

#### Revision number: 2 Revision date: 10/06/2014

# 1. IDENTIFICATION

Product name: Product code: 2-Benzyl-4-chlorophenol B0812

For laboratory research purposes.

Not for drug or household use.

#### Product use: Restrictions on use:

#### Company:

TCI America 9211 N. Harborgate Street Portland, OR 97203 U.S.A. Telephone: +1-800-423-8616 / +1-503-283-1681 Fax: +1-888-520-1075 / +1-503-283-1987 e-mail: sales-US@TCIchemicals.com www.TCIchemicals.com

# 2. HAZARD(S) IDENTIFICATION

OSHA Haz Com: CFR 1910.1200:

Acute Toxicity - Oral [Category 4] Skin Corrosion/Irritation [Category 2] Eye Damage/Irritation [Category 1] Aquatic Hazard (Acute) [Category 1]

Signal word:

Danger!

Hazard Statement(s):

Causes serious eye damage Causes skin irritation Harmful if swallowed Very toxic to aquatic life

#### Pictogram(s) or Symbol(s):



Precautionary Statement(s): [Prevention]

[Response]

[Storage] [Disposal] Do not eat, drink or smoke when using this product. Wash hands and face thoroughly after handling. Wear protective gloves. Wear eye protection. Wear face protection (full length face shield). If swallowed: Immediately call a poison center or doctor. Rinse mouth. If on skin: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. 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. None Dispose of contents and container in accordance with US EPA guidelines for the classification and determination of hazardous waste listed in 40 CFR 261.3. (See Section 13)

# 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/Mixture:

Substance

# SAFETY DATA SHEET

**TCI AMERICA** 

Emergency telephone number: Chemical Emergencies: TCI America (8:00am - 5:00pm) PST +1-503-286-7624 Transportation Emergencies: Chemtrec 24-Hour +1-800-424-9300 (U.S.A.) +1-703-527-3887 (International) Responsible department: TCI America Environmental Health Safety and Security +1- 503-286-7624 **TCI AMERICA** 

3. COMPOSITION/INFORMATION	ON INGREDIENTS				
Components:	2-Benzyl-4-chlorophenol				
Percent:	>97.0%(GC)				
CAS Number:	120-32-1				
Molecular Weight:	218.68				
Chemical Formula:	C <sub>13</sub> H <sub>11</sub> CIO				
Synonyms:	5-Chloro-2-hydroxydiphenylmethane				
4. FIRST-AID MEASURES					
Inhalation:	Immediately call a poison center or doctor. Move victim to fresh air. Give artificial respiration if victim is not breathing. Administer oxygen if breathing is difficult. Keep victim warm and quiet. Treat symptomatically and supportively. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.				
Skin contact:	Immediately call a poison center or doctor. Remove and wash contaminated clothing before re-use. Remove and isolate contaminated clothing and shoes. In case of contact with substance, immediately flush skin with running water for at least 20 minutes. Treat symptomatically and supportively. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.				
Eye contact:	IMMEDIATELY flush eyes with running water for at least 15 minutes, keeping eyelids open. Eye contact with vapors or substance may cause severe injury, burns, or death. Call emergency medical service. Move victim to fresh air. Check for and remove any contact lenses. Keep victim warm and quiet. Treat				
Ingestion:	symptomatically and supportively. Effects of exposure to substance may be delayed. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves. Harmful if swallowed. Do not induce vomiting with out medical advice. If swallowed, seek medical advice immediately and show the container or label. Do not use mouth-to-mouth method if victim ingested the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Loosen tight clothing such as a collar, tie, belt or waistband. If a persor vomits place them in the recovery position so that vomit will not reenter the mouth and throat. Rinse mout Keep victim warm and quiet. Treat symptomatically and supportively. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.				
Symptoms/effects:					
Acute: Delayed:	Pain. Redness. No data available				
Immediate medical attention:	WARNING: It might be hazardous to the person providing aid to give mouth-to-mouth respiration, because the inhaled material is harmful. WARNING: It might be hazardous to the person providing aid to give mouth-to-mouth respiration, because the inhaled material is corrosive. For severe burns, immediate medical attention is required. If breathing has stopped, perform artificial respiration. Use first aid treatment according to the nature of the injury. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.				
5. FIRE-FIGHTING MEASURES					
Suitable extinguishing media:	Dry chemical, $CO_2$ or water spray. Consult with local fire authorities before attempting large scale fire fighting operations.				
Specific hazards arising from the cher Hazardous combustion products: Other specific hazards:	nical These products include: Carbon oxides Halogenated compounds WARNING: Highly toxic HCl gas is produced during combustion.				
heated. Move containers from fire area if Special protective equipment for fire-fi	ighters:				
Wear positive pressure self-contained bro ONLY; it may not be effective in spill situa provide little or no thermal protection.	eathing apparatus (SCBA). Structural fire fighters' protective clothing provides limited protection in fire situations ations. Wear chemical protective clothing which is specifically recommended by the manufacturer. It may				
6. ACCIDENTAL RELEASE MEAS	URES				
Personal precautions:	Avoid contact with skin, eyes, and clothing. Keep people away from and upwind of spill/leak. Do not touch				

