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\*\*FOLIC ACID\*\*  
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MATERIAL SAFETY DATA SHEET

FISHER SCIENTIFIC  
CHEMICAL DIVISION  
1 REAGENT LANE  
FAIR LAWN NJ 07410  
(201) 796-7100

EMERGENCY NUMBER: (201) 796-7100  
CHEMTREC ASSISTANCE: (800) 424-9300

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SUBSTANCE IDENTIFICATION

SUBSTANCE: \*\*FOLIC ACID\*\* CAS-NUMBER 59-30-3

TRADE NAMES/SYNONYMS:  
BP-864.

N-(4-((2-AMINO-1,4-DIHYDRO-4-OXO-6-PTERIDINYL)METHYL)AMINO)BENZOYL)-L-GLUTAMIC ACID;  
LIVER LACTOBACILLUS CASEI FACTOR; PTEROYLGLUTAMIC ACID;  
PTEROYL-L-GLUTAMIC ACID; PTEROYLMONOGLUTAMIC ACID;  
PTEROYL-L-MONOGLUTAMIC ACID; PGA; VITAMIN BC; VITAMIC BE; VITAMIN M;  
ACC60914

CHEMICAL FAMILY:  
PTERIDINE

MOLECULAR FORMULA: C19-H19-N7-O6

MOLECULAR WEIGHT: 441.40

CERCLA RATINGS (SCALE 0-3): HEALTH=3 FIRE=U REACTIVITY=U PERSISTENCE=2  
NFPA RATINGS (SCALE 0-4): HEALTH=3 FIRE=U REACTIVITY=U

COMPONENTS AND CONTAMINANTS

COMPONENT: FOLIC ACID PERCENT: 100  
CAS# 59-30-3

OTHER CONTAMINANTS: NONE

EXPOSURE LIMITS:  
NO OCCUPATIONAL EXPOSURE LIMITS ESTABLISHED BY OSHA, ACGIH, OR NIOSH.

PHYSICAL DATA

DESCRIPTION: ODORLESS, YELLOWISH TO ORANGE TASTELESS CRYSTALS

MELTING POINT: NOT AVAILABLE SPECIFIC GRAVITY: NOT AVAILABLE

SOLUBILITY IN WATER: .00016%

SOLVENT SOLUBILITY: ACETIC ACID, PHENOL, PYRIDINE, SOLUTION OF ALKALI HYDROXIDES AND CARBONATES, ALCOHOL

DOES NOT MELT, DARKENS AND CHARS AT ABOUT 250 C

FIRE AND EXPLOSION DATA

FIRE AND EXPLOSION HAZARD:  
UNKNOWN FIRE AND EXPLOSION HAZARD.

FIREFIGHTING MEDIA:  
DRY CHEMICAL, CARBON DIOXIDE, WATER SPRAY OR FOAM

FOR LARGER FIRES, USE WATER SPRAY, FOG OR ALCOHOL FOAM

FIREFIGHTING:  
MOVE CONTAINER FROM FIRE AREA IF POSSIBLE. DO NOT SCATTER SPILLED MATERIAL WITH MORE WATER THAN NEEDED FOR FIRE CONTROL. DIKE FIRE CONTROL WATER FOR LATER DISPOSAL

USE AGENTS SUITABLE FOR TYPE OF SURROUNDING FIRE. AVOID BREATHING HAZARDOUS VAPORS, KEEP UPWIND.

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TOXICITY

FOLIC ACID:  
TOXICITY DATA:  
ANHYDROUS: 10 GM/KG ORAL-MOUSE LD50; 200 MG/KG SUBCUTANEOUS-MOUSE LD10;  
282 MG/KG INTRAVENOUS-MOUSE LD50; 85 MG/KG INTRAPERITONEAL-MOUSE LD50;  
MUTAGENIC DATA (RTECS); REPRODUCTIVE EFFECTS DATA (RTECS).  
DIHYDRATE: NO DATA AVAILABLE.  
CARCINOGEN STATUS: NONE.  
ACUTE TOXICITY LEVEL: INSUFFICIENT DATA.  
TARGET EFFECTS: NO DATA AVAILABLE.  
ADDITIONAL DATA: INTERACTIONS WITH MEDICATIONS HAVE BEEN REPORTED.

HEALTH EFFECTS AND FIRST AID

INHALATION:  
FOLIC ACID:  
ACUTE EXPOSURE- MAY CAUSE IRRITATION.  
CHRONIC EXPOSURE- NO DATA AVAILABLE.

FIRST AID- REMOVE FROM EXPOSURE AREA TO FRESH AIR IMMEDIATELY. IF BREATHING HAS STOPPED, PERFORM ARTIFICIAL RESPIRATION. KEEP PERSON WARM AND AT REST. TREAT SYMPTOMATICALLY AND SUPPORTIVELY. GET MEDICAL ATTENTION IMMEDIATELY.

SKIN CONTACT:  
FOLIC ACID:  
ACUTE EXPOSURE- MAY CAUSE IRRITATION.  
CHRONIC EXPOSURE- NO DATA AVAILABLE.

FIRST AID- REMOVE CONTAMINATED CLOTHING AND SHOES IMMEDIATELY. WASH AFFECTED AREA WITH SOAP OR MILD DETERGENT AND LARGE AMOUNTS OF WATER UNTIL NO EVIDENCE OF CHEMICAL REMAINS (APPROXIMATELY 15-20 MINUTES). GET MEDICAL ATTENTION IMMEDIATELY.

