SECTION 1: Identification

1.1. Identification
Product name : PB Penetrating Catalyst
Product code : 16-PB, 8-PB, 8-PBS, PB-TS, 20-PB

1.2. Relevant identified uses of the substance or mixture and uses advised against
Use of the substance/mixture : Penetrant

1.3. Details of the supplier of the safety data sheet
Manufacturer
The Blaster Corporation
8500 Sweet Valley Drive
Valley View, Ohio 44125 - USA
T (216) 901-5800 - F (216) 901-5801
www.blastercorp.com

1.4. Emergency telephone number
Emergency number : ChemTel 800-255-3024

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture
GHS-US classification
Flam. Aerosol 2
Dissolved gas
Asp. Tox. 1

2.2. Label elements
GHS-US labelling
Hazard pictograms (GHS-US) :

   GHS02
   GHS04
   GHS05

Signal word (GHS-US) : Danger
Hazard statements (GHS-US) : Flammable aerosol. Contains gas under pressure, may explode if heated. May be fatal if swallowed and enters airways.
Precautionary statements (GHS-US) : Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not spray on an open flame or other ignition source. Pressurized container. Do not pierce or burn, even after use. If swallowed: Immediately call a poison center/doctor. Do NOT induce vomiting. Store locked up. Store in a well-ventilated place. Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. Dispose of contents/container in accordance with local, regional, national and/or international regulation.

2.3. Other hazards
No additional information available

2.4. Unknown acute toxicity (GHS US)
Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substances
Not applicable
3.2. Mixtures

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Petroleum distillates, hydrotreated light</td>
<td>(CAS No) 54742-47-8</td>
<td>50 - 60</td>
</tr>
<tr>
<td>Solvent naphtha, petroleum, heavy aromatic</td>
<td>(CAS No) 54742-94-5</td>
<td>20 - 30</td>
</tr>
<tr>
<td>Distillates, petroleum, hydrotreated heavy naphthenic</td>
<td>(CAS No) 54742-92-9</td>
<td>20 - 30</td>
</tr>
<tr>
<td>Carbon dioxide</td>
<td>(CAS No) 124-38-9</td>
<td>1 - 4</td>
</tr>
</tbody>
</table>

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/admittance if you feel unwell.

First-aid measures after skin contact: If irritation occurs, flush skin with plenty of water. Get medical attention if irritation persists. Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.

First-aid measures after eye contact: Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persists. Direct contact with the eyes is likely to be irritating.

First-aid measures after ingestion: IF SWALLOWED: immediately call a POISON CENTER or doctor/physician. Do NOT induce vomiting.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/Injuries after inhalation: May cause respiratory tract irritation.

Symptoms/Injuries after skin contact: May cause skin irritation. Symptoms may include redness, drying, defatting and cracking of the skin.

Symptoms/Injuries after eye contact: May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling.

Symptoms/Injuries after ingestion: May be fatal if swallowed and enters airways. This product may be aspirated into the lungs and cause chemical pneumonitis. May cause stomach distress, nausea or vomiting.

4.3. Indication of any immediate medical attention and special treatment needed

Symptoms may not appear immediately. In case of accident or if you feel unwell, seek medical advice immediately (show the label or SDS where possible).

SECTION 5: Firefighting measures

5.1. Extinguishing media

| Suitable extinguishing media | Carbon dioxide, dry chemical, halons or foam. |
| Unsuitable extinguishing media | Do not use a heavy water stream. |

5.2. Special hazards arising from the substance or mixture

Fire hazard: Flammable aerosol. Products of combustion may include, and are not limited to: oxides of carbon and oxides of nitrogen.

Explosion hazard: Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries.

Reactivity: No dangerous reaction known under conditions of normal use.

5.3. Advice for firefighters

Firefighting instructions: DO NOT fight fire when fire reaches explosives. Evacuate area. Exercise caution when fighting any chemical fire.

Protection during firefighting: Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA). Vapors may be heavier than air and may travel along the ground to a distant ignition source and flash back. Use water spray to keep fire-exposed containers cool.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures: Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Isolate from fire, if possible, without unnecessary risk. Remove ignition sources. Use special care to avoid static electric charges.

6.1.1. For non-emergency personnel

Emergency procedures: Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment: Equip cleanup crew with proper protection.

11/30/2016 EN (English)
Emergency procedures: Ventilate area.

6.2 Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3 Methods and material for containment and cleaning up

For containment: Eliminate sources of ignition. Contain and/or absorb spill with inert material (e.g. sand, vermiculite), then place in a suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).

Methods for cleaning up: Scoop up material and place in a disposal container. Provide ventilation.

6.4 Reference to other sections

See section 8 for further information on protective clothing and equipment and section 13 for advice on waste disposal.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Precautions for safe handling: Do not spray on an open flame or other ignition source. Keep away from sources of ignition - No smoking. Use non-sparking tools. Use explosion-proof equipment. Take precautionary measures against static discharge. Avoid contact with skin and eyes. Do not swallow. Do not breathe gas, fumes, vapour or spray. When using do not eat, drink or smoke. Use only outdoors or in a well-ventilated area. Do not pierce or burn, even after use.

