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THE WORLD'S FOREMOST MANUFACTURER OF RESEARCH
BIOCHEMICALS AND DIAGNOSTIC REAGENTS

JUN 18 1996

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DATE 06/04/96
CUST#: 2-097-94804
PO#: UNF-64248

MATERIAL SAFETY DATA SHEET PAGE 1

THIS MSDS IS FOR A COMPONENT OF CATALOG #: 520-30

SECTION 1. CHEMICAL IDENTIFICATION

CATALOG #: S5881
NAME: SODIUM HYDROXIDE ANHYDROUS PELLETS

SECTION 2. COMPOSITION/INFORMATION ON INGREDIENTS

CAS #: 1310-73-2
MF: HNAO
EC NO: 215-185-5

SYNONYMS

CAUSTIC SODA * HYDROXYDE DE SODIUM (FRENCH) * LEWIS-RED DEVIL LYE *
LYE * NARIUMHYDROXID (GERMAN) * NARIUMHYDROXYDE (DUTCH) * SODA LYE *
SODIO(IDROSSIDO DI) (ITALIAN) * SODIUM HYDRATE * SODIUM HYDROXIDE
(ACGIH:OSHA) * SODIUM HYDROXIDE, SOLID (UN1823) (DOT) * SODIUM
HYDROXIDE, SOLUTION (UN1824) (DOT) * SODIUM(HYDROXYDE DE) (FRENCH) *
UN1823 (DOT) * UN1824 (DOT) * WHITE CAUSTIC *

SECTION 3. HAZARDS IDENTIFICATION

LABEL PRECAUTIONARY STATEMENTS

CORROSIVE
CAUSES BURNS.
HARMFUL BY INHALATION, IN CONTACT WITH SKIN AND IF SWALLOWED.
IN CASE OF CONTACT WITH EYES, RINSE IMMEDIATELY WITH PLENTY OF
WATER AND SEEK MEDICAL ADVICE.
TAKE OFF IMMEDIATELY ALL CONTAMINATED CLOTHING.
WEAR SUITABLE PROTECTIVE CLOTHING, GLOVES AND EYE/FACE
PROTECTION.

SECTION 4. FIRST-AID MEASURES

IN CASE OF CONTACT, IMMEDIATELY FLUSH EYES OR SKIN WITH COPIOUS
AMOUNTS OF WATER FOR AT LEAST 15 MINUTES WHILE REMOVING CONTAMINATED
CLOTHING AND SHOES.
ASSURE ADEQUATE FLUSHING OF THE EYES BY SEPARATING THE EYELIDS
WITH FINGERS.
IF INHALED, REMOVE TO FRESH AIR. IF NOT BREATHING GIVE ARTIFICIAL
RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN.
IF SWALLOWED, WASH OUT MOUTH WITH WATER PROVIDED PERSON IS CONSCIOUS.
CALL A PHYSICIAN.
WASH CONTAMINATED CLOTHING BEFORE REUSE.
DISCARD CONTAMINATED SHOES.

SECTION 5. FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA

CONTINUED ON NEXT PAGE

BRANCH OFFICES AT:

Table listing branch offices for SIGMA-ALDRICH in various countries including Germany, Spain, Italy, Belgium, Switzerland, Mexico, India, and South Korea.

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M A T E R I A L S A F E T Y D A T A S H E E T P A G E 2

THIS MSDS IS FOR A COMPONENT OF CATALOG #: 520-30

CATALOG #: S5881
NAME: SODIUM HYDROXIDE ANHYDROUS PELLETS

USE EXTINGUISHING MEDIA APPROPRIATE TO SURROUNDING FIRE CONDITIONS.
DO NOT USE WATER.

SPECIAL FIREFIGHTING PROCEDURES
WEAR SELF-CONTAINED BREATHING APPARATUS AND PROTECTIVE CLOTHING TO
PREVENT CONTACT WITH SKIN AND EYES.

UNUSUAL FIRE AND EXPLOSIONS HAZARDS
EMITS TOXIC FUMES UNDER FIRE CONDITIONS.