EYE CONTACT:  
FOLIC ACID:  
ACUTE EXPOSURE- MAY CAUSE IRRITATION.  
CHRONIC EXPOSURE- NO DATA AVAILABLE.

FIRST AID- WASH EYES IMMEDIATELY WITH LARGE AMOUNTS OF WATER OR NORMAL SALINE, OCCASIONALLY LIFTING UPPER AND LOWER LIDS, UNTIL NO EVIDENCE OF CHEMICAL REMAINS (APPROXIMATELY 15-20 MINUTES). GET MEDICAL ATTENTION IMMEDIATELY.

INGESTION:  
FOLIC ACID:  
ACUTE EXPOSURE- ALLERGIC SENSITIZATION HAS BEEN REPORTED FOLLOWING ORAL ADMINISTRATION.  
CHRONIC EXPOSURE- NO DATA AVAILABLE.

FIRST AID- TREAT SYMPTOMATICALLY AND SUPPORTIVELY. GET MEDICAL ATTENTION IMMEDIATELY. IF VOMITING OCCURS, KEEP HEAD LOWER THAN HIPS TO PREVENT ASPIRATION.

ANTIDOTE:  
NO SPECIFIC ANTIDOTE. TREAT SYMPTOMATICALLY AND SUPPORTIVELY.

REACTIVITY

REACTIVITY:  
STABLE UNDER NORMAL TEMPERATURES AND PRESSURES.

INCOMPATIBILITIES:  
FOLIC ACID:  
OXIDIZERS (STRONG): FIRE AND EXPLOSION HAZARD.

DECOMPOSITION:  
THERMAL DECOMPOSITION MAY RELEASE TOXIC AND/OR HAZARDOUS GASES.

POLYMERIZATION:  
HAZARDOUS POLYMERIZATION HAS NOT BEEN REPORTED TO OCCUR UNDER NORMAL TEMPERATURES AND PRESSURES.

STORAGE AND DISPOSAL

STORE IN A COOL PLACE PROTECTED FROM LIGHT.

CONDITIONS TO AVOID

NONE REPORTED.

SPILL AND LEAK PROCEDURES

OCCUPATIONAL SPILL:  
SWEEP UP AND PLACE IN SUITABLE CLEAN, DRY CONTAINERS FOR RECLAMATION OR LATER

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DISPOSAL. DO NOT FLUSH SPILLED MATERIAL INTO SEWER. KEEP UNNECESSARY PEOPLE AWAY.

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PROTECTIVE EQUIPMENT

VENTILATION:  
PROVIDE LOCAL EXHAUST OR PROCESS ENCLOSURE VENTILATION. VENTILATION EQUIPMENT MUST BE EXPLOSION-PROOF.

RESPIRATOR:  
FOR FIREFIGHTING AND OTHER IMMEDIATELY DANGEROUS TO LIFE OR HEALTH CONDITIONS:

ANY SELF-CONTAINED BREATHING APPARATUS THAT HAS A FULL FACEPIECE AND IS OPERATED IN A PRESSURE-DEMAND OR OTHER POSITIVE-PRESSURE MODE.

ANY SUPPLIED-AIR RESPIRATOR THAT HAS A FULL FACEPIECE AND IS OPERATED IN A PRESSURE-DEMAND OR OTHER POSITIVE-PRESSURE MODE IN COMBINATION WITH AN AUXILIARY SELF-CONTAINED BREATHING APPARATUS OPERATED IN PRESSURE-DEMAND OR OTHER POSITIVE-PRESSURE MODE.

ANY DUST AND MIST RESPIRATOR WITH A FULL FACEPIECE.

ANY AIR-PURIFYING FULL FACEPIECE RESPIRATOR WITH A HIGH-EFFICIENCY PARTICULATE FILTER.

ANY POWERED AIR-PURIFYING RESPIRATOR WITH A TIGHT-FITTING FACEPIECE AND HIGH-EFFICIENCY PARTICULATE FILTER.

ANY TYPE 'C' SUPPLIED-AIR RESPIRATOR WITH A FULL FACEPIECE OPERATED IN PRESSURE-DEMAND OR OTHER POSITIVE PRESSURE MODE OR WITH A FULL FACEPIECE, HELMET OR HOOD OPERATED IN CONTINUOUS-FLOW MODE.

ANY SELF-CONTAINED BREATHING APPARATUS WITH A FULL FACEPIECE OPERATED IN PRESSURE-DEMAND OR OTHER POSITIVE PRESSURE MODE.

CLOTHING:  
EMPLOYEE MUST WEAR APPROPRIATE PROTECTIVE (IMPERVIOUS) CLOTHING AND EQUIPMENT TO PREVENT REPEATED OR PROLONGED SKIN CONTACT WITH THIS SUBSTANCE.

GLOVES:  
EMPLOYEE MUST WEAR APPROPRIATE PROTECTIVE GLOVES TO PREVENT CONTACT WITH THIS SUBSTANCE.

EYE PROTECTION:  
EMPLOYEE MUST WEAR SPLASH-PROOF OR DUST-RESISTANT SAFETY GOGGLES TO PREVENT EYE CONTACT WITH THIS SUBSTANCE.

EMERGENCY EYE WASH: WHERE THERE IS ANY POSSIBILITY THAT AN EMPLOYEE'S EYES MAY BE EXPOSED TO THIS SUBSTANCE, THE EMPLOYER SHOULD PROVIDE AN EYE WASH FOUNTAIN WITHIN THE IMMEDIATE WORK AREA FOR EMERGENCY USE.

AUTHORIZED - FISHER SCIENTIFIC, INC.  
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