



# P-2 PRESERVATIVE 30% SOLUTION

DATE: 08/22/2006

CAS NO: 59-50-7

SUPERSEDES: 7/21/99

## 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** P-2 PRESERVATIVE 30% Solution  
**SYNONYMS:** Parachlorometacresol  
**CHEMICAL FAMILY:** Aromatic Halogen  
**MOLECULAR FORMULA:** C<sub>7</sub>H<sub>7</sub>ClO  
**MOLECULAR WEIGHT:** 142

VERICHEM, 3499 Grand Avenue, Pittsburgh, PA 15225 (412-331-7299, 8:30 am to 5:00 pm)  
**EMERGENCY PHONE:** For any emergency involving spill, leak, fire, exposure, or accident call  
CHEMTREC: 1-800-424-9300. Outside the USA and Canada call: 703-527-3887.

## 2. COMPOSITION/INFORMATION ON INGREDIENTS REGULATED COMPONENTS

COMPONENT	CAS NUMBER	PERCENT	WORKER EXPOSURE	REFERENCE
Parachlorometacresol	59-50-7	30%	None Established	

## 3. HAZARDS IDENTIFICATION

### EMERGENCY OVERVIEW

**APPEARANCE AND ODOR:** Clear Pale to Dark Yellow Solution  
**EFFECTS OF OVEREXPOSURE:** Corrosive to eyes. May produce skin irritation and sensitization.  
**PHYSICAL/CHEMICAL HAZARDS:** Environmentally hazardous by transportation.

## 4. FIRST AID MEASURES (IN CASE OF CONTACT)

**EYE:** Flush with plenty of water for at least 15 minutes. Consult a physician. **SKIN:** Flush with plenty of water for at least 15 minutes, wash with soap and water. If irritation persists, consult a physician. **INGESTION:** Do not induce vomiting. Call a physician immediately. Never give anything by mouth to an unconscious person. **INHALATION:** No toxic effects expected.

## 5. FIRE FIGHTING MEASURES

### FLAMMABLE PROPERTIES

**FLASH POINT:** Not flammable.  
**FLAMMABLE LIMITS (% BY VOLUME):** Not applicable.  
**AUTOIGNITION TEMPERATURE:** Not applicable.  
**DECOMPOSITION TEMPERATURE:** Not applicable.

### EXTINGUISHING MEDIA AND FIRE FIGHTING INSTRUCTION

In case of fire use water spray, alcohol foam, carbon dioxide, or dry chemicals. Exercise caution when fighting fires involving chemical substances. Respiratory protection is required. Burning will produce toxic fumes. Containers exposed to heat will result in pressure increase in containers. Cool hot containers with cool water.

## 6. ACCIDENTAL RELEASE MEASURES

### STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Immediately dike material to keep away from water sources. Absorb with vermiculite or other suitable absorbent. Discard in accordance with Federal, State, and local regulations. Residual amounts left on surface maybe cleaned with soap and water. Rinse residuals to municipal treatment plant.

## 7. HANDLING AND STORAGE

**HANDLING:** Avoid breathing vapors. Avoid getting in eyes or on skin. Wash thoroughly after handling.  
**STORAGE:** Store in a cool place.

