Safety Data Sheet

Chlorazol Black E

Revision Date: 06/05/15

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: Chlorazol Black E
Product code: 400308

Supplier: HealthLink, Inc
3611 St Johns Bluff Road, Suite 1
Jacksonville, FL 32224
800-638-2625
Monday-Friday: 8:00 -5:00 PM

Synonym: None.
Material uses: Laboratory Reagent.
Validation date: 01/13/2014
In case of emergency: 800-424-9300 CHEMTREC (USA)
24 Hours/Day: 7 Days/Week

2. HAZARDS IDENTIFICATION

Emergency Overview

Target Organs: Central nervous system, blood, liver, kidneys, and heart

GHS Labeling, Pictograms



Signal word: **Danger!**

Hazard statement(s):

H227: Combustible liquid (Cat 4)
H290: May be corrosive to metals (Cat 1).
H302: Harmful if swallowed (Cat 4)
H314: Causes severe skin burns and eye damage (Cat 1)
H350: May cause cancer (Cat 5)
H361: Suspected of damage the unborn child (Cat 2)

Precautionary statement(s):

P210: Keep away from heat/spark/open flames/hot surfaces. –No smoking-
P264: Wash hands thoroughly after handling
P270: Do not eat, drink or smoke when using this product
P280: Wear protective gloves/protective clothing/eye protection/face protection

OSHA Hazards

No known OSHA hazards.

GHS Classification
Carcinogen (Category 1B), Reproductive toxicity (Category 2), Skin corrosion (Category 1A), Serious eye damage (Category 1), Flammable liquids (Category 4), Corrosive to metals (Category 1)

NFPA
Health Hazard: 3
Fire: 0
Reactivity: 0

HMIS Classification
Health Hazard: 3
Flammability: 0
Physical hazards: 0

Potential Health Effects
Inhalation – Harmful if inhaled, causes respiratory irritation and damage
Skin – Corrosive to skin
Eyes – Causes severe eye damage
Ingestion – Harmful if ingested. May causes nausea, vomiting, loss of appetite, and gastrointestinal irritation/damage.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Name	CAS number	%
DMSO	67-68-5	< 12
Potassium Hydroxide	1310-58-3	5
Chlorazol Black E	1937-37-7	< 1
Water	7732-18-5	Balance

4. FIRST AID MEASURES

Eye contact: Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention immediately.

Skin contact: In case of contact, flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention immediately.

Inhalation: Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.

Ingestion: Call medical doctor or poison control center immediately. Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.

5. FIRE-FIGHTING MEASURES

Flammability of the product: Not flammable

Extinguishing media: Water spray, dry chemical, CO_2, and foam.

Not suitable: Do not use water jet.

Special exposure hazards: May emit toxic fumes under fire conditions.

Hazardous thermal decomposition products: Decomposition products may include the following materials:
Oxides of carbon and nitrogen

Special protective equipment for fire-fighters: Fire-fighters should wear protective clothing with NIOSH approved breathing apparatus. Products of combustion may be harmful in fire situation. Do not use direct water stream.

Special remarks on explosion hazards: Product contains combustible liquid

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).

Environmental precautions: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Spill: Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see section 1 for emergency contact information and section 13 for waste disposal. Dilute with water and mop up if water-soluble or absorb with an inert dry material and place in an appropriate waste disposal container.

7. HANDLING AND STORAGE

Handling: Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use non-sparking tools. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Use empty containers to retain product, residue can be hazardous. Do not reuse container.

Storage: Store in accordance with local regulations. Store in a segregated and approved area. Store in original container, protected from direct sunlight. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Consult local authorities for acceptable exposure limits.

Engineering measures: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Potassium hydroxide	CEIL, ACGIH, NIOSH	2 mg/ m_3
DMSO	TWA WEEL	250ppm

Hygiene measures: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Personal protection

Respiratory: Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Hands: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
Recommended: neoprene

Eyes: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts. Recommended: splash goggles

Skin: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Recommended: lab coat

Environmental exposure controls: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Liquid.	**Color:**	Dark blue/black
Flash Point:	Not available.	**Odor:**	slight bitter
pH:	Not available.	**Boiling/condensation point:**	~200°F
Melting/freezing point:	Not available.	**Relative density:**	Not available.
Vapor pressure:	Not available.	**Vapor density:**	Not available.
Odor threshold:	Not available.	**Evaporation rate:**	<1
VOC:	Not available.		
Solubility:	Soluble in the following materials: water		

10. STABILITY AND REACTIVITY

Chemical stability: The product is stable.

Possibility of hazardous reactions: Under normal conditions of storage and use, hazardous reactions will not occur.

Hazardous polymerization: Under normal conditions of storage and use, hazardous polymerization will not occur.

Conditions to avoid:

Materials to avoid: Strong acids.

Hazardous decomposition products: Oxides of carbon, sulfur, and nitrogen.

Conditions of reactivity: Under normal conditions of storage and use, hazardous reactions will not occur..

