

MSDS SAFETY DATA SHEET CERTIFICATE

PHOSPHORIC ACID 85 PCT MIN FOOD GRADE

1 - PRODUCT IDENTIFICATION -----

PRODUCT NAME: PHOSPHORIC ACID

FORMULA: H_3PO_4

FORMULA WT: 98.00

CAS NO.: 7664-38-2

NIOSH/RTECS NO.: TB6300000

COMMON SYNONYMS: ORTHO-PHOSPHORIC ACID

EFFECTIVE: 09/05/86

PRECAUTIONARY LABELLING

BAKER SAF-T-DATA(TM) SYSTEM

HEALTH - 2 MODERATE

FLAMMABILITY - 0 NONE

REACTIVITY - 2 MODERATE

CONTACT - 3 SEVERE (CORROSIVE)

HAZARD RATINGS ARE 0 TO 4 (0 = NO HAZARD; 4 = EXTREME HAZARD).

LABORATORY PROTECTIVE EQUIPMENT: GOGGLES & SHIELD; LAB COAT & APRON; VENT HOOD; PROPER GLOVES

PRECAUTIONARY LABEL STATEMENTS

DANGER

CAUSES BURNS

HARMFUL IF SWALLOWED

DO NOT GET IN EYES, ON SKIN, ON CLOTHING.

AVOID BREATHING VAPOR. KEEP IN TIGHTLY CLOSED CONTAINER. USE WITH ADEQUATE VENTILATION. WASH THOROUGHLY AFTER HANDLING.

SAF-T-DATA(TM) STORAGE COLOR CODE: WHITE (CORROSIVE)

2 - HAZARDOUS CHEMICAL COMPOSITION -----

COMPONENT % CAS NO.

PHOSPHORIC ACID 85-100 7664-38-2

3 - PHYSICAL DATA

BOILING POINT: 158 C (316 F) VAPOR PRESSURE(MM HG): 2.2

MELTING POINT: 21 C (70 F) VAPOR DENSITY(AIR=1): 3.4

SPECIFIC GRAVITY: 1.71 EVAPORATION RATE: N/A

(H₂O=1) (BUTYL ACETATE=1)

SOLUBILITY(H₂O): COMPLETE (IN ALL PROPORTIONS) % VOLATILES BY VOLUME: N/A

APPEARANCE & ODOR: COLORLESS,ODORLESS, SYRUPY LIQUID.

4 - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (OPEN CUP N/A NFPA 704M RATING: 2-0-0

FLAMMABLE LIMITS: UPPER - N/A % LOWER - N/A %

FIRE EXTINGUISHING MEDIA: USE WATER SPRAY, CARBON DIOXIDE, DRY CHEMICAL OR ORDINARY FOAM.

SPECIAL FIRE-FIGHTING PROCEDURES: FIREFIGHTERS SHOULD WEAR PROPER PROTECTIVE EQUIPMENT AND SELF-CONTAINED BREATHING APPARATUS WITH FULL FACEPIECE OPERATED IN POSITIVE PRESSURE MODE.

UNUSUAL FIRE & EXPLOSION HAZARDS: GIVES OFF FLAMMABLE VAPORS. VAPORS MAY FORM EXPLOSIVE MIXTURE WITH AIR. CLOSED CONTAINERS EXPOSED TO HEAT MAY EXPLODE.

TOXIC GASES PRODUCED: PHOSPHORUS OXIDE

5 - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE (TLV/TWA): 1 MG/M³ (PPM)

SHORT-TERM EXPOSURE LIMIT (STEL): 3 MG/M³ (PPM)

PERMISSIBLE EXPOSURE LIMIT (PEL): 1 MG/M³ (PPM)

TOXICITY: LD50 (ORAL-RAT)(MG/KG) - 1530

LD50 (SKIN-RABBIT)(MG/KG) - 2740

CARCINOGENICITY: NTP: NO IARC: NO Z LIST: NO OSHA REG: NO

EFFECTS OF OVEREXPOSURE: CONTACT WITH SKIN OR EYES MAY CAUSE SEVERE IRRITATION OR BURNS. INHALATION OF VAPORS MAY CAUSE SEVERE IRRITATION OF THE RESPIRATORY SYSTEM.