Personal precautions:	Avoid contact with skin, eyes, and clothing. Keep people away from and upwind of spill/leak. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing (Section 8). Warn unnecessary personnel to move away. Stop leak if you can do it without risk. Ensure adequate ventilation. Isolate the hazard area and deny entry to unnecessary and unprotected personnel.
Personal protective equipment:	Wear eye protection (splash goggles) and face protection (full length face shield). Lab coat. Dust respirator. Be sure to use a MSHA/NIOSH approved respirator or equivalent. Wear protective gloves (nitrile).

**Emergency procedures:** 

# 6. ACCIDENTAL RELEASE MEASURES

Prevent dust cloud. In case of a spill and/or a leak, always shut off any sources of ignition, ventilate the area, and excercise caution. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Warn personnel to move away. Prevent entry into sewers, basements or confined areas; dike if needed.

#### Methods and materials for containment and cleaning up:

ELIMINATE all ignition sources (no smoking, flares, sparks, or flames in immediate area). Stop leak if without risk. Absorb with an inert material and put the spilled material in an appropriate waste disposal container. Use clean non-sparking tools to collect absorbed material. Dike far ahead of spill; use dry sand to contain the flow of material. Ventilate the area.

Environmental precautions:

Keep away from living quarters. Environmental hazard. Do not let product enter drains. Prevent further leakage or spillage if safe to do so. Water runoff can cause environmental damage. Prevent entry into sewers, basements or confined areas; dike if needed.

7. HANDLING AND STORAGE	
Precautions for safe handling:	Avoid inhalation of vapor or mist. Manipulate under an adequate fume hood. Do not ingest. Avoid contact with skin and eyes. Good general ventilation should be sufficient to control airborne levels. Keep container dry. Handle and open container with care. Wear suitable protective clothing, gloves and eye/face protection. When using do not eat, drink, or smoke. Keep away from sources of ignition.
Conditions for safe storage:	Keep only in the original container in a cool well-ventilated place. Keep away from incompatibles. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Avoid prolonged storage periods. Store in refrigerator.
Storage incompatibilities:	Store away from oxidizing agents

# 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure limits: No data available

#### Appropriate engineering controls:

Good general ventilation should be sufficient to control airborne levels. Ventilation is normally required when handling or using this product. Eyewash fountains should be provided in areas where there is any possibility that workers could be exposed to the substance. Follow safe industrial engineering/laboratory practices when handling any chemical.

#### Personal protective equipment

Respiratory protection:	Dust respirator. Be sure to use a MSHA/NIOSH approved respirator or equivalent.
Hand protection:	Wear protective gloves.
Eye protection:	Safety glasses.
Skin and body protection:	Lab coat.

# 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state (20°C): Form: Color: Odor: Odor threshold:	Solid Crystal - Powder White - Reddish yellow Slight Phenolic No data available			
Melting point/freezing point: Boiling point/range: Decomposition temperature: Relative density: Kinematic Viscosity:	47°C (117°F) 162°C (324°F)/0.5kPa No data available No data available No data available No data available	pH: Vapor pressure: Vapor density: Dynamic Viscosity:		No data available 2.0kPa/193°C No data available No data available
Partition coefficient: n-octanol/water (log P <sub>ow</sub> )	4.55	Evaporation rate: (Butyl Acetate = 1)		No data available
Flash point: Flammability (solid, gas):	185°C (365°F) No data available	Autoignition tempe Flammability or exp Lower:		No data available able
		Upper:	No data availa	able
Solubility(ies):				

