PRODUCT AND COMPANY IDENTIFICATION

Manufacturer
THE PENRAY COMPANIES INC.
440 Denniston Ct.
Wheeling, IL 60090

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Product Name: PENRAY CHLORINATED BRAKE CLEANER - 4820
Revision Date: 8/04/2011
Version: 4
MSDS Number: 4820
Common Name: AEROSOL CLEANER CONTAINING CHLORINATED SOLVENTS
Chemical Formula: F450

HAZARDS IDENTIFICATION

Route of Entry: Skin absorption and inhalation
Target Organs: Lungs, kidneys, liver and nervous system.
Inhalation: Respiratory irritation and dizziness
Skin: Prolonged contact with skin can cause irritation. Repeated skin contact may cause persistent irritation and dermatitis
Eye: Will cause irritation upon contact.
Ingestion: Product may cause discomfort, nausea, vomiting and diarrhea.

CARCINOGENICITY: Product is considered "probably carcinogenic to humans" by IARC.
MEDICAL CONDITIONS: Pre-existing eye or skin conditions may be aggravated by over-exposure to this product.
3 COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients:
Chemical Ingredients (% by Weight)

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>CAS Number</th>
<th>Percent Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>PERCHLOROETHYLENE</td>
<td>127-18-4</td>
<td>60-100%</td>
</tr>
<tr>
<td>CARBON DIOXIDE</td>
<td>124-38-9</td>
<td>01%-05%</td>
</tr>
</tbody>
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4 FIRST AID MEASURES

Inhalation: Remove to fresh air. If not breathing, give artificial respiration. Seek medical attention. Inhalation hazard unlikely due to low volatility of product.

Skin Contact: Wash area with soap and water. seek medical attention if irritation persists

Eye Contact: Immediately flush eyes with plenty of water for 15 minutes. Seek medical attention.

Ingestion: DO NOT induce vomiting. Only give CONSCIOUS victim two glasses of water and seek medical attention. NEVER give UNCONSCIOUS anything by mouth.

5 FIRE FIGHTING MEASURES

Flash Point: N/G

EXTINGUISHING MEDIA: Carbon Dioxide (CO2) Dry Chemical, Foam.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Vapors are heavier than air and can collect in low areas

FIRE FIGHTING INSTRUCTIONS: Containers can build up pressure if exposed to fire. Containers should be cooled with water supply.

FIRE FIGHTING EQUIPMENT: Self-contained breathing apparatus with full face piece operated in positive pressure mode.

6 ACCIDENTAL RELEASE MEASURES

SPILL/LEAK PROCEDURES: Notify safety personnel, evacuate all unnecessary personnel and provide adequate ventilation. If feasible, and without risk, clean-up personnel should stop leak. All clean up personnel should wear proper personal protective equipment.

SMALL SPILLS: Clean with inert absorbent and place in recovery drums for disposal.

LARGE SPILLS: Dike to prevent further migration of material. DO NOT release into waterways or sewers. Follow applicable federal and state regulations.

7 HANDLING AND STORAGE

Handling Precautions: Wash thoroughly after handling. Do not get into eyes, on skin or on clothing. Do not smoke while using this product. Do not use near excessive heat, sparks, or open flame.

Storage Requirements: Store in clean, dry locations away from excessive heat. Store in areas designated for the storage of Level I aerosols according to NFPA 30B (Manufacturing and Storage of Aerosol Products.)
EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls: Eye wash station and safety shower.
Strong general ventilation or local exhaust.

Personal Protective Equip: EYE: Chemical splash goggles with indirect or no ventilation.
SKIN: Chemical resistant gloves, such as nitrile.
RESPIRATORY: Organic vapor air purifying respirator if vapors are a nuisance or if the concentrations are above PEL or TLV.

Never eat, drink or smoke in work area.

PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Colorless liquid
Physical State: liquid
Spec Grav./Density: BT 1.456-1.610
Boiling Point: 189-250 F
Vapor Pressure: BT 31.0 - 60.0 mmHG
Evap. Rate: >1.0
Odor: Chlorinated Solvent Odor
Solubility: Not soluble in water
Vapor Density: >1.0
VOC: 100%

STABILITY AND REACTIVITY

Stability: Material is stable.

Conditions to Avoid: Open flame.

Materials to Avoid: Strong oxidizing agents.

Hazardous Decomposition: Carbon Monoxide and Carbon Dioxide

Hazardous Polymerization: Cannot occur.

TOXICOLOGICAL INFORMATION

LD50

Perchloroethylene: 10,000 ml/kg (skin)

ECOLOGICAL INFORMATION

No data.

DISPOSAL CONSIDERATIONS

As a waste, this product in its raw form DOES MEET the criteria of a hazardous waste as defined by RCRA (40 CFR 361). All used and unused product and container should be disposed of in accordance with all applicable federal, state and local regulations. Do not dump in drains, sewers, on the ground or into any body of water.
14 TRANSPORT INFORMATION

DOMESTIC:
CONSUMER COMMODITY ORM-D

EXPORT:
UN 1950, AEROSOL DISPENSERS, CLASS 2.1, LIMITED QUANTITY

15 REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS
OSHA: Considered to be a hazardous material as defined by 29CFR1910.1200

EPA SARA TITLE III
Section 311-312 (40CFR370): If stored in excess of the threshold quantities, this product should be reported as a(n):
IMMEDIATE (acute) HEALTH HAZARD
DELAYED (chronic) HEALTH HAZARD
SUDDEN RELEASE HAZARD

Section 313(40CFR372) This product contains ingredients which are subject to the reporting requirements of SARA 313:

Perchloroethylene 127-18-4 91.800%

16 OTHER INFORMATION

CALIFORNIA PROPOSITION 65: This product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

Tetrachloroethylene

Notes:
NG= NOT GIVEN
BT= BETWEEN
<= LESS THAN
>= GREATER THAN

USERS RESPONSIBILITY: This MSDS provides environmental, health and safety information. This product is to be used in applications consistent with our product literature and container label. Individuals handling this product should be informed to the recommended safety precautions and have access to this MSDS. Please contact your local sales representative or our EH&S Department for further information.

END OF MSDS