SECTION 6. - - - - - ACCIDENTAL RELEASE MEASURES- - - - -

EVACUATE AREA.
WEAR SELF-CONTAINED BREATHING APPARATUS, RUBBER BOOTS AND HEAVY
RUBBER GLOVES.
SWEEP UP, PLACE IN A BAG AND HOLD FOR WASTE DISPOSAL.
VENTILATE AREA AND WASH SPILL SITE AFTER MATERIAL PICKUP IS COMPLETE.

SECTION 7. - - - - - HANDLING AND STORAGE- - - - -

REFER TO SECTION 8.

ADDITIONAL INFORMATION
CONTACT WITH ALUMINUM, TIN AND ZINC LIBERATES HYDROGEN GAS. CONTACT
WITH NITROMETHANE AND OTHER SIMILAR NITRO COMPOUNDS CAUSES FORMATION
OF SHOCK-SENSITIVE SALTS.

SECTION 8. - - - - - EXPOSURE CONTROLS/PERSONAL PROTECTION- - - - -

WEAR APPROPRIATE NIOSH/MSHA-APPROVED RESPIRATOR, CHEMICAL-RESISTANT
GLOVES, SAFETY GOGGLES, OTHER PROTECTIVE CLOTHING.
SAFETY SHOWER AND EYE BATH.
USE ONLY IN A CHEMICAL FUME HOOD.
FACESHIELD (8-INCH MINIMUM).
DO NOT BREATHE DUST.
DO NOT GET IN EYES, ON SKIN, ON CLOTHING.
AVOID PROLONGED OR REPEATED EXPOSURE.
READILY ABSORBED THROUGH SKIN.
WASH THOROUGHLY AFTER HANDLING.
TOXIC.
CORROSIVE.
KEEP TIGHTLY CLOSED.
EXTREMELY HYGROSCOPIC
AIR SENSITIVE
STORE IN A COOL DRY PLACE.

SECTION 9. - - - - - PHYSICAL AND CHEMICAL PROPERTIES - - - - -

APPEARANCE AND ODOR
WHITE PELLETS

PHYSICAL PROPERTIES

CONTINUED ON NEXT PAGE

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M A T E R I A L S A F E T Y D A T A S H E E T PAGE 3

THIS MSDS IS FOR A COMPONENT OF CATALOG #: 520-30

CATALOG #: S5881
NAME: SODIUM HYDROXIDE ANHYDROUS PELLETS

MELTING POINT: 318 C
VAPOR PRESSURE: <18MM 20 C 3MM 37 C
SPECIFIC GRAVITY: 2.130
VAPOR DENSITY: >1

SECTION 10. - - - - - STABILITY AND REACTIVITY - - - - -

INCOMPATIBILITIES
STRONG OXIDIZING AGENTS
STRONG ACIDS
ORGANIC MATERIALS
CHLORINATED SOLVENTS
ABSORBS CO2 FROM AIR.
PROTECT FROM MOISTURE.

HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS
NATURE OF DECOMPOSITION PRODUCTS NOT KNOWN.

SECTION 11. - - - - - TOXICOLOGICAL INFORMATION - - - - -

ACUTE EFFECTS
HARMFUL IF SWALLOWED, INHALED, OR ABSORBED THROUGH SKIN.
MATERIAL IS EXTREMELY DESTRUCTIVE TO TISSUE OF THE MUCOUS MEMBRANES
AND UPPER RESPIRATORY TRACT, EYES AND SKIN.
CAUSES SEVERE BURNS.
INHALATION MAY BE FATAL AS A RESULT OF SPASM, INFLAMMATION AND EDEMA
OF THE LARYNX AND BRONCHI, CHEMICAL PNEUMONITIS AND PULMONARY EDEMA.
SYMPTOMS OF EXPOSURE MAY INCLUDE BURNING SENSATION, COUGHING,
WHEEZING, LARYNGITIS, SHORTNESS OF BREATH, HEADACHE, NAUSEA AND
VOMITING.
TO THE BEST OF OUR KNOWLEDGE, THE CHEMICAL, PHYSICAL, AND
TOXICOLOGICAL PROPERTIES HAVE NOT BEEN THOROUGHLY INVESTIGATED.

