

SAFETY DATA SHEET

OSHA HCS (29 CFR 1910.1200)

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product identifier

| | |
|---------------------------------|---------|
| Chemical Family / Chemical Name | Mixture |
| CAS No. | Mixture |
| Trade Name | PDB-23 |
| Product Code | None |

Relevant identified uses of the substance or mixture and uses advised against

| | |
|------------------------|--|
| Identified Use(s) | Precipitant |
| Uses Advised Against | None |
| Company Identification | ECOLOGIX ENVIRONMENTAL SYSTEMS, LLC 11800 Wills Rd, Suite 100 Alpharetta, GA 30009 USA |

| | |
|-----------|--|
| Telephone | (678) 514-2100 |
| Fax | (678) 514-2106 |
| E-mail | info@EcologixSystems.com |

Emergency telephone number

| | |
|---------------------|---------------------|
| Emergency Phone No. | 888-326-2020 |
|---------------------|---------------------|

SECTION 2: HAZARDS IDENTIFICATION

Classification of the substance or mixture

| | |
|-----------------------------|---------------------------|
| OSHA HCS (29 CFR 1910.1200) | Skin Corr. 1A; Eye Dam. 1 |
|-----------------------------|---------------------------|

Label elements

Hazard Symbol



DANGER

Signal Word(s)

Hazard Statement(s)

Causes severe skin burns and eye damage.

Precautionary Statement(s)

Prevention: Wash skin thoroughly after handling. Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response:

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor/ physician.

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.

Wash contaminated clothing before reuse.

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Storage: Store locked up.

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

Other hazards

The following percentage of the mixture consists of ingredient(s) with unknown acute toxicity: 60 %

Additional Information

Warning - this preparation contains a substance not yet tested completely. (>10%)

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

| Hazardous Ingredient(s) | % wt. | CAS No. |
|--------------------------------|--------------|-----------|
| sodium dimethyldithiocarbamate | Trade Secret | 128-04-1 |
| Calcium Hydroxide | Trade Secret | 1305-62-0 |
| Water | Trade Secret | 7732-18-5 |

SECTION 4: FIRST AID MEASURES



Description of first aid measures

Inhalation

Remove to fresh air and keep at rest in a position comfortable for breathing. If breathing is laboured, administer oxygen. If symptoms occur obtain medical attention.

Skin Contact

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If symptoms persist, call a physician.

Eye Contact

In case of eye contact, remove contact lens and rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Seek medical advice.

Ingestion

Do not induce vomiting without medical advice. If conscious, drink plenty of water. If conscious, drink plenty of water. Never give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed

None known

Indication of any immediate medical attention and special treatment needed

Treat symptomatically

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing Media

-Suitable Extinguishing Media

Use dry chemical, foam or carbon dioxide, ABC powder, water mist.

-Unsuitable Extinguishing Media

As appropriate for surrounding fire.

Special hazards arising from the substance or mixture

Burning produces irritant fumes. Exposure to decomposition products may be a hazard to health. Cool closed containers exposed to fire

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Advice for fire-fighters

with water spray. Do not allow run-off from fire fighting to enter drains or water courses.

A self contained breathing apparatus and suitable protective clothing should be worn in fire conditions. Keep containers cool by spraying with water if exposed to fire.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Put on protective equipment before entering danger area. Wear protective gloves/protective clothing/eye protection/face protection.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Do not allow contact with soil, surface or ground water. Do not allow uncontrolled discharge of product into the environment.

Methods and material for containment and cleaning up

Dam up. Cover spills with inert absorbent material. Transfer to a container for disposal or recovery.

Reference to other sections

None

Additional Information

None

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling

Wear protective gloves/protective clothing/eye protection/face protection. When using do not eat, drink or smoke.

Conditions for safe storage, including any incompatibilities

-Storage temperature

No smoking.
Keep in properly labelled containers.
Observe label precautions.
Keep containers tightly closed in a dry, cool and well-ventilated place.

-Incompatible materials

Do not freeze.
Keep away from food and drink.
Keep away from tobacco products.

Specific end use(s)

Precipitant

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

Engineering measures : Handle only in a place equipped with local exhaust (or other appropriate exhaust).

Maintain air concentrations below occupational exposure standards.

Hazardous components without workplace control parameters

Components

sodium dimethyldithiocarbamate CAS-No.128-04-1

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Personal protection equipment

Eye/face protection



Safety glasses with side-shields
Tightly fitting safety goggles
Face-shield.

Skin protection (Hand protection/ Other)



The following to be used as necessary: Gloves (Neoprene or Natural rubber). Chemical protection suit. Wear safety or chemical resistant shoes or boots. Check with protective equipment manufacturer's data.

Respiratory protection



Normally no personal respiratory protection is necessary. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Use NIOSH approved respiratory protection.

Thermal hazards

Not normally required. Use gloves with insulation for thermal protection, when needed.

Environmental Exposure Controls

Collect all precipitate. Disposal should be in accordance with local, state or national legislation.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance

Color.

