MATERIAL SAFETY DATA SHEET

SECTION 1: PRODUCT IDENTIFICATION

PRODUCT NAME: PDB-23
PRIMARY FUNCTION: Precipitant
CHEMICAL NAME: Proprietary blend of precipitating reagents.

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>INGREDIENT</th>
<th>(CAS #)</th>
<th>%WT</th>
<th>OSHA PEL</th>
<th>ACGIH TLV</th>
<th>OTHER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Dimethylidithiocarbamate</td>
<td>128-04-1</td>
<td>&lt;50</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Other substances not “hazardous” per OSHA communication standard may be blended in this formulation. The precise composition is proprietary. Bona fide requests for disclosure to medical personnel must be made in accordance with the procedures in 29 CFR 1910.1200(i) 1-13.

SECTION 3: HAZARDS IDENTIFICATION

EXPOSURE LIMIT(S): Not established.
DANGER – CORROSIVE. Alkaline liquid. Exact effects unknown.
EYES: Alkaline material - may irritate or damage eyes.
SKIN: Repeated skin contact may cause a cumulative dermatitis.
INGESTION: May be toxic by ingestion. May cause moderate to marked irritation and possible chemical burns of the mouth, throat, esophagus and stomach.
INHALATION: Vapor may be irritating to the respiratory tract and mucous membranes.

SECTION 4: FIRST AID MEASURES

EYES: Immediately flush eyes with water and continue washing for at least 15 minutes. Obtain immediate medical attention without delay, preferably from an ophthalmologist.
SKIN: Immediately remove contaminated clothing and shoes. Wash skin with soap and water. Obtain medical attention if an irritation persists. Wash clothing before reuse. Discard contaminated leather articles such as shoes and belt.
INGESTION: If conscious, give water or milk to dilute. DO NOT INDUCE VOMITING. Obtain immediate medical attention without delay.
INHALATION: Remove to fresh air. Give artificial respiration if not breathing. If breathing is difficult, oxygen may be administered by qualified personnel. Obtain medical attention immediately if affected person has difficulty breathing.

SECTION 5: FIRE FIGHTING MEASURES

FLASH POINT: >200°F (Pensky-Martens)
EXTINGUISHING MEDIA: Non-flammable (aqueous solution)
SPECIAL FIRE FIGHTING PROCEDURES: Use self-contained breathing apparatus and protective clothing while extinguishing a fire.
UNUSUAL FIRE AND EXPLOSION HAZARDS: Product is non-flammable as supplied. May form flammable by-products on contact with strong acids and/or extreme heat.
National Fire Protection Association (NFPA) Rating (in fire conditions):
- Toxicity: 1
- Fire: 1
- Reactivity: 1
- Protective Equipment: 2
- Hazard Rating: 4=extreme 3=high 2=moderate 1=slight 0=insignificant
SECTION 6: ACCIDENTAL RELEASE MEASURES

SMALL SPILLS: Cover spilled liquid with absorption material.
LARGE SPILLS: Dike spills for recovery with absorbent material. Do not flush directly to waste treatment facility or water course. This product is toxic to fish. Do not discharge to sewer.
WASTE DISPOSAL METHOD: Landfill or incinerate. Dispose of in accordance with local, state and federal regulations.

SECTION 7: HANDLING and STORAGE

HANDLING AND STORAGE: DANGER! KEEP AWAY FROM ACIDS. DO NOT ACIDIFY. Store in a cool, dry place. Avoid skin and eye contact. Keep container closed when not in use.
OTHER PRECAUTIONS: DO NOT TAKE INTERNALLY. Wash thoroughly after handling. Do not inhale vapors or mists. DESTROY ANY CONTAMINATED LEATHER ARTICLES.

