

MALLINCKRODT INC -- NITRIC ACID, 70% -- 6810-00-130-1912

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Product Identification
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Product ID:NITRIC ACID, 70%

MSDS Date:04/06/1989

FSC:6810

NIIN:00-130-1912

MSDS Number: BLVZN

=== Responsible Party ===

Company Name:MALLINCKRODT INC

Box:M

City:PARIS

State:KY

ZIP:40361

Country:US

Info Phone Num:314-982-5000

Emergency Phone Num:314-982-5000

CAGE:62910

=== Contractor Identification ===

Comp

any 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

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Composition/Information on Ingredients
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Ingred Name:NITRIC ACID

CAS:7697-37-2

RTECS #:QU5775000

OSHA PEL:2 PPM;4 PPM STEL

ACGIH TLV:2 PPM;4 PPM STEL

EPA Rpt Qty:1000 LBS

DOT Rpt Qty:1000 LBS

Ingred Name:SUPDAT: LIFTING LIDS OCCASIONALLY. GET MED ATTN IMMED.

RTECS #:9999999ZZ

Ingred Name:SPILL PROC: ALKALINE MAT

L, PICKUP W/ABSORB MATL(SAND,
EARTH, VERMICULITE) & DISPOSE IN RCRA-APPRVD WASTE FACILITY(ING 4)
RTECS #:9999999ZZ

Ingred Name:ING 3:OR SEWER NEUT SLURRY W/EXCESS H*2O IF LOC ORDINACES
ALLOW. PROVIDE FORCED VENTILAITON TO DISSIPATE FUMES.
RTECS #:9999999ZZ

Ingred Name:OTHER PREC: CAUSTIC POISON ACT.
RTECS #:9999999ZZ

Ingred Name:VENT:PREC BECAUSE IT CAN CTRL EMISSIONS OF CONTAM @ ITS
SOURCE, PVNT DISPERSION OF IT INTO GEN WORK AREA. PLEASE (ING 7)
RTECS #:9999999ZZ

Ingred Name:IN
G 6: REFER TO ACGIH DOCUMENT, "INDUST VENT, MANUAL OF
RECOMMENDED PRACTICES", MOST RECENT EDITION, FOR DETAILS.
RTECS #:9999999ZZ

Ingred Name:HNDLT/STOR PREC: MOISTURE.
RTECS #:9999999ZZ

===== Hazards Identification =====

LD50 LC50 Mixture: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:INHAL:CORR! INHAL OF VAP CAN
CAUSE

BRTHG DFCLT & LEAD TO PENUM & PULMONARY EDEMA, WHICH CAN BE
FATAL. OTHER SYM MAY INCL COUGH/CHOKING/IRRIT OF NOSE/THROAT/RESP
TRACT. INGEST:CORR! SWALLOW NITRI C ACID CAN CAUSE IMMED PAIN &
BURNS OF MOUTH/THROAT/ESOPHAGUS & GI TRACT. SKIN:CORR! CAN CAUSE
RED, (EFTS OF OVEREXP)

Explanation of Carcinogenicity:NOT RELEVANT.

Effects of Overexposure:HLTH HAZ:PAIN/SEV SKIN BURNS. CONC SOLN CAUSE
DEEP ULCERS & STAIN SKIN YELLOW/YELLOW-BROWN COLOR. EYE:CORR! VAP
ARE IRRITATING/MA

Y CAUSE DAM TO EYES. SPLASHES MAY CAUSE SEV BURNS
& PERM EYE DAM. CHRON IC:LONG-TERM EXPOS TO CONC VAP MAY CAUSE
EROSION OF TEETH. LONG TERM EXPOS SELDOM OCCUR DUE TO CORR
PROPERTIES OF ACID.

Medical Cond Aggravated by Exposure:PERSONS WITH PRE-EXISTING SKIN
DISORDERS OR EYE DISEASE MAY BE MORE SUSCEPTIBLE TO EFFECTS OF THIS
SUBSTANCE.

===== First Aid Measures =====

First Aid:INHAL:REMOVE TO FRESH AIR. IF NOT BRTHG, GIVE ARTF RESP. IF

BRTHG DFCLT, GIVE O2. CALL PHYS. INGEST:DO NOT INDUCE VOMIT. GIVE LG QTY OF H2O/MILK IF AVAIL. NEVER GIVE ANYTHING BY MOUTH TO AN UNCON PERS ON. GET MED ATTN IMMED. SKIN:IMMED FLUSH W/PLENTY OF H2O FOR @ LST 15 MIN WHILE REMOVING CONTAMD CLTHG/SHOES. WASH CLTHG BEFORE REUSE. THORO CLEAN SHOES BEFORE REUSE. GET MED ATTN IMMED. (SUPDAT)

===== Fire Fighting Measures =====

Extinguishing Media:IF INVOLVED IN FIRE, USE WATER SPRAY.

Fire Fighti

ng Procedures:WEAR NIOSH/MSHA APPROVED SCBA AND FULL PROTECTIVE EQUIPMENT . INCREASES FLAMMABILITY OF COMBUSTIBLE, ORGANIC, AND READILY, OXIDIZABLE MATERIALS.

