Product ID:OXALIC ACID, DIHYDRATE MSDS Date:05/01/1989 FSC:6810 NIIN:00-132-4020 MSDS Number: BKBVS === Responsible Party === Company Name: J T BAKER INC Address:222 RED SCHOOL LANE City:PHILLIPSBURG State:NJ ZIP:08865 Country:US Info Phone Num:201-859-2151 Emergency Phone Num:908-859-2151, 800-424-8802 CAGE:DO803 === Contractor Identification === Company Name: J T BAKER INC Address:222 RED SCHOOL LANE City:PHILLIPSBURG State:NJ ZIP:08865 Country:US Phone:1-800-582-2537 CAGE:DO803 Company Name: MALLINCKRODT BAKER, INC. Address:222 RED SCHOOL LANE Box:City:PHILLIPSBURG State:NJ ZIP:08865 Country:US Phone:800-582-2537 CAGE:70829

Ingred Name:OXALIC ACID, DIHYDRATE (LIMITS AS OXALIC ACID, CAS NO.144-62-7.) CAS:6153-56-6 Fract ion by Wt: 90-100% OSHA PEL:1 MG/M3;2 MG/M3 STEL ACGIH TLV:1 MG/M3;2 MG/M3 STEL

LD50 LC50 Mixture:LD50:ORAL,RAT:375 MG/KG;DRML,RBT:20 G/KG Routes of Entry: Inhalation:YES Skin:NO Ingestion:NO Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO Health Hazards Acute and Chronic: TARGET ORGANS: RESPIRATORY SYSTEM, EYES, SKIN, KIDNEYS, MUCOUS MEMBRANES. ACUTE: INHAL: CORROSION OF MOUTH, THROAT, & STOMACH, HEADACHE, COUGHIN G, DIFFICULT BREATHING, CHEST PAINS, SEVERE LUNG IRRITATION, PULMONARY EDEMA, & MAY BE FATAL. SKIN/EYE:SEVERE BURNS. INGEST: HEADACHE, NAUSEA, VOMITING, (SEE EFTS OF OVEREXP) Explanation of Carcinogenicity:NOT RELEVANT Effects of Overexposure:HLTH HAZ:GASTROINTESTINAL IRRITATION, CONVULSIONS, BURNS TO MOUTH, THROAT, AND STOMACH, AND MAY BE FATAL. CHRONIC: KIDNEY DAMAGE. MFR IDENTIFIES SKIN AND INGESTION AS ROUTES OF ENTRY . Medical Cond Aggravated by Exposure: CHRONIC RESP **IRATORY DISEASE, KIDNEY** DISORDERS, SKIN DISORDERS.

First Aid:INGEST:DO NOT INDUCE VOMIT. IF CONSCIOUS, GIVE WATER/MILK OR MILK OF MAGNESIA. CALL MD. INHAL:REMOVE TO FRESH AIR. SUPPORT BREATHING (GIVE O2/ARTF RESP). RINSE MOUTH OR GARGLE REPEATEDLY W/ COLD WATER . SKIN:IMMEDIATELY FLUSH W/PLENTY OF WATER FOR AT LEAST 15 MINS. EYE:IMMEDIATELY FLUSH W/PLENTY OF WATER FOR AT LEAST 15 MINS.

Extinguishing Media:USE EXTINGUISHING MEDIA APPROPRIATE FOR SURROUNDING FIRE.

Fire Fighting Procedures:FIREFIGHTERS SHOULD WEAR NIOSH/MSHA APPRVD SCBA W/FULL FACEPIECE OPERATED IN POSTIVE PRESSURE MODE & FULL PROT EQUIP. MOVE CNTNRS FROM FIRE AREA (SEE SUPP DATA) Unusual Fire/Explosion Hazard:NOTE:DECOMPOSES AT MELTING POINT.

Spill Release Procedures:WEAR NIOSH

/MSHA APPRVD SCBA & FULL PROT CLTHG. W/CLEAN SHOVEL, PLACE MATL INTO CLEAN, DRY METAL CNTNR & COVER W/DRY SAND, LIME OR SODA ASH. KEEP CONTAINER TIGHTLY COVERED. Neutralizing Agent:NONE SPECIFIED BY MANUFACTURER.

Handling and Storage Precautions: KEEP CONTAINER TIGHTLY CLOSED. STORE IN CORROSION-PROOF AREA. ISOLATE FROM INCOMPATIBLE MATERIALS. Other Precautions: NONE SPECIFIED BY MANUFACTURER.

Respiratory Protection:REQUIRED IF AIRBORNE CONC EXCEEDS TLV. AT CONCS UP TO 10 PPM, A NIOSH/MSHA APPRVD HIGH-EFFICIENCY PARTICULATE RESPIRATOR IS RECOMMENDED. ABOVE THIS LEVEL, A NIOSH/MSHA APPRVD SCBA IS ADVISED.

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

Protective Gloves: RUBBER GLOVES.

Eye Protection: CHEMICAL WORKERS GOGGLES .

Other Protective Equipment: UNIFORM, APRON.

Work Hygienic Practices:W

ASH HANDS THOROUGHLY AFTER USE AND BEFORE

EATING, SMOKING OR USING SANITARY FACILITIES .

Supplemental Safety and Health

FIRE FIGHT PROC: IF IT CAN BE DONE WITHOUT RISK. USE WATER TO KEEP FIRE-EXPOSED CONTAINERS COOL.

HCC:C1

Melt/Freeze Pt:M.P/F.P Text:213F,101C Vapor Density:4.3 Spec Gravity:1.65 Solubility in Water:APPRECIABLE (>10%) Appearance and Odor:WHITE CRYSTALLINE SOLID. ODORLESS. Percent Volatiles by Volume:0

Stability Indicator/Materials to Avoid:YES
STRONG OXIDIZING AGENTS, STRONG BASES, SILVER AND SILVER COMPOUNDS, MOST COMMON METALS.
Stability Condition to Avoid:HEAT
Hazardous Decomposition Products:CARBON MONOXIDE, CARBON DIOXIDE.

Waste Disposal Methods:DISPOSE I/A/W ALL APPLICABLE FEDERAL, STATE, AND LOCAL ENVIRONMENTAL REGULATIONS. EPA HAZ WASTE NO

:D002 (CORROSIVE WASTE).

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