Water: Insoluble (149mg/L, 25°C) Very soluble: Alcohols, Many organic solvents

# 10. STABILITY AND REACTIVITY

10. STABILITY AND REACTIVITY				
Reactivity:	Not Available.			
Chemical Stability:	Heat sensitive.			
Possibility of Hazardous Reactions:		ctivity has been reported.		
Conditions to avoid: Incompatible materials:	Heat sensitive. Strong oxidizing ag	nents		
Hazardous Decomposition Products:	No data available	gonto		
11. TOXICOLOGICAL INFORMATION	I			
RTECS Number: GO7175000				
Acute Toxicity:				
ihl-rat LC:>13200 mg/m <sup>3</sup> /6H		orl-mus LD50:65	mg/kg	
orl-rat LD50:1700 mg/kg		skn-rbt LDLo:501	0 mg/kg	
Skin corrosion/irritation: skn-hmn 1 %/48H MLD				
Serious eye damage/irritation: No data available				
<b>Respiratory or skin sensitization:</b> No data available				
Germ cell mutagenicity: msc-hmn-lym 40 mg/L		msc-mus-lym 25	mg/L	
Carcinogenicity:				
orl-mus TDLo:123.6 g/kg/103W-l		orl-rat TDLo:8760	00 mg/kg/2Y-C	
IARC: No data available	NTP:	No data available	OSHA:	No data available
<b>Reproductive toxicity:</b> No data available				
Routes of Exposure:	Inhalation, Eye cor	ntact, Ingestion, Skin contact.		
Symptoms related to exposure: Overexposure may result in serious illness of blistering. Skin contact may result in redness				
Potential Health Effects:				
Skin and eye contact may result in irritation. Target organ(s):	No data available			
12. ECOLOGICAL INFORMATION				
Eastaviaity				
Ecotoxicity Fish:	No data available			
Crustacea:	No data available			
Algae:	No data available			
<b>_</b>	Nie der 1997			
Persistence and degradability:	No data available			
Bioaccumulative potential (BCF): Mobillity in soil:	75 No data available			
Partition coefficient:	4.55			
n-octanol/water (log Pow)				
Soil adsorption (Koc):	2050			
Henry's Law: constant (PaM³/mol)	10.1 x 10 <sup>-4</sup>			

Non-hazardous for transportation.

13. DISPOSAL CONSIDERAT	TIONS	
Disposal of product:	Recycle to process if possible. It is the generator's responsibility to comply with Federal, State and Local rules and regulations. You may be able to dissolve or mix material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber system. This section is intended to provide assistance but does not replace these laws, nor does compliance in accordance with this section ensure regulatory compliance according to the law. US EPA guidelines for Identification and Listing of Hazardous Waste are listed in 40 CFR Parts 261. The product should not be allowed to enter the environment, drains, water ways, or the soil.	
Disposal of container:	Dispose of as unused product. Do not re-use empty containers.	
Other considerations:	Observe all federal, state and local regulations when disposing of the substance.	
14. TRANSPORT INFORMAT	ION	
DOT (US)	Non-hazardous for transportation.	
ΙΑΤΑ	Non-hazardous for transportation.	

# 15. REGULATORY INFORMATION

Toxic Substance Control Act (TSCA 8b.): This product is ON the EPA Toxic Substances Control Act (TSCA) inventory.

#### **US Federal Regulations**

CERCLA Hazardous substance and Reportable Quantity:		
SARA 313:	Not Listed	
SARA 302:	Not Listed	

#### State Regulations

IMDG

#### State Right-to-Know

Massachusetts	Not Listed
New Jersey	Not Listed
Pennsylvania	Not Listed
California Proposition 65:	Not Listed

#### **Other Information**

NFPA Rating:		HMIS Classification:	
Health:	2	Health: 2	2
Flammability:	1	Flammability: 1	I
Instability:	0	Physical: 0	)

# International Inventories

WHMIS hazard class:	E: Corrosive material. D2A: Materials causing other toxic effects. (Very Toxic)
	D2B: Materials causing other toxic effects. (Toxic)
EC-No:	204-385-8

# 16. OTHER INFORMATION

# Revision date: 10/06/2014

**Revision number: 2** 

TCI chemicals are for research purposes only and are NOT intended for use as drugs, food additives, households, or pesticides. The information herein is believed to be correct, but does not claim to be all inclusive and should be used only as a guide. Neither the above named supplier nor any of its affiliates or subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All chemical reagents must be handled with the recognition that their chemical, physiological, toxicological, and hazardous properties have not been fully investigated or determined. All chemical reagents should be handled only by individuals who are familiar with their potential hazards and who have been fully trained in proper safety, laboratory, and chemical handling procedures. Although certain hazards are described herein, we can not guarantee that these are the only hazards which exist. Our SDS are based only on data available at the time of shipping and are subject to change without notice as new information is obtained. Avoid long storage periods since the product is subject to degradation with age and may become more dangerous or hazardous. It is the responsibility of the user to request updated SDS for products that are stored for extended periods. Disposal of unused product must be undertaken by qualified personnel who are knowledgeable in all applicable regulations and follow all pertinent safety precautions including the use of appropriate protective equipment (e.g. protective goggles, protective clothing, breathing equipment, face mask, fume hood). For proper handling and disposal, always comply with federal, state and local regulations.

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