MATERIAL SAFETY DATA SHEET

DATE PREPARED: 03/01/2001
MSDS No: PB Bulk
PB Penetrating Catalyst - part #’s: 128-PB, 5-PB, 55-PB

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: PB Penetrating Catalyst - part #’s: 128-PB, 5-PB, 55-PB

MANUFACTURER:
The Blaster Chemical Companies
Blaster
8500 Sweet Valley Drive
Valley View, OH 44125
Customer Service: (800) 858-6605

24 HR. EMERGENCY TELEPHONE NUMBERS:
CHEMTREC (800) 424-9300
Emergency Contact: CHEMTREC
Emergency Phone (800) 424-9300

2. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>wt.%</th>
<th>CAS Registry #</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dipropylene glycol methyl ether</td>
<td>0 – 10</td>
<td>34590-94-8</td>
</tr>
<tr>
<td>Heavy Aromatic Naphtha Solvent</td>
<td>50 – 70</td>
<td>64742-94-5</td>
</tr>
<tr>
<td>Alkylpolyethyleneoxyethanol</td>
<td>1 – 10</td>
<td>68131-40-8</td>
</tr>
<tr>
<td>Petroleum Distillates</td>
<td>20 – 35</td>
<td>64742-57-0</td>
</tr>
</tbody>
</table>

OSHA HAZARDOUS COMPONENTS (29 CFR 1910.1200):

<table>
<thead>
<tr>
<th>Component</th>
<th>OSHA PEL</th>
<th>ACGIH TLV</th>
<th>Supplier</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dipropylene glycol methyl ether</td>
<td>100 ppm</td>
<td>100 ppm</td>
<td>Supplier</td>
</tr>
<tr>
<td>Heavy Aromatic Naphtha Solvent</td>
<td>400 ppm</td>
<td>not established</td>
<td>Supplier</td>
</tr>
<tr>
<td>Alkylpolyethyleneoxyethanol</td>
<td></td>
<td></td>
<td>Supplier</td>
</tr>
<tr>
<td>Petroleum Distillates</td>
<td>5 mg/m3</td>
<td>5 mg/m3</td>
<td>Supplier</td>
</tr>
</tbody>
</table>

COMMENTS:
The criteria for listing components in this section are as follows:
Carcinogens are listed if present at 0.1% or greater
OSHA hazardous ingredients are listed if present at 1.0% or greater
Non-Hazardous ingredients may be listed if present at 5.0% or greater

3. HAZARDS IDENTIFICATION

POTENTIAL HEALTH EFFECTS
EYES:
Likely to cause immediate or delayed irritation. Irritation will show as redness and/or swelling of the eyes.
SKIN:
Repeated or prolonged contact with skin may produce irritation, dryness, or dermatitis.

INGESTION:
Ingestion may cause irritation to the mouth, esophagus, and stomach.

INHALATION:
Inhalation of spray mist may cause irritation to the respiratory tract.

ACUTE EFFECTS:
Irritation of the eyes, nose, throat, digestive tract. Diarrhea, vomiting, nausea, and / or nervous system depression. (Headaches, drowsiness, diszziness.)

MEDICAL CONDITIONS AGGRAVATED:
May aggravate pre-existing skin and respiratory disorders.

COMMENTS:
NOTICE - Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.

4. FIRST AID MEASURES

EYES:
Flush with plenty of clear water. Seek medical attention.

SKIN:
Remove contaminated clothing immediately. Wash skin with soap and water. If irritation develops, seek medical attention

INGESTION:
Wash mouth immediately. If conscious, give exposed individual 6 to 8 ounces of liquid. Do NOT induce vomiting unless advised by physician. Seek medical attention immediately.

INHALATION:
Remove to fresh air. Seek medical attention.

5. FIRE FIGHTING MEASURES

Flashpoint and Method: ~152 F TAG CC

GENERAL HAZARD:
This material can be ignited by heat, sparks, flames, or other sources of ignition (static electricity.) Vapors are heavier than air and will collect in low areas (sewers) or travel considerable distances to a source of ignition. If containers are not cooled in a fire, they may ignite and explode.
EXTINGUISHING MEDIA:
Dry chemical, carbon dioxide, halon, or foam is recommended. Water spray may be used to cool containers or structures. Halon may decompose into toxic materials and carbon dioxide will displace oxygen. Take proper precautions when using these materials.

HAZARDOUS COMBUSTION PRODUCTS:
Thermal decomposition in the presence of air may yield, carbon monoxide, carbon dioxide, and various hydrocarbons.

FIRE FIGHTING PROCEDURES:
Emergency responders in the danger area should wear bunker gear and self-contained breathing apparatus for fires beyond the incipient stage. Wear other protective gear as conditions warrant. Stop leaks, if it can be done with minimal risk. Water spray may be useful in dispersing vapors or cooling equipment and containers. Material will float on water. Avoid spreading fire with water.

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILL:
Absorb the liquid and scrub the area with detergent and water.

