#### MATERIAL SAFETY DATA SHEET

EAGLE EP PICHER NITRIC ACID (35-40%) CAS#: 7697-37-2

EMERGENCY TELEPHONE: 800-535-5053 INFOTRAC (24 HOURS)

DATE PREPARED: AUGUST 26, 1992 DATE REVISED: SEPTEMBER 14, 1993

SECTION I

MANUFACTURER'S NAME......EAGLE-PICHER INDUSTRIES, INC.

ENVIRONMENTAL SCIENCE AND TECHNOLOGY

MIAMI, OKLAHOMA 74354

EMERGENCY TELEPHONE NUMBER.....(800) 535-5053 INFOTRAC (24 HOURS)

INFORMATION TELEPHONE NUMBER.....(918) 540-1507 FAX NUMBER.....(918) 542-3223

CHEMICAL NAME AND SYNONYMS......NITRIC ACID, < 40%

TRADE NAME AND SYNONYMS......AQUA FORTIS, AZOTIC ACID

CHEMICAL FAMILY......N/A FORMULA.....HNO3

SECTION II - HAZARDOUS INGREDIENTS/TOXICITY DATA

COMPONENTS CAS# ACGIH TLV OSHA PEL % (OPTIONAL)

7697-37-2 2 PPM TWA 2 PPM TWA AIR NITRIC ACID

TOXICITY DATA: UNKNOWN.

SECTION III - PHYSICAL DATA

MELTING PT.....N/A FORMULA WT......63.01

VAPOR PRESSURE (MMHG)..@ 6.8 (20 C) % VOLATILE BY VOLUME...........N/A VAPOR DENSITY (AIR=1)..N/A EVAPORATION RATE..................N/A SOLUBILITY IN WATER: COMPLETE APPEARANCE AND ODOR: COLORLESS LIQUID,

SUFFOCATING ACRID ODOR.

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT.....N/A

FLAMMABLE LIMITS.....N/A LEL: N/A UEL: N/A

EXTINGUISHING MEDIA: NONCOMBUSTIBLE. USE EXTINGUISHING MEDIA APPROPRIATE TO SURROUNDING FIRE.

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SPECIAL FIRE FIGHTING PROCEDURES: NITRIC ACID INCREASES THE FLAMMABILITY OF COMBUSTIBLE, ORGANIC AND READILY OXIDIZABLE MATERIALS. FIRE FIGHTERS SHOULD WEAR FULL PROTECTIVE CLOTHING. NIOSH-APPROVED SELF-CONTAINED BREATHING APPARATUS W/FULL FACE PIECE OPERATED IN THE POSITIVE PRESSURE MODE. UNUSUAL FIRE AND EXPLOSION HAZARDS: REACTS EXPLOSIVELY WITH COMBUSTIBLE ORGANIC OR READILY OXIDIZABLE MATERIALS: ALCOHOLS, METAL POWDER, OR HYDROGEN SULFIDE.

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## SECTION V - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE (TLV): ACGIH, OSHA TWA: 2 PPM.

HEALTH HAZARDS: MAY BE FATAL IF INHALED, SWALLOWED, OR ABSORBED THROUGH SKIN. CAUSES BURNS.

EFFECTS OF OVEREXPOSURE: MATERIAL IS EXTREMELY DESTRUCTIVE TO MUCOUS MEMBRANES AND UPPER RESPIRATORY TRACT, EYES AND SKIN. INHALATION MAY BE FATAL AS A RESULT OF SPASM, INFLAMMATION AND EDEMA OF THE LARYNX AND BRONCHI, CHEMICAL PNEUMONITIS AND PULMONARY EDEMA. SYMPTOMS INCLUDE: BURNING SENSATION, COUGHING, WHEEZING, LARYNGITIS, SHORTNESS OF BREATH, HEADACHE, AND VOMITING. STAINS ANIMAL TISSUE A BRIGHT YELLOW.

PRIMARY ROUTE(S) OF EXPOSURE: [X! DERMAL [X! INHALATION [X! INGESTION EMERGENCY FIRST AID PROCEDURES

INHALATION: REMOVE TO FRESH AIR. IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN.

EYE CONTACT: IMMEDIATELY FLUSH EYES WITH COPIOUS AMOUNTS OF WATER FOR AT LEAST 15 MINUTES.

SKIN CONTACT: IMMEDIATELY WASH SKIN WITH COPIOUS AMOUNTS OF WATER. REMOVE AND WASH CONTAMINATED CLOTHING.

INGESTION: WASH OUT MOUTH WITH WATER. CALL A PHYSICIAN.

#### SECTION VI - REACTIVITY DATA

STABILITY: [X! STABLE [ ! UNSTABLE

CONDITIONS TO AVOID: HEAT, LIGHT; MAY DISCOLOR ON EXPOSURE TO LIGHT. FUMES IN MOIST AIR.

INCOMPATIBILITY: BASES, REDUCING AGENTS, ALCOHOLS, ALKALI METALS, BRASS, COPPER, COPPER ALLOYS, GALVANIZED IRON, ALUMINUM, CORRODES STEEL, ORGANIC MATERIALS, AMINES.

HAZARDOUS DECOMPOSITION PRODUCTS: TOXIC FUMES OF NITROGEN OXIDES. HAZARDOUS POLYMERIZATION: [ ! MAY OCCUR [X! WILL NOT OCCUR

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### SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: WEAR SELF-CONTAINED BREATHING APPARATUS, RUBBER BOOTS AND CHEMICAL RESISTANT GLOVES. ABSORB ON SAND, VERMICULITE AND PLACE IN A CLOSED CONTAINER AND HOLD FOR DISPOSAL. VENTILATE AREA AND WASH SPILL SITE AFTER MATERIAL PICKUP IS COMPLETE. WASTE DISPOSAL METHOD: FOR SMALL QUANTITIES, CAUTIOUSLY ADD TO A LARGE STIRRED EXCESS OF WATER. ADJUST THE PH TO NEUTRAL, SEPARATE ANY INSOLUBLE SOLIDS OR LIQUIDS AND PACKAGE THEM FOR WASTE DISPOSAL. FLUSH THE AQUEOUS SOLUTIONS DOWN THE DRAIN WITH PLENTY OF WATER. THE HYDROLYSIS AND NEUTRALIZATION REACTIONS MAY GENERATE HEAT AND FUMES WHICH CAN BE CONTROLLED BY THE RATE OF ADDITION. FOLLOW ALL STATE, FEDERAL AND LOCAL REGULATIONS.

# SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION: NIOSH/MSHA APPROVED RESPIRATOR. PROTECTIVE GLOVES: CHEMICAL RESISTANT. EYE PROTECTION: SAFETY GOGGLES. OTHER PROTECTIVE EQUIPMENT: PROTECTIVE CLOTHING. SAFETY SHOWER, EYE BATH, FACE SHIELD.

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VENTILATION:

LOCAL EXHAUST: N/A MECHANICAL EXHAUST: REQUIRED. SPECIAL: CHEMICAL FUME HOOD. OTHER: N/A

SECTION IX - SPECIAL PROVISIONS

PRECAUTIONS: AVOID ALL CONTACT. WASH THOROUGHLY AFTER HANDLING. CORROSIVE.

POISON. STRONG OXIDIZER.

OTHER PRECAUTIONS: KEEP TIGHTLY CLOSED. STORE IN A COOL, DRY PLACE.

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