Odor

Odor Threshold (ppm)

pH (Value)

Melting Point (°C) / Freezing Point (°C)

Boiling point/boiling range (°C):

Flash Point (°C)

Evaporation Rate

Flammability (solid, gas)

Explosive Limit Ranges

Vapour pressure

Vapour Density (Air=1)

Density (g/ml)

Solubility (Water)

Solubility (Other)

Partition Coefficient (n-Octanol/water)

Auto Ignition Point (°C)

Decomposition Temperature (°C)

Kinematic Viscosity

Explosive properties

Oxidizing properties

Other information

Liquid

Clear Yellow-Green to amber

Slight Sulfide odor

Not available

12.5 – 13.5

ca. 0 (32 °F)

ca.100 (212 °F)

>200°F (Pensky-Martens)

Similar to Water

Not applicable (aqueous solution)

Not applicable

13 mm Hg @ 25°C

N/A

1.175 – 1.195

Complete

Not available

Not available

Non-combustible / Non-flammable

Not available

Similar to Water

Not explosive.

Not oxidizing.

Not available

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SECTION 10: STABILITY AND REACTIVITY

| | |
|---|--|
| Reactivity | Stable |
| Possibility of hazardous reactions | Stable under recommended storage conditions. |
| Conditions to avoid | Protect from frost.Heat, flames and sparks. |
| Incompatible materials | Oxidizing agents Strong acids and strong bases |
| Hazardous decomposition product(s) | Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen (NOx), dense black smoke. |

SECTION 11: TOXICOLOGICAL INFORMATION

Exposure routes: Skin Contact, Eye Contact

Substances in preparations / mixtures

| | |
|-------------------------------|---|
| Acute toxicity | Oral: LD50 - Not determined Dermal: LD50 - Not determined Inhalation: LC50 – Not Determined |
| Irritation/Corrosivity | Irritating to skin and eyes |
| Sensitization | No information available |
| Repeated dose toxicity | No information available |
| Carcinogenicity | No data. It is unlikely to present a carcinogenic hazard to man. |

| NTP | IARC | ACGIH | OSHA | NIOSH |
|-----|------|-------|------|-------|
| No. | No. | No. | No. | No. |

| | |
|----------------------------------|--------------------------|
| Mutagenicity | No information available |
| Toxicity for reproduction | No information available |

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

| | |
|---|--|
| Short term | No data available- (<i>Ceriodaphnia dubia</i> ; water flea) No data available- (<i>Daphnia magna</i> ; water flea) No data available- (<i>Pimephales promelas</i> ; fathead minnow) |
| Long Term | Not available |
| Persistence and degradability | Not available |
| Bioaccumulative potential | The product has low potential for bioaccumulation. |
| Mobility in soil | Not available |
| Results of PBT and vPvB assessment | Not classified as PBT or vPvB. |
| Other adverse effects | None known. |

SECTION 13: DISPOSAL CONSIDERATIONS

| | |
|--------------------------------|---|
| Waste treatment methods | Disposal should be in accordance with local, state or national legislation.Consult an accredited waste disposal contractor or the local authority for advice. Clean container with water. |
|--------------------------------|---|

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SECTION 14: TRANSPORT INFORMATION

| | Land transport (U.S. DOT) | Sea transport (IMDG) | Air transport (ICAO/IATA) |
|------------------------------|---|-------------------------|------------------------------|
| UN number | UN 3267 | UN 3267 | UN 3267 |
| Proper Shipping Name | Corrosive liquid, basic, organic, n.o.s. (sodium dimethyldithiocarbamate) | | |
| Transport hazard class(es) | 8 | 8 | 8 |
| Packing group | III | III | III |
| Hazard label(s) | Corrosive | Corrosive | Corrosive |
| Environmental hazards | Yes | Yes | Yes |
| Special precautions for user | None assigned | None assigned | None assigned |

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: Not established.

SECTION 15: REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture:

TSCA (Toxic Substance Control Act) - Inventory Status: All components listed or polymer exempt.

Designated Hazardous Substances and Reportable Quantities (40 CFR 302.4):

| Chemical Name | CAS No. | Typical %wt. | RQ (Pounds) |
|---------------|---------|--------------|-------------|
| None | ---- | ---- | ---- |

SARA 311/312 - Hazard Categories:

Fire Sudden Release Reactivity Immediate (acute) Chronic (delayed)

SARA 313 - Toxic Chemicals (40 CFR 372):

| Chemical Name | CAS No. | Typical %wt. |
|--------------------------------|----------|--------------|
| Sodium dimethyldithiocarbamate | 128-04-1 | 40 |

SARA 302 - Extremely Hazardous Substances(40 CFR 355):

| Chemical Name | CAS No. | Typical %wt. | TPQ (pounds) |
|---------------|---------|--------------|--------------|
| None | ---- | ---- | ---- |

California Proposition 65 List:

| Chemical Name | CAS No. | Type of Toxicity |
|---------------|---------|------------------|
| None | ---- | ---- |

SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements: 1-16.

Date of preparation: June 9, 2015

National Fire Protection Association (NFPA) Rating (in fire conditions):

Toxicity: 2 Fire: 1 Reactivity: 1 Protective Equipment: B
Hazard Rating: 4=extreme 3=high 2=moderate 1=slight 0=insignificant

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