FISHER SCIENTIFIC CO CHEMICAL DIV. -- SODIUM HYDROXIDE -- 6810-00-234-8373
========== Product Identification ==========

Product ID:SODIUM HYDROXIDE
MSDS Date:04/22/1989
FSC:6810
NIIN:00-234-8373
MSDS Number: BMBTN
=== Responsible Party ===
Company Name:FISHER SCIENTIFIC CO CHEMICAL DIV.
Address:1 REAGENT LANE
City:FAIR LAWN
State:NJ
ZIP:07410
Country:US
Info Phone Num:201-796-7100
Emergency Phone Num:201-796-7100 OR 201-796-7523
CAGE:1B464
=== Contractor Identification
===
Company Name:FISHER SCIENTIFIC CO. CHEMICAL MFG DIV
Address:1 REAGENT LANE
Box:City:FAIRLAWN
State:NJ
ZIP:07410-2802
Country:US
Phone:201-796-7100
CAGE:1B464

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

Ingred Name:SODIUM HYDROXIDE
CAS:1310-73-2
RTECS #:WB4900000
Fraction by Wt: 100%
Other REC Limits:NONE SPECIFIED BY M.
OSHA PEL:2 MG/M3
ACGIH TLV:C 2 MG/M3; 9293
EPA Rpt Qty:1000 LBS
DOT Rpt Qty:1000 LBS

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

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LD50 LC50 Mixture:ORAL, RAT, LD50 = 140-340 MG/KG
Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO
Health Hazards Acute and
Chronic:EYES:CORROSIVE,IRRITATION,BURNS,BLINDNESS.
SKIN:CORROSIVE,IRRITATION,BURNS. INHALATION:SEVERE IRRITATION,
DAMAGE OF UPPER RESPIRATORY TRACT, PNEUMONITIS MAY OCCUR.
INGESTION:CORROSIVE,BURNING OF MOUTH ,THROAT,STOMACH, DEATH.
CHRONIC:DERMATITIS, CORNEAL,NASAL,BRONCHIAL AND GAST
RIC ULCERATION,
CONJUCTIVITI
Explanation of Carcinogenicity:DATA PER MGF MSDS.
Effects of Overexposure:IRRITATION TO SEVERE BURNS OF SKIN AND EYES. ,
ABDOMINAL PAIN, BLOODY VOMITING AND DIARRHEA., SOAR THOAT, COUGHING
AND DYSPNEA.
Medical Cond Aggravated by Exposure:SKIN DISORDERS, EYE PROBLEMS &
IMPAIRED RESPIRATORY FUNCTION.

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

First Aid:EYES:FLUSH WITH WATER FOR AT LEAST 15 MIN. GET IMMED MEDICAL
HELP. SKI
N:WASH WITH WATER AND REMOVE CONTAMINATED CLOTHES & SHOES.
SEE DOCTOR IMM. INHALATION:REMOVE TO FRESH AIR. IF NOT BREATHING
GIVE C PR. IF BREATHING IS DIFFICULT, GIVE OXYGEN. GET MEDICAL
HELP. INGESTION:DO NOT INDUCE VOMITING. GIVE WATER/MILK, FOLLOWED
BY CITRUS FRUIT JUICE. NOTHING BY MOUTH IF UNCONSCIOUS.SEE DOCTOR
IMMEDIATELY.

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

Extinguishing Media:EXTINGUISH WITH AGENT SUITABLE FOR SURROUNDING
FIRE.
Fire Fighting Procedures:FIRE FIGHTERS SHOULD USE NIOSH APPROVED SCBA &
FULL PROTECTIVE EQUIPMENT WHEN FIGHTING CHEMICAL FIRE. USE WATER
SPRAY TO COOL NEARBY CONTAINERS EXPOSED TO FIRE.
Unusual Fire/Explosion Hazard:HOT OR MOLTEN MATERIAL CAN REACT
VIOLENTLY WITH WATER. CAN REACT WITH CERTAIN METALS SUCH AS
ALUMINUM TO GENERAL FLAMMABLE HYDROGEN GAS.

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

Spill Release Procedures:CLEAN UP PERSONNEL REQUIRE PROTECTIV

E CLOTHNG
& RESP PROTECTION FROM DUST. SWEEP,SCOOP OR PICK UP SPILLED MATERIAL. AVOID DUSTNG. TRANSFER WASTE TO A CLOSED CONTAINER FOR DISPOSAL. DO NOT FLUSH TO THE SEWER. NEUTRALIZE RESIDUE WITH 5% ACETIC ACID.
Neutralizing Agent:5% ACETIC ACID

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

Handling and Storage Precautions:STORE IN COOL,DRY WELL VENTED LOW FIRE RISK AREA. PROTECT FROM HEAT,SHOCK,FRICTION. KEEP CONTAINERS CLOSED.
Other Precautions:
KEEP AWAY FROM INCOMPATIBLE MATERIALS. ALWAYS ADD THE CAUSTIC TO WATER WHILE STIRRING;NEVER THE REVERSE.

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

Respiratory Protection:NONE NORMALLY REQUIRED. USE NIOSH APPROVED SELF-CONTAINED BREATHING APPARATUS IF TLV IS EXCEEDED OR WHEN SPRAYING OR USING IN CONFINED SPACES.
Ventilation:LOCAL EXHAUST TO ELIMINATE MISTS/FUMES/GASES.
Protective Gloves:IMPERVIOUS
Eye Protection:CHEM.SFTY GOGGLES AND/OR FULL FACESHIELD
Othe
r Protective Equipment:IMPERVIOUS PROTECTIVE CLOTHING,INCLUDING BOOTS, LAB COAT,APRON OR COVERALLS TO PREVENT SKIN CONTACT.EYE WASH&SFTY SHOWER
Work Hygienic Practices:WASH THOROUGHLY AFTER HANDLING. THIS SUBSTANCE IS CLASSIFIED AS A POISON.
Supplemental Safety and Health
MTLS TO AVOID,CONT'D:CONTACT W.NITROMETHANE & OTHER SIMILAR NITRO COMPDS CAUSES FORMATION OF SHOCK-SENSITIVE SALTS; CONTACT W.METALS SUCH AS ALUMINUM,TIN,AND ZINC CAUSES FORMATION OF FLAMMABLE HYDROGE N
GAS. ADDING WATER TO CAUSTIC SOLUTIONGENERATES LARGE AMOUNTS OF HEAT.

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

HCC:B1
Boiling Pt:B.P. Text:2534F,1390C
Melt/Freeze Pt:M.P/F.P Text:604F,318C
Spec Gravity:2.13
pH:14.0
Solubility in Water:COMPLETE
Appearance and Odor:WHITE, HYGOSCOPIC PELLETS.

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

Stability Indicator/Materials to Avoid:YES
ACIDS,FLAMM LIQUIDS AND CHLORINATED ORGANIC COMPDS, ORGANIC

PEROXIDES-SEE SUPPL.
Stability Condition to Avoid:VERY HYGROSCOPIC.CAN SLOWLY PICK UP MOISTURE FROM AIR AND REACT WITH CO2 IN AIR TO FORM SODIUM CARBONATE.
Hazardous Decomposition Products:SODIUM OXIDE

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

Waste Disposal Methods:DISPOSE OF IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS.