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

Product Name:

AIR BRAKE SYSTEM ANTIFREEZE

(formerly called Airline System Antifreeze)

Generic/Chemical Name:

HYDROXY COMPOUND

MSDS Preparation Date:

August 8, 1995 - supersedes January 25, 1995

Emergency Phone Number:

800/424-9300

SECTION II - COMPOSITION/INFORMATION OF INGREDIENTS

INGREDIENT HYDROXY COMPOUNDS PERCENT 100

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; 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

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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 launder before reuse.

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 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 POINT 54° F (TCC) FLAMMABLE LIMITS: LOWER...... 5.5 UPPER...... 36.5

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 of combustible liquids.

EMPTY CONTAINERS CONTAIN FLAMMABLE VAPORS: "DO NOT USE TORCH CUTTING 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: Dispose of waste by supervised incineration 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 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.

SECTION VIII - EXPOSURE CONTROLS AND PERSONAL PROTECTION:

OSHA				ACGIH	
TWA		STEL		TWA	
PPM	MgM3	PPM	MgM3	PPM	MgM3
200	260	200	310	200	260
Carcinogen - NTP ProgramN/A					
Carcinogen - IA	RC Progra	m	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): Hydrocarbon vapor canister or supplied-air hose made 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 gloves if necessary.

EYE PROTECTION: Normally not needed.

OTHER PROTECTION EQUIPMENT: Hydrocarbon insoluble apron if needed.

SECTION IX - PHYSICAL AND CHEMICAL PROPERTIES.

BOILING POINT	. 147° F (64.5° C)
VAPOR PRESSURE (mmHG)	. 96 @ 68° F (22° C)
VAPOR DENSITY (AIR =1)	. 1.11
SOLUBILITY IN WATER	. Totally miscible
SPECIFIC GRAVITY (H2O =1)	792 @ 20/20° C
PERCENT, VOLATILE BY VOLUME (%)	. 100
VAPORATION RATE	. 4.6
APPEARANCE	. Clear, water white liquid
ODOR	Alcohol odor

SECTION X - STABILITY AND REACTIVITY:

STABILITY	. Stable
INCOMPATIBILITY (Materials to avoid)	Strong chronic anhydride, lead
HAZARDOUS DECOMPOSITION PRODUCTS	perchlorate and perchloric
CARBON MONOXIDE AND CARBON DIOXIDE. HAZARDOUS POLYMERIZATION	

CONDITIONS TO AVOID:

- 1. Prolonged or repeated breathing of vapors
- 2. Contact with eyes
- 3. Prolong 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.

SECTION XII - ECOLOGICAL INFORMATION

THIS PRODUCT DOES NOT CONTAIN ANY OZONE DEPLETING CHEMICALS

SECTION XIII - DISPOSAL CONSIDERATIONS

WASTE DISPOSAL: This product, if discarded, becomes 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 Packing Group: II

RCRA Waste Number: D001 U154

Waste management should be in compliance with federal, state, and local law.

SECTION XIV - TRANSPORTATION INFORMATION

PART #2155 - DRUMS

PROPER SHIPPING NAME: FLAMMABLE LIQUID, NOS (HYDROXY COMPOUND)

HAZARD CLASS: 3 I.D. NUMBER: UN 1993 PACKING GROUP: 2

PLACARDING: REQUIRED WHEN WEIGHT IS OVER 1000 POUNDS

PART #2125 - 32oz. and PART #2140 - 128oz. CASES

PROPER SHIPPING NAME: FLAMMABLE LIQUID, NOS (HYDROXY COMPOUND)

HAZARD CLASS: 3

I.D. NUMBER: UN 1993 "LIMITED QUANTITY"

PACKING GROUP: 3

PLACARDING: NOT REQUIRED SPECIAL PACKING: NOT REQUIRED

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

EMERGENCY RESPONSE GUIDE BOOK PAGE NUMBER: 28

NFPA RATING:

HEALTH: 1

FIRE: 3

REACTIVITY: 0