TARGET ORGANS: RESPIRATORY SYSTEM, EYES, SKIN

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: NONE IDENTIFIED

ROUTES OF ENTRY: INHALATION, INGESTION, EYE CONTACT, SKIN CONTACT

EMERGENCY AND FIRST AID PROCEDURES:

CALL A PHYSICIAN.

IF SWALLOWED, DO NOT INDUCE VOMITING; IF CONSCIOUS, GIVE WATER, MILK, OR MILK OF MAGNESIA.

IN CASE OF CONTACT, IMMEDIATELY FLUSH EYES OR SKIN WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES WHILE REMOVING CONTAMINATED CLOTHING AND SHOES. WASH CLOTHING BEFORE RE-USE.

6 - REACTIVITY DATA

STABILITY: STABLE HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

INCOMPATIBLES: MOST COMMON METALS, STRONG BASES

DECOMPOSITION PRODUCTS: OXIDES OF PHOSPHORUS

7 - SPILL AND DISPOSAL PROCEDURES

STEPS TO BE TAKEN IN THE EVENT OF A SPILL OR DISCHARGE: WEAR SELF-CONTAINED BREATHING APPARATUS AND FULL PROTECTIVE CLOTHING. STOP LEAK IF YOU CAN DO SO WITHOUT RISK. VENTILATE AREA. NEUTRALIZE SPILL WITH SODA ASH OR LIME. WITH CLEAN SHOVEL, CAREFULLY PLACE MATERIAL INTO CLEAN, DRY CONTAINER AND COVER; REMOVE FROM AREA. FLUSH SPILL AREA WITH WATER.

J. T. BAKER NEUTRASORB(R) OR NEUTRASOL(R) "LOW NA+" ACID NEUTRALIZERS ARE RECOMMENDED FOR SPILLS OF THIS PRODUCT.

DISPOSAL PROCEDURE: DISPOSE IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL ENVIRONMENTAL REGULATIONS.

EPA HAZARDOUS WASTE NUMBER: D002, D003 (CORROSIVE, REACTIVE WASTE)

8 - PROTECTIVE EQUIPMENT

VENTILATION: USE GENERAL OR LOCAL EXHAUST VENTILATION TO MEET TLV REQUIREMENTS.

RESPIRATORY PROTECTION: RESPIRATORY PROTECTION REQUIRED IF AIRBORNE CONCENTRATION EXCEEDS TLV. AT CONCENTRATIONS UP TO 12 PPM, A HIGH-EFFICIENCY PARTICULATE RESPIRATOR IS RECOMMENDED. ABOVE THIS LEVEL, A SELF-CONTAINED BREATHING APPARATUS IS ADVISED.

EYE/SKIN PROTECTION: SAFETY GOGGLES AND FACE SHIELD, UNIFORM, PROTECTIVE SUIT, POLYVINYL ALCOHOL GLOVES ARE RECOMMENDED.

9 - STORAGE AND INSTRUCTION FOR SAFE HANDLING

SAF-T-DATA(TM) STORAGE COLOR CODE: WHITE (CORROSIVE)

SPECIAL PRECAUTIONS: KEEP CONTAINER TIGHTLY CLOSED. STORE IN CORROSION-PROOF AREA.

10 - TRANSPORTATION DATA AND ADDITIONAL INFORMATION

DOMESTIC (D.O.T.)

PROPER SHIPPING NAME PHOSPHORIC ACID

HAZARD CLASS CORROSIVE MATERIAL (LIQUID)

UN/NA UN1805

LABELS CORROSIVE

REPORTABLE QUANTITY 5000 LBS.

INTERNATIONAL (I.M.O.)

PROPER SHIPPING NAME PHOSPHORIC ACID

HAZARD CLASS 8

UN/NA UN1805

LABELS CORROSIVE