Transportation
EC-50 - Effective Concentration
EPA - U.S. Environmental Protection Agency
HMIS - Hazardous Materials Information System
IARC - International Agency For Research On Cancer
LD-50 - Lethal Dose
MAK - Germany Maximum Concentration Values
MSHA - Mine Safety and Health Administration
NFPA - National Fire Protection Association
NIOSH - National Institute of Occupational Safety and Health
NOIC - Notice of Intended Change (Proposed change to ACGIH TLV)
NTP - National Toxicology Program
OPA - Oil Pollution Act of 1990
OSHA - U.S. Occupational Safety & Health Administration
PEL - Permissible Exposure Limit (OSHA)
RCRA - Resource Conservation and Recovery Act
REL - Recommended Exposure Limit (NIOSH)
SARA - Superfund Amendments and Reauthorization Act of 1986 Title III
SCBA - Self-Contained Breathing Apparatus
STEL - Short-Term Exposure Limit (generally 15 minutes)
TLV - Threshold Limit Value
TSCA - Toxic Substances Control Act
TWA - Time Weighted Average (8hr.)
WHMIS - Canadian Workplace Hazardous Materials Information System

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