8. **PERSONAL PROTECTION**  
**EYE PROTECTION REQUIREMENTS:** Chemical safety glasses or face shield. **SKIN PROTECTION REQUIREMENTS:** Rubber gloves, long sleeve shirts and pants. **VENTILATION REQUIREMENTS:** Local and general exhaust ventilation to control levels of exposure. **RESPIRATOR REQUIREMENTS:** Air purifying particulate / organic vapor cartridge respirator.
9. **PHYSICAL AND CHEMICAL PROPERTIES**
- |  |                                   |
|--|-----------------------------------|
| APPEARANCE AND ODOR:                   | Clear light yellow to dark brown. |
| BOILING POINT:                         | Similar to water.                 |
| MELTING POINT:                         | Not applicable.                   |
| VAPOR PRESSURE:                        | Unknown.                          |
| SPECIFIC GRAVITY:                      | 1.10 – 1.20                       |
| VAPOR DENSITY:                         | Unknown.                          |
| PERCENT VOLATILE (BY WEIGHT):          | ~60%                              |
| pH:                                    | 11.5 – 12.5                       |
| SATURATION IN AIR (PERCENT BY VOLUME): | Unknown.                          |
| EVAPORATION RATE:                      | Unknown.                          |
| SOLUBILITY IN WATER:                   | Complete.                         |
10. **STABILITY AND REACTIVITY**  
**STABILITY (CONDITIONS TO AVOID):** Stable. **POLYMERIZATION (CONDITIONS TO AVOID):** Not applicable. **INCOMPATIBLE MATERIALS:** Oxidizing material. **HAZARDOUS DECOMPOSITION PRODUCTS:** Thermal decomposition may produce CO, CO<sub>2</sub> and other toxic fumes.
11. **TOXICOLOGICAL INFORMATION**
- ACUTE EFFECTS**  
**EYE:** Corrosive (Rabbits). **KIN CONTACT:** Causes skin burns. **SKIN ABSORPTION:** LD<sub>50</sub> >5000 mg/kg (Rat). **INGESTION:** LD<sub>50</sub> 1830 mg/kg (Rat) (1,2); 1800-5000 mg/kg (Rat); 1449 mg/kg (bobwhite quail). **INHALATION:** LC<sub>50</sub> >704 mg/m<sup>3</sup> – 4 hours of exposure. Inhalation of >704 mg/m<sup>3</sup> caused no deaths (Rats). **SENSITIZATION:** In a patch-test according to the Draize procedure, using induction concentrations of 5-10-20% and a challenge concentration of 5%, none out of 252 total human subjects were sensitized. Repetition of the preceding procedure with 5% induction solution in petrolatum and 5% challenge solution gave no sensitization in 31 humans. By means of maximization test according to Magnusson-Klingman, using 1% induction concentrations by intradermal injection, the following challenge by topical application caused a low degree sensitization in guinea pigs. By means of open epicutaneous test according to Klecak, using induction concentrations of 1-3-10-30% and challenge concentrations of 3-10-30-100%, no indication of sensitizing effects could be found on the skin of female guinea pigs.
- SUBCHRONIC / CHRONIC EFFECTS**  
**TOXICITY:** Wistar rats were administered P-2 Preservative for three months at the following concentrations in their diet: 0-150-500-1500 mg/kg. The dose of 150 mg/kg was tolerated without any effects by males, as were the doses up to and including 1500 mg/kg by the female. **CARCINOGENICITY:** This product is not listed by NTP, IARC or regulated as a carcinogen by OSHA. The EPA has classified Parachlorometacresol as Group D, not classifiable as to human carcinogenicity, by the EPA. **CHROMOSOMES:** This product was tested for mutagenic effects in the Salmonella/Microsome test at doses of up to 12500 ug per plate on four Salmonella/typhimurium. There were no indications of a mutagenic effect of P-2. The number of mutants neither showed a dose-related doubling nor a biologically relevant increase in comparison to the negative controls.
12. **ECOLOGICAL INFORMATION**  
**AQUATIC:** LC50 – 0.5 mg/l/48 hours. (Leuciscus idus); LC50: 1.2 mg/l/48 hours (Leuciscus idus); LC100: 2.0 mg/l/48 hours. (Leuciscus idus); LC50: 1.2 LOEC: 3.2 mg/l – 14 day fish toxicity study (Brachydanio rerio); NOEC: 1.0 mg/l – 14 day fish toxicity study (Brachydanio rerio); ECO: 2.0 mg/l/24 hours (Daphnia magna); EC50: 5.6 mg/l/24 hours (Daphnia magna); EC100: 9.0 mg/l/24 hours (Daphnia magna); EC50: 2.29 mg/l/48 hours (Daphnia magna); LC50: 3.90 mg/l/48 hours (Daphnia magna); NOEC: 1.73 mg/l/48 hours (Daphnia magna); LC50: 917 ug/l/96 hours, rainbow trout (Oncorhynchus mykiss); NOEC: 366 ug/l/96 hours, rainbow trout (Oncorhynchus mykiss) 1 Occupation Health Services (OHS) Material Safety Data Sheet. 2 NIOSH Registry of Toxic Effects of Chemical Substances (RTECS). **AVIAN LIFE:** In an acute oral toxicity study using the bobwhite quail as the test animal, the highest no-observed-effect concentration (NOEC) was 125 mg/kg and the lowest-observed-effect concentration (LOEC) was 250 mg/kg. **BIODEGRADATION:** No information available

13. **DISPOSAL CONSIDERATION**

**ACTION TO TAKE IN THE EVENT OF A SPILL:** Utilize protective clothing and equipment (see Section VII). Spills should be taken up mechanically and placed into labeled, closable containers. Avoid generation of dust. Spill area can be washed with water. Collect wash water for approved disposal. **DISPOSAL METHOD:** Waste disposal should be in accordance with existing federal, state and local environmental regulations. All precautions for full containers must be followed for empty containers when they have been passed on for reconditioning or reuse. The recipient must be advised of the product contents.

14. **TRANSPORT INFORMATION**

This section provides basic shipping classification information. Refer to appropriate transportation regulations for specific requirements.

	D.O.T. Shipping Information	IMO Shipping Information	ICAO/IATA	TRANSPORT CANADA
Shipping Name	Environmentally hazardous substance, liquid, n.o.s.	Not Regulated	Environmentally hazardous substance, liquid, n.o.s.	Not Regulated
Hazard Class	9	Not Regulated	9	
Packing Group	III	Not Regulated	III	
Subsidiary Class	W/N	Not Regulated	W/N	
UN/ID Number	UN 3082	Not Regulated	UN 3082	
Transport Label Required	Class 9	Not Regulated	Class 9	
Packing Instructions Passenger Cargo		Not Regulated	911 No Limit	
Max. Net Quantity Passenger Cargo		Not Regulated	911 No Limit	
D.O.T. Hazardous Substances	4-chloro-m-cresol	Not Regulated		
IMDG Page		Not Regulated		

15. **REGULATORY INFORMATION**

INVENTORY INFORMATION

US TSCA: Yes

CANADA DSL: Yes

EEC EINECS: Yes

OTHER ENVIRONMENTAL INFORMATION

The following components are defined as toxic chemicals subject to reporting requirements of Section 313 of Title III and of 40 CFE 372 or subject to other EPA regulations.

COMPONENT: None

PRODUCT CLASSIFICATION UNDER SECTION 311 OF SARA

ACUTE: (Y) CHRONIC: (Y)

16. **OTHER INFORMATION**

NFPA HAZARD RATING (3) (NATIONAL FIRE PROTECTION ASSOCIATION)

FIRE: 1

HEALTH: 2

REACTIVITY: 0

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