MATERIAL SAFETY DATA SHEET

EAGLE EP PICHER

HYDROCHLORIC ACID, SOLUTION

CAS#: 7647-01-0

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

DATE PREPARED: AUGUST 25, 1992 DATE REVISED: SEPTEMBER 15, 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.......HYDROCHLORIC ACID, SOLUTION; MURIATIC

ACID

FORMULA.....HCL

SECTION II - HAZARDOUS INGREDIENTS/TOXICITY DATA

COMPONENTS CAS# ACGIH TLV OSHA PEL
-----HYDROCHLORIC ACID 7647-01-0 5PPM CL 5PPM CL % (OPTIONAL)

TOXICITY DATA: IHL-HMN LCLO: 1300PPM/30M, INL-HMN LCLO: 3000PPM/5M, IHL-RAT LC50: 3124PPM/1H, ORL-RAT LD50: 900MG/KG.

SECTION III - PHYSICAL DATA

VAPOR DENSITY (AIR=1)....@ 1.3 EVAPORATION RATE......UNKNOWN SOLUBILITY IN WATER: 100%, SLIGHT APPEARANCE AND ODOR: COLORLESS,

EVOLUTION OF HEAT. FUMING LIQUID.

SECTION IV - FIRE AND EXPLOSION DATA

FLASH POINT: N/A

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

EXTINGUISHING MEDIA: NON-COMBUSTIBLE. USE EXTINGUISHING MEDIA APPROPRIATE TO SURROUNDING FIRE CONDITIONS.

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SPECIAL FIRE FIGHTING PROCEDURES: FIRE FIGHTERS SHOULD WEAR PROPER PROTECTIVE EQUIPMENT AND SELF-CONTAINED BREATHING APPARATUS WITH FULL FACE PIECE IN POSITIVE PRESSURE MODE. DO NOT GET WATER INSIDE CONTAINERS! UNUSUAL FIRE AND EXPLOSION HAZARDS: WILL PRODUCE TOXIC FUMES OF HYDROGEN CHLORIDE GAS IN CONTACT WITH WATER, AND HYDROGEN GAS UPON CONTACT WITH METAL.

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SECTION V - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE (TLV): ACGIH, OSHA CEILING LIMIT: 5 PPM.
HEALTH HAZARDS: MAY BE FATAL BY INHALATION, INGESTION OR SKIN ABSORPTION.
HIGH CONCENTRATIONS MAY BE DESTRUCTIVE TO TISSUE OF MUCOUS MEMBRANES, UPPER
RESPIRATORY TRACT, EYES AND SKIN. INHALATION MAY BE FATAL AS A RESULT OF
INFLAMMATION, SPASM, AND EDEMA OF LARYNX AND BRONCHI, CHEMICAL PNEUMONITIS AND
PULMONARY EDEMA.

EFFECTS OF OVEREXPOSURE: BURNING SENSATION, COUGHING, WHEEZING, LARYNGITIS, SHORTNESS OF BREATH, HEADACHE, NAUSEA, AND VOMITING.

EMERGENCY FIRST AID PROCEDURES

INHALATION: REMOVE TO FRESH AIR. IF BREATHING, GIVING OXYGEN. IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION. CALL A PHYSICIAN. EYE CONTACT: IMMEDIATELY FLUSH EYES WITH COPIOUS AMOUNTS OF WATER FOR AT LEAST

SKIN CONTACT: IMMEDIATELY FLUSH SKIN WITH COPIOUS AMOUNTS OF WATER FOR AT LEAST 15 MINUTES WHILE REMOVING CLOTHING.

INGESTION: CALL PHYSICIAN IMMEDIATELY. IF CONSCIOUS, GIVE WATER.

SECTION VI - REACTIVITY DATA

STABILITY: [X! STABLE [! UNSTABLE CONDITIONS TO AVOID: HEAT, MOISTURE. INCOMPATIBILITY: BASES, AMINES, ALKALI METALS, COPPER, COPPER ALLOYS, ALIMINIUM.

HAZARDOUS DECOMPOSITION PRODUCTS: HYDROGEN CHLORIDE GAS.
HAZARDOUS POLYMERIZATION: [! MAY OCCUR [X! WILL NOT OCCUR

SECTION VII - SPILL OR LEAK PROCEDURES

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STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: EVACUATE AREA. WEAR SELF-CONTAINED BREATHING APPARATUS, RUBBER BOOTS AND HEAVY RUBBER GLOVES. COVER SPILL WITH DRY LIME, SAND, OR SODA ASH. PLACE IN COVERED CONTAINERS USING NON-SPARKING TOOLS. TRANSPORT OUTDOORS. VENTILATE AREA AND WASH SPILL SITE AFTER PICK-UP IS COMPLETE.

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WASTE DISPOSAL METHOD: FOR SMALL QUANTITIES, CAUTIOUSLY ADD TO A LARGE QUANTITY OF STIRRED EXCESS OF WATER AND ADJUST PH TO 7 (NEUTRAL). SEPARATE ANY INSOLUBLE SOLIDS AND PACKAGE FOR HAZARDOUS WASTE DISPOSAL. FLUSH AQUEOUS SOLUTION DOWN THE DRAIN WITH PLENTY OF WATER. HYDROLYSIS MAY GENERATE HEAT AND FUMES WHICH CAN BE CONTROLLED BY RATE OF ADDITION. FOLLOW ALL FEDERAL, STATE, AND LOCAL REGULATIONS.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: KEEP TIGHTLY CLOSED, STORE IN A COOL, DRY PLACE. WEAR CHEMICAL RESISTANT GLOVES AND AVOID BREATHING VAPOR. DO NOT GET ON SKIN OR IN EYES.

SECTION VII - SPECIAL PRECAUTIONS

RESPIRATORY PROTECTION: NIOSH/MSHA APPROVED RESPIRATOR.
PROTECTIVE GLOVES: CHEMICAL RESISTANT. EYE PROTECTION: SAFETY GOGGLES/

SAFETY GOGGLES, FACE SHIELD.

OTHER PROTECTIVE EQUIPMENT: LAB COAT OR APRON.

VENTILATION:

MECHANICAL EXHAUST: REQUIRED

LOCAL EXHAUST: ACCEPTABLE SPECIAL: CHEM. FUME HOOD.

PRECAUTIONS: POISON! CORROSIVE! AVOID ALL CONTACT. AVOID BREATHING VAPOR.

AVOID PROLONGED OR REPEATED EXPOSURE. WASH THOROUGHLY AFTER HANDLING.

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