11. TOXICOLOGICAL INFORMATION

Principle Routes of Exposure: Skin, Eyes, and Respiratory Tract

Acute toxicity

Oral LD50

Chlorazol Black E- Rat, 7,600 mg/kg
DMSO- Rat, 14,500 mg/kg
KOH- Rat, 333 mg/kg

Inhalation LC50

DMSO- Rat, 4h 40250 ppm

Dermal LD50

DMSO- Rabbit, >5000 mg/kg

Other information on acute toxicity

no data available

Ingestion: May causes nausea, vomiting, loss of appetite.

Skin: Corrosive and irritant, skin contact can produce inflammation and blistering, Skin inflammation is characterized by itching, scaling, reddening, and blistering.

Inhalation: Inhalation of dust/mist will produce irritation to gastro-intestinal or respiratory tract, characterized by burning, sneezing, and coughing. Severe over exposure can produce lung damage, choking, unconsciousness or death.

Eye Contact: Corrosive and irritant, inflammation of the eye is characterized by redness, watering, and itching

Carcinogenicity: IARC, group 1 carcinogenic to humans. NTP, known to be human carcinogen. OSHA, Not available. ACGIH, Group 1 carcinogenic to humans

Mutagenicity: No known significant effects or critical hazards except possibly in laboratory animals.

Teratogenicity: No known significant effects or critical hazards except possibly in laboratory animals.

Reproductive: Possible risk of congenital malformation in the fetus

12. ECOLOGICAL INFORMATION

Toxicity
Toxicity to fish
Chlorazol Black E- Pimephales promelas (fathead minnow)- >180 mg/L 96h
DMSO- Pimephales promelas (flathead minnow)- 34000 mg/L 96h
Oncorhynchus mykiss (rainbow trout)- 2500 mg/L 96h
Toxicity to daphnia and other aquatic invertebrates
DMSO- Daphnia magna (water flea)- 24600 mg/L 48h
Toxicity to algae
DMSO- Pseudokirchneriella subcapitata (green algae)- 17000 mg/L 72h

Persistence and degradability
Not readily biodegradable (DMSO)

Bioaccumulative potential
no data available

Mobility in soil
no data available

PBT and vPvB assessment
no data available

Other adverse effects
no data available

13. DISPOSAL CONSIDERATIONS

The information presented only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations. Disposal should be in accordance with applicable regional, national and local laws and regulations.

14. TRANSPORT INFORMATION

DOT (US)
UN number: 1814
Class: 8
Group: II
Shipping name: Potassium Hydroxide, Solution
Marine pollutant: not available
Poison Inhalation Hazard: not available

IMDG
UN number: 1814
Class: 8
Group: II
Shipping name: Potassium Hydroxide, Solution
Marine pollutant: not available
Poison Inhalation Hazard: not available

IATA
UN number: 1814
Class: 8
Group: II
Shipping name: Potassium Hydroxide, Solution
Marine pollutant: not available
Poison Inhalation Hazard: not available

TDG
UN number: 1814
Class: 8
Group: II
Shipping name: Potassium Hydroxide, Solution
Marine pollutant: not available
Poison Inhalation Hazard: not available

15. REGULATORY INFORMATION

United States
HCS Classification: Not available

U.S. Federal regulations:
TSCA 8(a) IUR: No products were found.
United States inventory (TSCA 12b): CAS# 1937-37-7
SARA 302/304/311/312 extremely hazardous substances: No products were found.
SARA 313: CAS# 1937-37-7
SARA 302/304 emergency planning and notification: No products were found.
SARA 302/304/311/312 hazardous chemicals: No products were found.
SARA 311/312 MSDS distribution - chemical inventory - hazard identification: No products were found.

DEA List I Chemicals (Precursor Chemicals): Not listed
DEA List II Chemicals (Essential Chemicals): Not listed.

RTK: MA, PA, NJ

California Prop. 65, WARNING, this product contains chemicals known to the state of California to cause cancer.

CANADA
WHMIS (Canada): Class D2A
Class D2B

Canadian lists:
CEPA Toxic substances: None of the components are listed.
Canadian ARET: None of the components are listed.
Canadian NPRI: None of the components are listed.
Alberta Designated Substances: None of the components are listed.
Ontario Designated Substances: None of the components are listed.
Quebec Designated Substances: None of the components are listed.

CEPA DSL / CEPA NDSL: All components are listed or exempted.
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

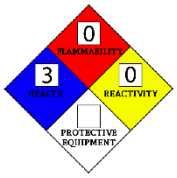
International regulations

International lists:

Australia inventory (AICS): All components are listed or exempted.
China inventory (IECSC): All components are listed or exempted.
Japan inventory: All components are listed or exempted.
Korea inventory: All components are listed or exempted.
New Zealand Inventory of Chemicals (NZIoC): All components are listed or exempted.
Philippines inventory (PICCS): All components are listed or exempted.

16. OTHER INFORMATION

National Fire Protection Association (U.S.A.)



Notice to reader

The above information is believed to be correct but does not purport to be all-inclusive and shall be used only as a guide. Healthlink shall not be liable for any damage resulting from handling of contact with this product.