SECTION 8: EXPOSURE CONTROLS and PERSONAL PROTECTION

EYE PROTECTION: Wear chemical splash-proof goggles or faceshield.
PROTECTIVE CLOTHING: Wear rubber, Nitrile (NBR), Butyl or Polyethylene gloves. Rubber apron and boots if splashing likely.
RESPIRATORY PROTECTION: None normally required if good ventilation is maintained. Otherwise wear self-contained breathing apparatus (SCBA) in high vapor concentrations.
VENTILATION: Provide local exhaust sufficient to keep vapors below TLV. If vapors are strong enough to be irritating to nose or eyes, special ventilation may be required.
OTHER PROTECTIVE EQUIPMENT: Provide eye wash and safety shower stations.

SECTION 9: PHYSICAL and CHEMICAL PROPERTIES

BOILING POINT: >212°F
SPECIFIC GRAVITY: 1.175 – 1.195
EVAPORATION RATE: Like water
VOLATILE BY VOLUME: Approx. <60
VAPOR PRESSURE: 13 mm Hg @ 25°C
SOLUBILITY IN WATER: Complete
pH of NEAT SOLUTION: 12.5 – 13.5
APPEARANCE/ODOR: Clear yellow-green to amber liquid; slight sulfide odor

SECTION 10: STABILITY and REACTIVITY

STABILITY: Stable
HAZARDOUS POLYMERIZATION: Will not occur
INCOMPATIBILITY (MATERIALS/CONDITIONS TO AVOID): Strong oxidizing agents and acids. Temperatures above 100°C (212°F) and evaporation of water. DANGER: DO NOT ACIDIFY. Acidification releases flammable toxic gases.
HAZARDOUS DECOMPOSITION PRODUCTS: Hydrogen sulfide may be produced if heated to high temperatures. Carbon disulfide may be produced on contact with strong acids. Dimethylnitrosamines may be produced on contact with a combination of strong acids and nitrating compounds.

SECTION 11: TOXICOLOGICAL INFORMATION

CHRONIC EFFECTS AND MEDICAL CONDITIONS AGGRAVATED BY OVEREXPOSURE: None noted.
SPECIAL NOTE: None of the components in this product are considered a carcinogen by OSHA, NTP or IARC.

SECTION 12: ECOLOGICAL INFORMATION

Not determined.

MSDS: PRODUCT NAME: PDB-23
SECTION 13: DISPOSAL CONSIDERATIONS

Dispose of in accordance with federal, state, and local environmental laws.

SECTION 14: TRANSPORT INFORMATION

DOT Proper Shipping Name: Corrosive liquid, basic, organic, n.o.s. (contains sodium hydroxide solution), 8, UN 3267, III. Corrosive label required.

SECTION 15: REGULATORY INFORMATION

FEDERAL EPA

Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA):
Requires notification to the National Response Center of releases of quantities of Hazardous Substances equal to or greater than the reportable quantities (RQ) in 40 CFR 302.4. Components present in this product at a level which would require reporting under the statute are:

<table>
<thead>
<tr>
<th>Chemical</th>
<th>CAS Number</th>
<th>RQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>sodium dimethyldithiocarbamate</td>
<td>128-04-1</td>
<td>2.5 lbs.</td>
</tr>
</tbody>
</table>

Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III:
Sec. 313 Toxic Chemical Release: Sodium dimethyldithiocarbamate CAS # 128-04-1
Sec. 302-304: Extremely hazardous Substances: None
Sec. 311-312: Inventory Reporting - Hazard Category: Immediate health, delayed health

Toxic Substances Control Act (TSCA) Status: All ingredients of this product are on the TSCA inventory

SECTION 16: OTHER INFORMATION

LEGEND:
CAS Chemical Abstract Number
CERCLA Comprehensive Environmental Response, Compensation and Liability Act
CFR Code of Federal Regulations
DOT Department of Transportation
HMIS Hazardous Materials Identification System
IARC International Agency for Research on Cancer
MSDS Material Safety Data Sheet
N/A Not Applicable
N/D Not Determined
NTP National Toxicity Program
OSHA Occupational Safety and Health Administration
PEL Permissible Exposure Limit
SARA Superfund Amendments and Reauthorization Act
TSCA Toxic Substance Control Act
TLV Threshold Limit Value

The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances. Users are responsible to determine the suitability of this product and to evaluate risks prior to use.