

MATERIAL SAFETY DATA SHEET
Required under USDL Safety and Health Regulations

SECTION I - CHEMICAL COMPANY AND PRODUCT IDENTIFICATION

POWER SERVICE PRODUCTS
P.O. BOX 1089
WEATHERFORD, TEXAS 76086
817/599-9486 **e-mail: psp@powerservice.com**

Product Name: **AIR BRAKE SYSTEM ANTIFREEZE**
Generic/Chemical Name: **METHANOL**
MSDS Preparation Date: **March 3, 2005 - supersedes December 15, 2003**
Emergency Phone Number: **800/424-9300**

SECTION II - COMPOSITION/INFORMATION OF INGREDIENTS

<u>INGREDIENT</u>	<u>CAS NUMBER</u>	<u>PERCENT</u>
METHANOL	67-56-1	99.0
CORROSION INHIBITOR	MIXTURE	1.0

SECTION III - HAZARD IDENTIFICATION

EMERGENCY AND FIRST AID PROCEDURES: If overcome by vapors, remove from exposure immediately; call a physician. If breathing is irregular or stopped, start resuscitation, administer oxygen. If swallowed induce vomiting if conscious; call a physician. Remove contaminated clothing and wash skin with soap and water. Flush eyes with water until irritation subsides.

PRIMARY ROUTE (S) OF ENTRY: INGESTION AND INHALATION

VARIABILITY AMONG INDIVIDUALS: Health Studies have shown that many petroleum hydrocarbons and synthetic lubricants pose potential human health risks which may vary from person to person. As a precaution, exposure to liquids, vapors, mists and fumes should be minimized.

NATURE OF HAZARD AND TOXICITY INFORMATION: Prolonged or repeated skin contact with this product tends to remove skin oils possibly leading to irritation and dermatitis; however, based on human experiences and available toxicological data, this product is judged to be 'highly toxic'.

Potential risk to humans can be minimized by observing good work practices and personal hygiene procedures generally recommended for petroleum products.

SECTION IV - FIRST AID MEASURES

EYE CONTACT: Flush eyes with large amounts of water until irritation subsides. If irritation persists, get medical attention.

SKIN CONTACT: Flush with large amounts of water, use soap if available. Remove grossly contaminated clothing, including shoes and laundry before re-use.

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INHALATION: Using proper respiration protection, immediately remove the affected victim from exposure. Administer artificial respiration if breathing is stopped. Keep at rest. Call for prompt medical attention.

INGESTION: If swallowed and conscious give two glasses of water, induce vomiting immediately. Have patient lie down and keep warm. Cover eyes to exclude light. Call a physician.

SECTION V - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT54°F (TCC)

EXPLOSIVE LIMITS: lower 6.0% upper 36.0%

EXTINGUISHING MEDIA: Alcohol resistant foam, dry chemical, CO₂, waterspray or fog.

SPECIAL FIRE FIGHTING PROCEDURES: Use air-supplied rescue equipment for enclosed areas. Cool exposed containers with water.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Do not store or mix with strong oxidants or combustible liquids.

HAZARDOUS PRODUCTS OF COMBUSTION MAY FORM: Carbon dioxide and carbon monoxide.

EMPTY CONTAINERS CONTAIN FLAMMABLE VAPORS: "DO NOT USE CUTTING TORCH EQUIPMENT OR ANY OTHER FLAME ON ANY EMPTY CONTAINER".

SECTION VI - ACCIDENTAL RELEASE PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Remove all ignition sources. Keep people away. Recover free liquid. Add absorbent to spill area. Avoid breathing vapors. Ventilate enclosed spaces. Open all windows and doors. Keep petroleum products out of public sewers, streams and waterways.

WASTE DISPOSAL METHOD: Typical dispose of waste by supervised incineration in a furnace, or in a chemical disposal area in compliance with local regulations.

SECTION VII - HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: Keep containers closed. Keep away from heat, sparks and open flames.

CONTAINERS ARE STRICTLY "SINGLE TRIP CONTAINERS." THEY ARE NOT TO BE USED FOR ANY REASON AFTER BEING EMPTIED.

OTHER PRECAUTIONS: Avoid breathing vapors. Avoid prolonged or repeated contact with skin. Remove contaminated clothing; wash before re-use. Wash skin with soap and water after contact.

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SECTION VIII - EXPOSURE CONTROLS AND PERSONAL PROTECTION

OSHA		ACGIH	
TWA	STEL	TWA	STEL
PPM	PPM	PPM	TLV
200	250	200	250
Carcinogen - NTP Program		N/A	
Carcinogen - IARC Program		N/A	

EFFECTS OF OVEREXPOSURE: Avoid breathing vapor. Inhalation of high vapor concentrations may have results ranging from dizziness and headaches to unconsciousness. Prolonged or repeated liquid contact will dry and defat the skin leading to irritation and dermatitis.

RESPIRATORY PROTECTION (Specify type): Organic or Hydrocarbon vapor respirator or supplied-air hose if needed.

VENTILATION:

LOCAL EXHAUST	Face velocity > 60 fpm
MECHANICAL (General)	Explosion - proof ventilation equipment.
SPECIAL	Use only with adequate ventilation.
OTHER	No smoking or open flames.

