

MALLINCKRODT/BAKER -- SODIUM SULFATE ANHYDROUS -- 6550-00-299-8176

===== Product Identification =====

Product ID:SODIUM SULFATE ANHYDROUS

MSDS Date:03/05/1997

FSC:6550

NIIN:00-299-8176

Status Code:A

MSDS Number: CJMMR

==== Responsible Party ===

Company Name:MALLINCKRODT/BAKER

Address:222 RED SCHOOL LANE

City:PHILLIPSBURG

State:NJ

ZIP:08865-2219

Country:US

Info Phone Num:908-859-2151

Emergency Phone

Num:24 HR:908-859-2151/CAN 613-996-6666

Resp. Party Other MSDS Num.:S5018

Chemtrec Ind/Phone:(800)424-9300

CAGE:LO895

==== Contractor Identification ===

Company Name:MALLINCKRODT/BAKER

Address:222 RED SCHOOL LANE

Box:City:PHILLIPSBURG

State:NJ

ZIP:08865-2219

Country:US

Phone:908-859-2151

CAGE:LO895

===== Composition/Information on Ingredients =====

Ingred Name:SODIUM SULFATE

CAS:7757-82-6

RTECS #:WE1650000

Minumum % Wt:90.

Maxumum % Wt:100.

===== Hazards Ide

ntification =====

Health Hazards Acute and Chronic:INHALATION-NOT EXPECTED TO BE A HEALTH HAZARD. INGESTION-MILDLY TOXIC BY INGESTION. SLOWLY ABSORBED FROM THE ALIMENTARY TRACT.BECAUSE OF OSMOTIC ACTIVITY, IT WILL DRAW WATER INTO THE LUMEN OF THE BOWEL & MAY CAUSE PURGING, FLUID LOSS, BLOOD IN STOOL, FALL OF BLOOD PRESSURE & HIGH SODIUM LEVELS IN THE BLOOD. SKIN-NO ADVERSE EFFECTS EXPECTED. EYE-NO ADVERSE EFFECTS EXPECTED BUT DUST MAY CAUSE MECHANICAL

IRRITATION. CHRONIC: NO INFORMATION FOUND.

Medical Cond Aggravated by Exposure:NO INFORMATION FOUND.

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

First Aid:INHALATION-NOT EXPECTED TO REQUIRE FIRST AID MEASURES.

INGESTION-GIVE SEVERAL GLASSES OF WATER TO DRINK TO DILUTE. IF LARGE VOLUMES WERE SWALLOWED, GET MEDICAL ADVICE. SKIN-WASH EXPOSED AREA WITH SOAP AND WATER. GET MEDICAL ADVICE IF IRRITATION DEVELOPS. EYE-WASH THOROUGHLY WITH RUNNING WATER.GET MEDICAL ADVICE IF IRRITATION DEVELOPS.

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

Extinguishing Media:USE ANY MEANS SUITABLE FOR EXTINGUISHING SURROUNDING FIRE. NOT CONSIDERED TO BE A FIRE HAZARD.

Fire Fighting Procedures:USE ANY MEANS SUITABLE FOR EXTINGUISHING SURROUNDING FIRE. USE PROTECTIVE CLOTHING AND BREATHING EQUIPMENT APPROPRIATE FOR THE SURROUNDING FIRE.

Unusual Fire/Explosion Hazard:NOT CONSIDERED TO BE AN EXPLOSION HAZARD, BUT VIOLENT EXPLOSIONS OCCUR WHEN POTASSIUM SULFATE AND SODIUM

SULFATE ARE MELTED WITH ALUMINUM.

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

Spill Release Procedures:VENTILATE AREA OF LEAK OR SPILL. WEAR APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT. SWEEP UP AND CONTAINERIZE FOR RECLAMATION OR DISPOSAL. VACUUMING OR WET SWEEPING MAY BE USED TO AVOID DUST DISPERSAL.

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

Handling and Storage Precautions:KEEP

IN A TIGHTLY CLOSED CONTAINER,

STORED IN A COOL, DRY, VENTILATED AREA. PROTECT AGAINST PHYSICAL DAMAGE. ISOLATE FROM INCOMPATIBLE SUBSTANCES. CONTAINERS OF THIS MATERIAL MAY BE HAZARDOUS WHEN EMPTY SINCE THEY RETAIN PRODUCT RESIDUES; OBSERVE ALL WARNINGS AND PRECAUTIONS LISTED FOR THE PRODUCT.

Other Precautions: AS PART OF GOOD INDUSTRIAL AND PERSONAL HYGIENE AND SAFETY PROCEDURES, AVOID ALL UNNECESSARY EXPOSURE TO THE CHEMICAL SUBSTANCE AND ENSURE PROMPT REMOVAL FROM SKIN, EYES AND CLOTHING.