LARGE SPILL:
Avoid vapors and ignition sources. Use appropriate protective equipment. Stop and contain the discharge if it can be done safely. Keep out of drains and water ways. Handle only with trained personnel. Notify authorities as necessary.

GENERAL PROCEDURES:
Dispose of liquid and absorbants in accordance with local, state, and federal law.

7. HANDLING AND STORAGE

GENERAL PROCEDURES:
Use in accordance with good industrial workplace practices. Open containers slowly to relieve pressure

HANDLING:
Avoid unnecessary contact. Wash thoroughly after handling. Do not wear contaminated clothing or shoes.

STORAGE:
Store in a dry place away from excessive heat. Store containers tightly closed.
8. **EXPOSURE CONTROLS/PERSONAL PROTECTION**

**PERSONAL PROTECTION**

**EYES AND FACE:**
Standard safety glasses with splash shields are adequate protection. Where excessive splashing is possible, a face shield should be used.

**SKIN:**
Excessive contact should be avoided. Neoprene gloves and aprons will provide adequate protection when contact cannot be avoided.

**RESPIRATORY:**
Good general ventilation should be sufficient to control airborne levels. Maintain airborne concentrations below the established exposure limits of ingredients in Section 2.

**PROTECTIVE CLOTHING:**
Chemical resistant aprons and boots are suggested when contact with material cannot be avoided. Remove and wash any contaminated clothing immediately.

**WORK HYGIENIC PRACTICES:**
Wash thoroughly after handling.

**OTHER USE PRECAUTIONS:**
Eye wash stations and emergency showers should be available.

**COMMENTS:**
The BLASTER CHEMICAL COMPANIES takes no responsibility for determining what measures are required for personal protection in any specific application. The information provided should be used with discretion.

9. **PHYSICAL AND CHEMICAL PROPERTIES**

Physical State: Liquid  
Odor: Strong Aromatic  
Appearance: Translucent, viscous, and oily.  
Color: Dark brown/amber  
pH: Not Available  
Percent Volatile: 69.10  
Vapor Density: \( >1 \) (Air = 1)  
Boiling Point: 352 to 418 °F  
Freezing Point: Not Established  
Solubility in Water: Slight  
Evaporation Rate: \( >1 \) (n-Butyl Acetate=1)  
Specific Gravity: 0.9020 (water=1)  
\( (VOC) \): 5.194 Pounds per gallon  
Weight per Volume: 7.515 Pounds per gallon
10. STABILITY AND REACTIVITY

STABLE: YES

HAZARDOUS POLYMERIZATION: NO

CONDITIONS TO AVOID:
Avoid excessive heat, sources of ignition, and excessive water.

STABILITY:
Stable.

POLYMERIZATION:
Will not occur.

HAZARDOUS DECOMPOSITION:
Carbon monoxide, carbon dioxide, and various hydrocarbons.

INCOMPATIBLE MATERIALS:
Avoid contact with strong oxidizing agents and strong reducing agents (strong acids or bases.)
Avoid mixture with water.

11. TOXICOLOGICAL INFORMATION

COMMENTS:
Toxicological information on this product as a mixture has yet to be determined. See section 15 for reportable ingredients.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL DATA:
No data available. Contact Env. Dept.

ECOTOXICOLOGICAL INFORMATION:
No data available. Contact Env. Dept.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD:
Used or unused product should be disposed of in accordance with local, state, and federal regulations.
14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)
Proper Shipping Name: Combustible Liquid, N. O. S.
Technical Name: Petroleum Distillates
NA/UN Number: 1993
Packing Group: III
NAERG: 128

Other Shipping Information: This product may be packaged to meet the criteria set forth in CFR 49 part 173.150c as a "consumer commodity." Allowing for certain exceptions (173.156) for domestic surface shipments. Please call Blaster for clarifications or questions regarding proper shipping information.

U.S. CUSTOMS HARMONIZATION NUMBER:
3403.19.0000

15. REGULATORY INFORMATION

UNITED STATES
SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)
Title III Notes: There are no SARA 313 reportable materials in this product.

CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)
CERCLA RQ: This product has no CERCLA Reportable Quantity. However, release into a waterway may require reporting to the National Response Center.
Reportable Spill Quantity: 1950 Lbs.

TSCA (TOXIC SUBSTANCE CONTROL ACT)
TSCA Regulatory: This product complies with all TSCA Inventory requirements.

16. OTHER INFORMATION

Approval date: 03/05/2001
REVISION SUMMARY
Revision #: 1

This MSDS replaces the March 05, 2001 MSDS. Any changes in information are as follows:
In Section 14
Other DOT Shipping Information (text)

HMIS CODES
Fire: 2    Health: 2    Reactivity: 0    Protection: x

MANUFACTURER DISCLAIMER:
To the best of our knowledge, the information contained herein is accurate. However, neither The Blaster Chemical Companies nor any of its 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 materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exists.