Product Name: AIR BRAKE ANTI-FREEZE--5655 Manufacturer: THE PENRAY COMPANIES, INC.

Revision Date: 01/30/2001

SECTION 01 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

SECTION 02 COMPOSITION AND INFORMATION ON INGREDIENTS

SECTION 03 HAZARD IDENTIFICATION

SECTION 04 FIRST AID INFORMATION

SECTION 05 FIRE FIGHTING MEASURES

SECTION 06 ACCIDENTAL RELEASE MEASURES

SECTION 07 HANDLING AND STORAGE

SECTION 08 EXPOSURE CONTROLS AND PERSONAL PROTECTION

SECTION 09 PHYSICAL AND CHEMICAL PROPERTIES

SECTION 10 STABILITY AND REACTIVITY

SECTION 11 TOXICOLOGICAL INFORMATION

SECTION 12 ECOLOGICAL INFORMATION

SECTION 13 DISPOSAL CONSIDERATIONS

SECTION 14 TRANSPORTATION INFORMATION

SECTION 15 REGULATORY INFORMATION

SECTION 16 OTHER INFORMATION

Product Name: AIR BRAKE ANTI-FREEZE--5655

Manufacturer: THE PENRAY COMPANIES, INC.

Address: 440 DENNISTON COURT WHEELING IL 60090

Telephone: (847) 459-5000 Emergency: (800) 752-7869

Contact: EH&S MANAGER

Trade Name: AIR BRAKE ANTI-FREEZE--5655

Synonyms:

Description: AIR BRAKE ANTI-FREEZE CONTAINING METHANOL

NFPA 704M© Rating:

Health: 2 Fire: 4 Reactivity: 0 Special:

0=Insignificant 1=Slight 2=Moderate 3=High 4=Extreme

SECTION 02 COMPOSITION AND INFORMATION ON INGREDIENTS

Chemical Ingredients (% by Weight)

Ingredient CAS Number Percent Weight

METHANOL 67-56-1 100 %

SECTION 03 HAZARD IDENTIFICATION

EMERGENCY OVERVIEW: Prolonged contact with skin may cause moderate irritation. Contact with eyes can cause severe irritation, redness, tearing, and blurred vision. Harmful if swallowed, or absorbed through skin.

POTENTIAL HEALTH EFFECTS

CARCINOGENICITY: Product 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.

TARGET ORGANS: Liver, lungs, kidneys, optic nerve.

PRIMARY ENTRY ROUTES: Skin absorption and inhalation.

ACUTE HEALTH EFFECTS

EYE: Will cause irritation upon contact.

SKIN: Prolonged contact with skin can cause irritation. Repeated skin

contact may cause persistent irritation and dermatitis.

INHALATION: Product non-volatile, inhalation hazard unlikely.

INGESTION: Product may be harmful if swallowed and may cause nausea,

vomiting, and diarrhea.

CHRONIC HEALTH EFFECTS: Overexposure to the ingredients in this product can cause liver abnormalities, eye and kidney damage. May cause blindness or visual disturbances.

SECTION 04 FIRST AID INFORMATION

EYE CONTACT: Immediately flush eyes with plenty of water for 15 minutes. Seek medical attention.

SKIN CONTACT: Wash area with soap and water. Seek medical attention if irritation persists.

INHALATION: Remove to fresh air. If not breathing, give artificial

respiration. Seek medical attention. Inhalation hazard unlikely due to low volatility of product.

INGESTION: INDUCE vomiting. Only give CONSCIOUS victim two glasses of water and seek medical attention. NEVER give UNCONSCIOUS victim anything by mouth.

SECTION 05 FIRE FIGHTING MEASURES

FLASH POINT: BT 53 - 55 F TCC

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 spray.

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

SECTION 06 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 SPILL: Clean with inert absorbant and place in recovery drums for disposal.

LARGE SPILL: Dike to prevent further migration of material. DO NOT release into waterways or sewers. Follow applicable federal and state regulations (20CFR1910.120).

SECTION 07 HANDLING AND STORAGE

STORAGE REQUIREMENTS: Store in clean, dry locations away from excessive heat. Store in areas designated for the storage of (Class

IB) flammable liquids according to NFPA 30 (Flammable and Combustible Liquids Code)

HANDLING PRECAUTIONS: Wash throughly after handling. Do not get into eyes, on skin, or on clothing.

SECTION 08 EXPOSURE CONTROLS AND PERSONAL PROTECTION

ENGINEERING CONTROLS: Eye wash station and safety shower.

VENTILATION: General ventilation. Material non-volatile.

PERSONNEL PROTECTIVE EQUIPMENT

EYE: Chemical splash goggles with indirect or no ventilation.

SKIN: Chemical resistant gloves such as nitrile.

RESPIRATORY: None required.

COMMENTS: Never eat, drink, or smoke in work areas.

SECTION 09 PHYSICAL AND CHEMICAL PROPERTIES

BOILING POINT: 148 F

SPECIFIC GRAVITY: 0.791

VAPOR PRESSURE: 96

PERCENT VOLATILES: 100%

EVAPORATION RATE: < 2

SOLUBILITY IN WATER: Completely.

ODOR/APPEARANCE/CHARACTERISTICS: Colorless liquid, slight alcohol odor.

SECTION 10 STABILITY AND REACTIVITY

STABILITY: Material is stable

POLYMERIZATION: Hazardous polymerization cannot occur.

CHEMICAL INCOMPATIBILITIES: Strong oxidizing and reducing agents.

CONDITION TO AVOID: Excessive heat and open flame.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide, and carbon dioxide.

SECTION 11 TOXICOLOGICAL INFORMATION

-----LD50-----

Methanol: 5.6 g/kg (oral), 15.8 g/kg (dermal)

SECTION 12 ECOLOGICAL INFORMATION

No data.

SECTION 13 DISPOSAL CONSIDERATIONS

As a waste, this product in its raw form =DOES MEET= the criteria of a hazardous waste as defined by RCRA (40CFR361).

Dispose of in accordance with all applicable state, federal, and local regulations.

SECTION 14 TRANSPORTATION INFORMATION

DOMESTIC:

*5632: Consumer Commodity ORM-D.

*5601/5655: Methanol Solution, Class 3.2, UN1230, PGII

EXPORT:

*5632: Methanol Solution, Class 3.2, UN1230, 6.1, Page 3251, FP 50 deg. F, Limited Quantity.

*5601/5655: Methanol Solution, Class 3.2, UN1230, 6.1, Page 3251, FP 50 deg. F.

SECTION 15 REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS

OSHA: Considered 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 contains ingredients which are subject to the reporting requirements of SARA 313:
- *Methanol

STATE REGULATIONS

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

SECTION 16 OTHER INFORMATION

REVISION: 5

NOTES:

- *NG="NOT GIVEN"
- *BT="BETWEEN"
- *<="LESS THAN"
- *>="GREATER THAN"

USER'S 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 Environmental, Health and Safety Department for further information.

END OF MSDS