PROTECTIVE GLOVES: Normally not needed. Use chemical resistant PVC coated gloves if necessary.

EYE PROTECTION: Normally not needed, however chemical goggles full face shield or safety glasses are recommended.

OTHER PROTECTION EQUIPMENT: Organic or Hydrocarbon insoluble apron if needed.

SECTION IX - PHYSICAL AND CHEMICAL PROPERTIES

BOILING POINT	147°F (63.8°C)
VAPOR PRESSURE (mmHg).....	97.680 mmHg @ 68°F (22°C)
SPECIFIC VAPOR DENSITY (AIR =1).....	1.11
SOLUBILITY IN WATER	Totally miscible
SPECIFIC GRAVITY (H2O =1)80 @ 68.00 F.
PERCENT, VOLATILE BY VOLUME (%)	100
EVAPORATION RATE	2.10
APPEARANCE	Clear, water white liquid
ODOR	Alcohol odor

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SECTION X - STABILITY AND REACTIVITY

STABILITY	Stable. Will not undergo hazardous polymerization.
INCOMPATIBILITY (Materials to avoid)	Reactive metals, strong acids, strong oxidizing agents.
HAZARDOUS DECOMPOSITION PRODUCTS	Occurs from heat and reaction with materials.

CONDITIONS TO AVOID:

1. Prolonged or repeated breathing of vapors
2. Contact with eyes
3. Prolonged or repeated contact with skin

SECTION XI - TOXICOLOGICAL INFORMATION

Danger - Highly toxic - May be fatal or cause blindness if swallowed. Cannot be made non-poisonous.

Aquatic Toxicity:

BOD₅(g/g): 0.76-1.12 Standard Dilution/Sewage Seed.

Aquatic Toxicity: TLm96: over 1000 ppm (TLm96 = Lethal concentration, 50% kill (96 hours))
250 ppm/11hr./goldfish/died/fresh water.

This product contains the following chemicals that are subject to the reporting requirements of EPCRA Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (40 CFR Part 372). Concentration does not exceed specified upper bound.

<u>CAS Number</u>	<u>Chemical Name</u>	<u>Upper Bound in %</u>
67-56-1	Methanol	99.0

SECTION XII - ECOLOGICAL INFORMATION

THIS PRODUCT DOES NOT CONTAIN ANY OZONE DEPLETING CHEMICALS

SECTION XIII - DISPOSAL CONSIDERATIONS

WASTE DISPOSAL: This product, if discarded, may become a hazardous waste under CERCLA. Use the following information:

Proper Shipping Name: **RQ Waste Flammable Liquid N.O.S.**

Class: **3**

I.D. Number: **UN 1993**

Pk Group: **II**

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Typical disposal is by supervised incineration in a furnace or in a chemical disposal area in compliance with Federal, State and Local Law.

CERCLA RQ – 40 CFR 302.4

METHYL ALCOHOL RQ 5000 pounds

Section 311/312 Hazard Class – 40CFR 370.2

Immediate (X) Delayed (X) Fire (X) Reactive () Sudden Release of Pressure ()

SECTION XIV - TRANSPORTATION INFORMATION

Part #2125 - 32 oz. (cases)

PROPER SHIPPING NAME: **FLAMMABLE LIQUID, N.O.S (HYDROXY COMPOUNDS)**

HAZARD CLASS: **3**

I.D. NUMBER: **UN 1993 “LIMITED QUANTITY”**

PACKING GROUP: **II**

PLACARDING: **NOT REQUIRED**

SPECIAL PACKING: **NOT REQUIRED**

Part #2141 - 96 oz. (cases)

Part #2155 – 55 gal. (drums)

PROPER SHIPPING NAME: **FLAMMABLE LIQUID, N.O.S (HYDROXY COMPOUNDS)**

HAZARD CLASS: **3**

I.D. NUMBER: **UN 1993**

PACKING GROUP: **II**

PLACARDING: **FLAMMABLE LIQUID**

IATA:

Packaging not suitable to be shipped by Air.

IMDG:

PROPER SHIPPING NAME: **FLAMMABLE LIQUID, n.o.s. (HYDROXY COMPOUNDS)**

HAZARD CLASS: **3**

I.D. NUBER: **UN1993**

PACKING GROUP: **II**

PLACARDING: **FLAMMABLE LIQUID**

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SECTION XV - REGULATORY INFORMATION

RIGHT TO KNOW TIER II REPORTING INFORMATION SECTION 311-312

CHEMICAL DESCRIPTION: **HYDROXY COMPOUNDS**

COMMON (LABEL) NAME: **AIR BRAKE SYSTEM ANTIFREEZE**

TYPE OF PRODUCT: **MIX - LIQUID**

PHYSICAL HAZARD: **FIRE**

HEALTH HAZARD: **IMMEDIATE (ACUTE)**

REACTIVITY: **NONE**

EXTREMELY HAZARDOUS SUBSTANCES: **NONE**

NFPA RATING:

HEALTH: **1**

FIRE: **3**

REACTIVITY: **0**