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

Respiratory Protection: PERSONAL RESPIRATORS (NIOSH APPROVED): FOR CONDITIONS OF USE WHERE EXPOSURE TO DUST OR MIST IS APPARENT, A HALF-FACE DUST/MIST RESPIRATOR MAY BE WORN. FOR EMERGENCIES OR WHERE EXPOSURE LEVELS ARE NOT KNOWN, USE FULL-FACE POSITIVE-PRESSURE, AIR-SUPPLIED RESPIRATOR. WARNING: AIR PURIFYING RESPIRATORS DO NOT PROTECT WORKERS IN OXYGEN-DEFICIENT ATMOSPHERES.

Ventilation: DILUTION VENTILATION IS OKAY FOR HEALTH HAZARD CONTROL OF

THIS SUBSTANCE. IF CONDITIONS OF USE CREATE DISCOMFORT TO WORKER, LOCAL EXHAUST SYSTEM BE CONSIDERED.

Protective Gloves: WEAR PROTECTIVE GLOVES

Eye Protection: USE CHEMICAL SAFETY GOGGLES.

Other Protective Equipment: MAINTAIN EYE WASH FOUNTAIN & QUICK-DRENCH FACILITIES IN WORK AREA.

Work Hygienic Practices: CLEAN BODY-COVERING CLOTHING.

Supplemental Safety and Health

===== Physical/Chemical Properties =====

=====

HCC:N1

Melt/Freeze Pt:=843.9C, #####F

Vapor Density: 2.68

Solubility in Water: 3.6 PARTS H2O, 1 IN 2 MAX.

Appearance and Odor: FINE WHITE CRYSTALLINE GRANULES. ODORLESS.

Percent Volatiles by Volume: @21C(70F):0

===== Stability and Reactivity Data =====

Stability Indicator/Materials to Avoid: YES

IN COMBINATION WITH SODIUM SULFATE, ALUMINUM AND MAGNESIUM WILL EXPLODE @ 800C (1472C); STRONG MINERAL ACIDS AND BASES.

Stability Condition to Avoid: AIR, MOISTURE

RE, AND INCOMPATIBLES. STABLE

IN TIGHTLY CLOSED CONTAINERS UNDER NORMAL CONDITIONS OF STORAGE.

Hazardous Decomposition Products:OXIDES OF SULFUR AND SODIUM MAY FORM

WHEN HEATED TO DECOMPOSITION.

Conditions to Avoid Polymerization:WILL NOT OCCUR.

===== Toxicological Information =====

Toxicological Information:NO LD50/LC50 INFORMATION FOUND RELATING TO

NORMAL ROUTES OF OCCUPATIONAL EXPOSURE. INVESTIGATED AS A
TUMORIGEN, MUTAGEN, REPRODUCTIVE EFFECTOR.

SODIUM SULFATE: NONE.

===== Ecological Information =====

Ecological:ECOLOGICAL: ENVIRONMENTAL FATE-WHEN RELEASED INTO THE SOIL,
THIS MATERIAL IS EXPECTED TO LEACH INTO GROUNDWATER. THIS MATERIAL
IS NOT EXPECTED TO SIGNIFICANTLY BIOACCUMULATE. ENVIRONMENTAL
TOXICITY-T HIS MATERIAL IS NOT EXPECTED TO BE TOXIC TO AQUATIC
LIFE. THE LC50/96-HOUR VALUES FOR FISH ARE OVER 100 MG/L. THE
EC50/48-HOUR VALUES FOR DAPHNIA ARE OVER 100 MG/L.

=====

===== Disposal Considerations =====

Waste Disposal Methods:WHAT CANNOT BE SAVED FOR RECOVERY OR RECYCLING
SHOULD BE MANAGED IN AN APPROPRIATE & APPROVED WASTE DISPOSAL
FACILITY. PROCESSING, USE OR CONTAMINATION OF THIS PRODUCT MAY
CHANGE THE WASTE MANAGEMENT OPTIONS. DISPOSE OF CONTAINER &
UNUSED CONTENTS IN ACCORDANCE WITH FEDERAL, STATE & LOCAL REQUIREMENTS.

===== MSDS Transport Information =====

Transport Informati

on:NOT REGULATED.

===== Regulatory Information =====

SARA Title III Information:NONE.

Federal Regulatory Information:NONE.

===== Other Information =====

Disclaimer (provided with this information by the compiling agencies):

This information is formulated for use by elements of the Department
of Defense. The United States of America in no manner whatsoever,
expressly or implied, warrants this information to be accurate.

te and

disclaims all liability for its use. Any person utilizing this document should seek competent professional advice to verify and assume responsibility for the suitability of this information to their particular situation.