Hygiene measures: Launder contaminated clothing before reuse. Wash hands before eating, drinking, or smoking.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures: Proper grounding procedures to avoid static electricity should be followed.

Storage conditions: Keep locked up and out of reach of children. Do not expose to temperatures exceeding 50 °C/122 °F. Store away from direct sunlight or other heat sources. Keep in fireproof place.

Storage area: Store in a well-ventilated place.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Petroleum distillates, hydrotreated light (64742-47-8)
Not applicable

Solvent naphtha, petroleum, heavy aromatic (64742-94-5)
Not applicable

Distillates, petroleum, hydrotreated heavy naphthenic (64742-52-5)
Not applicable

Carbon dioxide (124-38-9)

<table>
<thead>
<tr>
<th></th>
<th>ACGIH TWA (ppm)</th>
<th>ACGIH STEL (ppm)</th>
<th>OSHA PEL (TWA) (mg/m³)</th>
<th>OSHA PEL (TWA) (ppm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACGIH</td>
<td>5000 ppm</td>
<td>30000 ppm</td>
<td>9000 mg/m³</td>
<td>5000 ppm</td>
</tr>
<tr>
<td>OSHA</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

8.2 Exposure controls

Appropriate engineering controls: Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, etc.) below recommended exposure limits.

Hand protection: Wear chemically resistant protective gloves.

Eye protection: Safety glasses or goggles are recommended when using product.

Skin and body protection: Wear suitable protective clothing.

Respiratory protection: In case of insufficient ventilation, wear suitable respiratory equipment. 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.

Environmental exposure controls: Maintain levels below Community environmental protection thresholds.

Other information: Do not eat, smoke or drink where material is handled, processed or stored. Wash hands carefully before eating or smoking. Handle according to established industrial hygiene and safety practices.
SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Liquid</td>
</tr>
<tr>
<td>Appearance</td>
<td>Clear. Aerosol.</td>
</tr>
<tr>
<td>Colour</td>
<td>Orange</td>
</tr>
<tr>
<td>Odour</td>
<td>Characteristic</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting point</td>
<td>No data available</td>
</tr>
<tr>
<td>Freezing point</td>
<td>No data available</td>
</tr>
<tr>
<td>Boiling point</td>
<td>356 °F (180 °C)</td>
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<tr>
<td>Flash point</td>
<td>&gt; 141 °F (&gt; 61 °C)</td>
</tr>
<tr>
<td>Relative evaporation rate (butylacetate=1)</td>
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<td>Flammability (solid, gas)</td>
<td>Flammable aerosol</td>
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<td>Vapour pressure</td>
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<tr>
<td>Relative vapour density at 20 °C</td>
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</tr>
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<td>Relative density</td>
<td>0.9</td>
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<tr>
<td>Solubility</td>
<td>No data available</td>
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<tr>
<td>Partition coefficient n-octanol/water</td>
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</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Decomposition temperature</td>
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<tr>
<td>Viscosity, kinematic</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, dynamic</td>
<td>No data available</td>
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<tr>
<td>Explosive limits</td>
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<tr>
<td>Explosive properties</td>
<td>No data available</td>
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<tr>
<td>Oxidising properties</td>
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9.2. Other information

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heat of Combustion</td>
<td>45.8 kJ/g</td>
</tr>
<tr>
<td>Flame Projection</td>
<td>0 inches</td>
</tr>
<tr>
<td>Flashback</td>
<td>None</td>
</tr>
</tbody>
</table>

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reaction known under conditions of normal use.

10.2. Chemical stability

Stable under normal storage conditions. Flammable aerosol. Contents under pressure. Container may explode if heated. Do not puncture. Do not burn. Extreme risk of explosion by shock, friction, fire or other sources of ignition.

10.3. Possibility of hazardous reactions

No dangerous reaction known under conditions of normal use.

10.4. Conditions to avoid


10.5. Incompatible materials

Strong oxidizing agents.

10.6. Hazardous decomposition products

May include, and are not limited to: oxides of carbon and oxides of nitrogen.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity       : Not classified.
**PB Penetrating Catalyst**  
Safety Data Sheet  

**PB Penetrating Catalyst**  
LD50 oral rat > 2000 mg/kg (Calculated Acute Toxicity Estimate)  
LD50 dermal rabbit > 2000 mg/kg (Calculated Acute Toxicity Estimate)  
LC50 inhalation rat > 5 mg/l/4h (Calculated Acute Toxicity Estimate)  

**Petroleum distillates, hydrotreated light (64742-47-8)**  
LD50 oral rat > 5000 mg/kg  
LD50 dermal rabbit > 2000 mg/kg  
LC50 inhalation rat > 5.2 mg/l/4h  

**Solvent naphtha, petroleum, heavy aromatic (64742-94-5)**  
LD50 oral rat > 5000 mg/kg  
LD50 dermal rabbit > 2 ml/kg  
LC50 inhalation rat > 590 mg/m³ (Exposure time: 4 h)  

Skin corrosion/irritation: Not classified.  
Serious eye damage/irritation: Not classified.  
Respiratory or skin sensitisation: Not classified.  
Germ cell mutagenicity: Not classified.  

