MATERIAL SAFETY DATA SHEET

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: BiCAT® 3228
PRODUCT NUMBER: 1362C
CHEMICAL NAME: Zinc carboxylate mixture
DATE PREPARED: 04-Jan-12

MANUFACTURER:
The Shepherd Chemical Company
4900 Beech Street
Cincinnati, Ohio  45212
(513)-731-1110 (voice), (513)-731-1532 (fax)

EMERGENCY TELEPHONE NO. 1-800-424-9300 CHEMTREC

SECTION 2 - COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>CHEMICAL INGREDIENT</th>
<th>C.A.S. NUMBER</th>
<th>% BY WEIGHT</th>
<th>% METAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zinc carboxylate blend</td>
<td>Proprietary</td>
<td>94 min.</td>
<td>Proprietary</td>
</tr>
<tr>
<td>Diethylene glycol monoethyl ether</td>
<td>111-90-0</td>
<td>6 max.</td>
<td></td>
</tr>
</tbody>
</table>

SECTION 3 - HAZARD IDENTIFICATION

EMERGENCY OVERVIEW

APPEARANCE: Yellow-gold liquid
ODOR: Fatty acid odor

CAUTION! AVOID CONTACT WITH EYES, SKIN AND CLOTHING. AVOID BREATHING VAPORS OR MIST. WASH THOROUGHLY AFTER HANDLING.

POTENTIAL HEALTH EFFECTS, TARGET ORGAN EFFECTS (ACUTE AND CHRONIC)

This product may cause irritation to eyes, skin and upper respiratory tract.

CARCINOGENICITY: Not applicable

SECTION 4 - FIRST AID MEASURES

If inhaled, remove to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing is difficult, give oxygen. Call a physician. If swallowed, induce vomiting immediately by giving two glasses of water and sticking finger down throat. Call a physician. Never give anything by mouth to an unconscious person. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Call a physician. Wash skin with soap and water.

SECTION 5 - FIRE FIGHTING MEASURES

FLASHPOINT/METHOD: > 250º F
FLAMMABLE LIMITS: LEL: N/A  UEL: N/A
EXTINGUISHING MEDIA: CO2, Foam, Dry Chemical or Water Spray.
SPECIAL FIREFIGHTING PROCEDURES: Use Self-Contained Breathing-Apparatus.
FIRE AND EXPLOSION HAZARD:
Moderate when exposed to extreme heat or flame.
SECTION 6 - ACCIDENTAL RELEASE MEASURES
Remove ignition sources. Ventilate area of spill. Do not allow to enter confined spaces such as sewers. Absorb in vermiculite, dry sand, earth or similar material.

SECTION 7- HANDLING AND STORAGE
Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Wash thoroughly after handling. Store in closed containers away from extreme heat, flame or strong oxidizing agents.

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION
RESPIRATORY PROTECTION: Use NIOSH/MSHA approved respirators if OSHA PEL is exceeded.
SKIN PROTECTION: Use impervious glove and body-covering clothing.
EYE PROTECTION: Use side-shielded safety glasses or goggles.
ENGINEERING CONTROLS: Provide general and/or local exhaust ventilation.
EXPOSURE GUIDELINES:

<table>
<thead>
<tr>
<th>CHEMICAL INGREDIENT</th>
<th>OSHA PEL (mg/M3)</th>
<th>ACGIH TLV (mg/M3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diethylene glycol monoethyl ether</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Zinc carboxylate blend</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Yellow-gold liquid
ODOR: Fatty acid odor
BOILING POINT: >350º F
VAPOR PRESSURE (mm HG): N/A
VAPOR DENSITY (Air = 1): N/A
SOLUBILITY IN WATER: Negligible
SPECIFIC GRAVITY / DENSITY: 1.17
FREEZING POINT: Not available
pH: N/A
EVAPORATION RATE: N/A

SECTION 10 - STABILITY AND REACTIVITY
STABILITY: This product is stable. Hazardous polymerization will not occur.
INCOMPATIBILITY: Strong oxidizing agents.
HAZARDOUS DECOMPOSITION BY PRODUCTS:
Thermal decomposition may produce carbon monoxide.

SECTION 11- TOXICOLOGICAL INFORMATION
None found for this product.

SECTION 12- ECOLOGICAL INFORMATION
Not available

SECTION 13 - DISPOSAL CONSIDERATION
Liquid incineration or dispose of contaminated absorbent/stabilizing agent in an approved landfill. Observe local, state and federal regulations.

SECTION 14 - TRANSPORT INFORMATION
This product is not regulated for transportation.
SECTION 15 - REGULATORY INFORMATION

OSHA HAZARD COMMUNICATION STANDARD:
Hazardous due to target organ effects (See Section 3)

CERCLA/SUPERFUND:
N/A

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT):
Section 311/312 Hazard Categories: Acute Health Hazard

Section 313 - This product contains the following substances subject to 313 reporting:
Glycol ether 6% max.
Zinc compounds 94% min.

TOXIC SUBSTANCES CONTROL ACT (TSCA):
All components of this product are on the TSCA Inventory unless otherwise noted in Section 2.

INTERNATIONAL REGULATIONS:
Available upon request

SECTION 16 - OTHER INFORMATION

REFERENCES:
Dangerous Properties of Industrial Materials, 6th Ed., N. Irving Sax

HMIS RATING:
Health - 1
Flammability - 1
Reactivity - 0
Personal Protection - B

DISCLAIMER:
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