

# MSDS Material Safety Data Sheet

THE PENRAY COMPANIES, INC.



## PENRAY DOT 4 BRAKE FLUID 6432

MSDS Number: 6432

Revision Date: 04/03/2008

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### 1 PRODUCT AND COMPANY IDENTIFICATION

#### Manufacturer

THE PENRAY COMPANIES INC.

440 Denniston Ct.  
Wheeling, IL 60090

**Contact:** EH&S Manager  
**Telephone Number:** (847) 459-5000  
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**Product Name:** PENRAY DOT 4 BRAKE FLUID 6432  
**Revision Date:** 04/03/2008  
**MSDS Number:** 6432  
**Common Name:** SOLUTION OF GLYCOL ETHERS AND POLYETHYLENE GLYCOL  
**Chemical Formula:** F519

EMERGENCY PHONE NUMBER (800) 752-7869

NFPA 704M RATING :

HEALTH:1 FIRE:1 REACTIVITY: 0 SPECIAL:

0=INSIGNIFICANT 1=SLIGHT 2=MODERATE 3=HIGH 4=EXTREME

### 2 COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENTS	CAS NUMBER	PERCENT WEIGHT
TRIETHYLENE GLYCOL MONOMETHYL BORATE ESTER	71243-41-9	<46%
TRIETHYLENE GLYCOL MONOBUTYL ETHER	143-22-6	<2.0%
TRIETHYLENE GLYCOL MONOMETHYL ETHER	112-35-6	<27%
POLYETHYLENE GLYCOL METHYL ETHER	9004-74-4	<17%
TETRAETHYLENE GLYCOL	112-60-7	<4.0%
TETRAETHYLENE GLYCOL MONOBUTYL ETHER	1559-34-8	<2.0%
DIETHYLENE GLYCOL	111-46-6	<3.0%
DIETHYLENE GLYCOL MONOBUTYL ETHER	112-34-5	<1.0%

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### 3 HAZARDS IDENTIFICATION

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

**CARCINOGENICITY:** Product is not considered a carcinogen by OSHA, NTP or IARC.  
**MEDICAL CONDITIONS:** Pre-existing eye or skin conditions may be aggravated by over-exposure to this product.

### 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:** > 250 degree F  
**Flash Point Method:** pmcc  
**Autoignition Temperature:** 590 degree F

**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.

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## 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

**Engineering Controls:** Eye wash station and safety shower.  
General ventilation. Material non - volatile

**Protective Equipment:** EYE: Chemical splash goggles with indirect or no ventilation.  
SKIN :None required  
RESPIRATORY: None required ,except in emergency situations.

**Exposure Guidelines/Other:** Never eat, drink or smoke in work area

## 9 PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance:</b>	transparent pale yellow	<b>Boiling Point:</b>	> 450 Degree F
<b>Physical State:</b>	liquid	<b>Freezing/Melting Pt.:</b>	< -75 degree F
<b>Odor:</b>	mild ethereal	<b>Solubility:</b>	Soluble in water
<b>pH:</b>	8.6 (25% aqueous solution)	<b>Spec Grav./Density:</b>	1.040 - 1.075
<b>Vapor Pressure:</b>	<0.1 mmHG at 20 degree C		
<b>Vapor Density:</b>	9 (air = 1)		

**VOC:** 0.5 wt%

## 10 STABILITY AND REACTIVITY

**Stability:** Material is stable.

**Conditions to avoid:** Excessive heat and open flame.

**Materials to avoid (incompatability):** Strong oxidizing agents.

**Hazardous Decomposition products:** Carbon Monoxide and Carbon Dioxide

**Hazardous Polymerization:** Cannot occur.

## 11 TOXICOLOGICAL INFORMATION

No DATA

## 12 ECOLOGICAL INFORMATION

No Data.

## 13 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.

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## 14 TRANSPORT INFORMATION

DOMESTIC:  
Not regulated

EXPORT:  
Not regulated

## 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  
FIRE HAZARD

Section 313(40CFR372) This product does not contain ingredients which are subject to the reporting requirements of SARA 313:

## 16 OTHER INFORMATION

CALIFORNIA PROPOSITION 65: This product does not contain ingredients which are on the current Proposition 65 list.

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 of our EH&S Department for further information.

END OF MSDS

END OF MSDS DOCUMENT