Unusual Fire/Explosion Hazard:NOT COMBUST/BUT SUBSTANCE IS STRONG OXIDIZER/ITS HEAT OF RXN W/REDUCING AGENTS/COMBUST MAY CAUSE IGNIT. CAN REACT W/METALS TO REL FLAM HYDROGEN GAS. (SUPDAT)

===== Accidental Release Measures =====

Spill Release Procedures:ISOLATE/ENCLOSE AREA OF LEAK/SPILL. CLEAN-UP

PERS SHOULD WEAR PROT CLTHG & RESP EQUIP SUITABLE FOR TOX/CORR FLUIDS/VAP. SM SPILLS:FLUSH W/H2O & NEUT W/ALKALINE MATL(SODA ASH, LIME, ETC). SEWER W/EXCES S H2O. LG SPILL/LOT SIZES:NEUT W/ (ING 3)

Neutralizing Agent:SEE MATERIAL RELEASED SPILLED PROCEDURES.

===== Handling and Storage =====

Handling and Storage Precautions:KEEP IN TIGHTLY CLSD CONTR, STORED IN COOL/ DRY/VENTD AREA. PROTECT FROM PHYS DAM/DIRECT SUNLIGHT. ISOLATE FROM INC

OMP SUBSTANCE. PROTECT FROM (ING 8)

Other Precautions:DO NOT GET IN EYES/ON SKIN/CLTHG. AVOID BRTHG MIST. USE ONLY W/ADEQ VENT. KEEP FROM CONT W/CLTHG/OTHER COMBUST MATL. DO NOT STORE NEAR COMBUST MATL. REMOVE/WASH CONTAMD CLTHG PROMPTLY. SUBSTANCE IS CL ASSIFIED AS POISON UNDER FED (ING 5)

===== Exposure Controls/Personal Protection =====

Respiratory Protection:IF TLV IS EXCEEDED, WEAR NIOSH/MSHA APPRVD SUPPLIED AIR, FULL-FACEPIECE RESP, AIRLINED HOOD, OR SCB

A. NITRIC

ACID IS AN OXIDIZER & SHOULD NOT COME IN CONT W/CARTRIDGES & CANNISTERS THAT CNTN OXIDIZABLE MATL, SUCH AS ACTIVATED CHARCOAL.

Ventilation:SYS OF LOC/GEN EXHAUST IS RECOM TO KEEP EMPLOYEE EXPOS BELOW AIRBORNE EXPOS LIM. LOC EXHAUST VENT IS GENERALLY (ING 6)

Protective Gloves:IMPERVIOUS GLOVES.

Eye Protection:CHEM WRKRS GOG & FULL LGTH FSHLD.

Other Protective Equipment:IMPERVIOUS CLOTHING, BOOTS, LAB COAT, APRON OR COVERALLS TO PREVENT SKIN CONTACT.

Work Hygienic Practi

ces:WASH THOROUGHLY AFTER HANDLING. MAINTAIN EYEWASH FOUNTAIN AND QUICK DRENCH FACILITIES IN WORK AREA.

Supplemental Safety and Health

EXPLOS HAZ:REACTS EXPLOS W/COMBUST/ORG/ READILY OXIDIZABLE MATL SUCH AS:ALCOHOLS, TURPETINE, CHARCOAL, ORG REFUSE, METAL POWDER/HYDROGEN SULFIDE/ETC. MATL TO AVOID:POWDERS, CARBIDES, HYDROGEN SULFIDE, TURPETINE, COMBUST ORG. HAZ DECOMP:& TOX & CORR FUMES. FIRST AID PROC:EYE:WASH W/PLENTY OF H2O FOR @ LST 15 MIN,(ING 2

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Physical/Chemical Properties =====

HCC:C1

Boiling Pt:B.P. Text:252F,122C

Melt/Freeze Pt:M.P/F.P Text:-29F,-34C

Vapor Pres:62@68F

Vapor Density:2-3

Spec Gravity:1.41

Evaporation Rate & Reference:NON INFORMATION FOUND.

Solubility in Water:INFINITE IN WATER.

Appearance and Odor:CLEAR, COLORLESS TO SLIGHTLY YELLOW LIQUID. SUFFOCATING ACRID ODOR.

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Stability and Reactivity Data =====

Stability Indicator/Materials to Avoid:YES

DANGEROUSLY POWERFUL OX

IDIZING AGENT/CONC NITRIC ACID IS INCOMP W/MOST

SUBSTANCES/ESP STRONG BASES, METALLIC (SUPDAT)

Stability Condition to Avoid:CONTAINERS MAY BURST WHEN HEATED.

Hazardous Decomposition Products:WHEN HEATED TO DECOMP, EMITS TOX

NITROGEN OXIDES FUMES & HYDROGEN NITRATE. WILL REACT W/H2O/STEAM TO PRDCE HEAT(SUPDAT)

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Disposal Considerations =====

Waste Disposal Methods:ENSURE COMPLIANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS.

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ded with this information by the compiling agencies):

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