Product ID:TARTARIC ACID MSDS Date:08/07/1986 FSC:6810 NIIN:00-234-2057 **MSDS Number: BPZHK** === Responsible Party === Company Name:MALLINCKRODT Box:800 City:PARIS State:KY ZIP:40362 Country:US Info Phone Num:314-539-1600 Emergency Phone Num:314-539-1600 CAGE:ZA916 === Contractor Identification === Company Name: MALLINCKRODT MEDICAL, INC Address:2703 WAGNER PLACE Box:M City:MARYL AND HEIGHTS State:MO ZIP:63043 Country:US Phone:314-770-7800 CAGE:ZA916 Company Name: MALLINCKRODT SPECIALTY CHEMICALS CO Address:222 RED SCHOOL LANE Box:City:PHILLIPSBURG State:NJ ZIP:08865 Country:US Phone:908-859-2151 CAGE:62910

Ingred Name:TARTARIC ACID CAS:87-69-4 RTECS #:WW7875000 Fraction by Wt: 100% Other REC Limits:NONE SPECIFIED BY M.

LD50 LC50 Mi

xture:NONE SPECIFIED BY MANUFACTURER. Routes of Entry: Inhalation:YES Skin:NO Ingestion:YES Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO Health Hazards Acute and Chronic: ACUTE- INHALATION: NUISANCE DUST. CAN CAUSE COUGHING AND SNEEZING. INGESTION: MILDLY IRRITATING TO GASTROINTESTINAL SYSTEM IF LARGE QUANTITIES ARE INGESTED. EFFECT IS THAT OF AN ACID. EYE: MILD IRRITAN T AND POSSIBLY TEMPORARILY ABRASIVE. Explanation of Carcinogenicity:NOT RELEVANT. Effects of Overexposu re:COUGHING, SNEEZING, NAUSEA, VOMITING AND DIARRHEA. Medical Cond Aggravated by Exposure:NO INFORMATION FOUND. First Aid:INHALATION: REMOVE TO FRESH AIR. GET MEDICAL ATTENTION FOR ANY BREATHING DIFFICULTY. INGESTION: GIVE SEVERAL GLASSES OF WATER TO DRINK TO DILUTE. IF LARGE AMOUNTS WERE SWALLOWED, GET MEDICAL ADVICE. S KIN: WASH EXPOSED AREA WITH SOAP AND WATER. GET MEDICAL ADVICE IF IRRITATION DEVELOPS. EYE: IMMEDIATELY FLUSH WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES. CALL A PHYSICIAN. Extinguishing Media:WATER SPRAY, DRY CHEMICAL, ALCOHOL FOAM, OR CARBON DIOXIDE. Fire Fighting Procedures: WEAR NIOSH/MSHA APPROVED PRESS DEMAND SCBA AND FULL PROTECTIVE EQUIPMENT. Unusual Fire/Explosion Hazard:NOT CONSIDERED TO BE AN EXPLOSION HAZARD. AS WITH MOST ORGANIC SOLIDS, FIRE IS POSSIBLE AT ELEVATED TEMPERATURE S OR BY CONTACT WITH AN IGNITION SOURCE. Spill Release Procedures: VENT AREA. CLEAN-UP PERSONNEL MAY REQ PROT CLTHG & RESP PROT FROM DUST. SWEEP UP OR VACUUM UP AND CONTAINERIZE FOR RECLAMATION/DISPOSAL. AVOID DUST DISPERSAL. TRACE RESIDUE MAY BE FLUSHED TO SEWER W/L RG AMTS OF H2O. Neutralizing Agent:NONE SPECIFIED BY MANUFACTURER.

Handling and S

torage Precautions:KEEP IN TIGHTLY CLOSED CONTAINER. STORE IN COOL, DRY, VENTILATED AREA AWAY FROM SOURCES OF HEAT OR IGNITION. PROTECT AGAINST PHYSICAL DAMAGE. Other Precautions:NONE SPECIFIED BY MANUFACTURER.

Respiratory Protection:FOR CONDITIONS OF USE WHERE EXPOSURE TO DUST IS APPARENT, A NIOSH APPROVED DUST/MIST RESPIRATOR MAY BE WORN. FOR EMERGENCIES, A NIOSH APPROVED SELF-CONTAINED BREATHING APPARATUS

MAY BE NECESSARY. Ventilation:GENERAL OR LOCAL. Protective Gloves:IMPERVIOUS GLOVES. Eye Protection:CHEMICAL WORKERS GOGGLES . Other Protective Equipment:EYE WASH FOUNTAIN AND QUICK-DRENCH FACILITIES IN WORK AREA. Work Hygienic Practices:CONTACT LENSES SHOULD NOT BE WORN WHEN WORKING WITH MATERIAL.

Supplemental Safety and Health

HCC:N1 NRC/State Lic Num:NOT RELEVANT Melt/Freeze Pt:M.P/F.P Text:403F,206C Solubility i n Water:133G/100G OF H2O Appearance and Odor:WHITE CRYSTALS, ODORLESS.

Stability Indicator/Materials to Avoid:YES
SILVER AND SILVER COMPOUNDS.
Stability Condition to Avoid:NONE SPECIFIED BY MANUFACTURER.
Hazardous Decomposition Products:CO2 AND CO MAY FORM WHEN HEATED TO DECOMPOSITION.

Waste Disposal Methods: WHATEVER CANNOT BE SAVED FOR RECLAMATION MAY B

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## DISPOSED AS ACID WASTE IN AN APPROVED WASTE DISPOSAL FACILITY. ENSURE COMPLIANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS.

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