Carcinogenicity: Not classified.  
Reproductive toxicity: Not classified.  
Specific target organ toxicity (single exposure): Not classified.  
Specific target organ toxicity (repeated exposure): Not classified.  

Aspiration hazard: May be fatal if swallowed and enters airways.  
Symptoms/injuries after inhalation: May cause respiratory tract irritation.  
Symptoms/injuries after skin contact: May cause skin irritation. Symptoms may include redness, drying, defatting and cracking of the skin.  
Symptoms/injuries after eye contact: May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling.  
Symptoms/injuries after ingestion: May be fatal if swallowed and enters airways. This product may be aspirated into the lungs and cause chemical pneumonitis. May cause stomach distress, nausea or vomiting.  
Other information: Likely routes of exposure: ingestion, inhalation, skin and eye.  

**SECTION 12: Ecological information**

**Toxicity**  
Ecology - general: May cause long-term adverse effects in the aquatic environment.  

**Petroleum distillates, hydrotreated light (64742-47-8)**  
LC50 fish 1 45 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])  
LC50 fish 2 2.2 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])  

**Solvent naphtha, petroleum, heavy aromatic (64742-94-5)**  
LC50 fish 1 19 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])  
EC50 Daphnia 1 0.95 mg/l (Exposure time: 48 h - Species: Daphnia magna)  
LC50 fish 2 2.34 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss)  

**Distillates, petroleum, hydrotreated heavy naphthenic (64742-52-5)**  
LC50 fish 1 > 5000 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss)  
EC50 Daphnia 1 > 1000 mg/l (Exposure time: 48 h - Species: Daphnia magna)  

**12.2. Persistence and degradability**

**PB Penetrating Catalyst**  
Persistence and degradability: Not established.
12.3. Bioaccumulative potential

<table>
<thead>
<tr>
<th>PB Penetrating Catalyst</th>
<th>Bioaccumulative potential</th>
<th>Not established.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Petroleum distillates, hydrotreated light (64742-47-8)</td>
<td>BCF fish 1</td>
<td>61 - 150</td>
</tr>
<tr>
<td>Solvent naphtha, petroleum, heavy aromatic (64742-94-6)</td>
<td>BCF fish 1</td>
<td>61 - 150</td>
</tr>
<tr>
<td></td>
<td>Partition coefficient n-octanol/water</td>
<td>2.9 - 6.1</td>
</tr>
<tr>
<td>Carbon dioxide (124-38-9)</td>
<td>BCF fish 1</td>
<td>(no bioaccumulation)</td>
</tr>
</tbody>
</table>

12.4. Mobility in soil
No additional information available

12.5. Other adverse effects

Effect on the global warming : No known effects from this product.

Other information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations : This material must be disposed of in accordance with all local, state, provincial, and federal regulations. The generation of waste should be avoided or minimized wherever possible.

Additional information : Flammable vapours may accumulate in the container.

SECTION 14: Transport information

Department of Transportation (DOT)
In accordance with DOT

Transport document description : UN1950 Aerosols (flammable, (each not exceeding 1 L capacity)), 2.1

UN-No. (DOT) : UN1950

Proper Shipping Name (DOT) : Aerosols, flammable, (each not exceeding 1 L capacity)

Class (DOT) : 2.1 - Class 2.1 - Flammable gas 49 CFR 173.115

Hazard labels (DOT) : 2.1 - Flammable gas

Other information : No supplementary information available.

Special transport precautions : Do not handle until all safety precautions have been read and understood.

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory.

15.2. International regulations

No additional information available

15.3. US State regulations

California Proposition 65 - This product contains, or may contain, trace quantities of a substance(s) known to the state of California to cause cancer, developmental and/or reproductive harm
PB Penetrating Catalyst
Safety Data Sheet


<table>
<thead>
<tr>
<th>Naphthalene (91-20-3)</th>
<th>U.S. - California - Proposition 65 - Carcinogens List</th>
<th>U.S. - California - Proposition 65 - Developmental Toxicity</th>
<th>U.S. - California - Proposition 65 - Reproductive Toxicity - Female</th>
<th>U.S. - California - Proposition 65 - Reproductive Toxicity - Male</th>
<th>Non-significant risk level (NSRL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td></td>
<td>5.8 µg/day</td>
</tr>
</tbody>
</table>

| Carbon dioxide (124-38-9) | U.S. - New Jersey - Right to Know Hazardous Substance List | U.S. - Pennsylvania - RTK (Right to Know) List |

SECTION 16: Other information

Date of issue : 11/09/2016
Revision date : 11/30/2016
Other information : None.

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