RTECS #: WB4900000
SODIUM HYDROXIDE

IRRITATION DATA

EYE-MKY 1%/24H SEV	TXAPA9 6,701,64
SKN-RBT 500 MG/24H SEV	28ZPAK -7,72
EYE-RBT 400 UG MLD	OYYAA2 26,627,83
EYE-RBT 1% SEV	AJOPAA 29,1363,46
EYE-RBT 50 UG/24H SEV	28ZPAK -7,72
EYE-RBT 1 MG/24H SEV	TXAPA9 6,701,64
EYE-RBT 1 MG/30S RINSE SEV	TXCYAC 23,281,82

TOXICITY DATA

IPR-MUS LD50:40 MG/KG COREAF 257,791,63
ONLY SELECTED REGISTRY OF TOXIC EFFECTS OF CHEMICAL SUBSTANCES
(RTECS) DATA IS PRESENTED HERE. SEE ACTUAL ENTRY IN RTECS FOR
COMPLETE INFORMATION.

SECTION 12. - - - - - ECOLOGICAL INFORMATION - - - - -

CONTINUED ON NEXT PAGE

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NAME: SODIUM HYDROXIDE ANHYDROUS PELLETS

DATA NOT YET AVAILABLE.

SECTION 13. - - - - - DISPOSAL CONSIDERATIONS - - - - -

FOR SMALL QUANTITIES: CAUTIOUSLY ADD TO A LARGE STIRRED EXCESS OF WATER. ADJUST THE PH TO NEUTRAL, SEPARATE ANY INSOLUBLE SOLIDS OR LIQUIDS AND PACKAGE THEM FOR HAZARDOUS-WASTE DISPOSAL. FLUSH THE AQUEOUS SOLUTION DOWN THE DRAIN WITH PLENTY OF WATER. THE HYDROLYSIS AND NEUTRALIZATION REACTIONS MAY GENERATE HEAT AND FUMES WHICH CAN BE CONTROLLED BY THE RATE OF ADDITION. OBSERVE ALL FEDERAL, STATE AND LOCAL ENVIRONMENTAL REGULATIONS.

SECTION 14. - - - - - TRANSPORT INFORMATION - - - - -

CONTACT SIGMA CHEMICAL COMPANY FOR TRANSPORTATION INFORMATION.

SECTION 15. - - - - - REGULATORY INFORMATION - - - - -

EUROPEAN INFORMATION

EC INDEX NO: 011-002-01-3

CORROSIVE

R 35

CAUSES SEVERE BURNS.

S 26

IN CASE OF CONTACT WITH EYES, RINSE IMMEDIATELY WITH PLENTY OF WATER AND SEEK MEDICAL ADVICE.

S 27

TAKE OFF IMMEDIATELY ALL CONTAMINATED CLOTHING.

S 36/39

WEAR SUITABLE PROTECTIVE CLOTHING AND EYE/FACE PROTECTION.

REVIEWS, STANDARDS, AND REGULATIONS

OEL=MAK

ACGIH TLV-CL 2 MG/M3

EPA FIFRA 1988 PESTICIDE SUBJECT TO REGISTRATION OR RE-REGISTRATION

FEREAC 54,7740,89

MSHA STANDARD: AIR-CL 2 MG/M3

DTLVS* 3,233,71

OSHA PEL (GEN INDU): 8H TWA 2 MG/M3

CFRGR 29,1910.1000,94

OSHA PEL (CONSTRUC): 8H TWA 2 MG/M3

CFRGR 29,1926.55,94

OSHA PEL (SHIPYARD): 8H TWA 2 MG/M3

CFRGR 29,1915.1000,93

OSHA PEL (FED CONT): 8H TWA 2 MG/M3

CFRGR 41,50-204.50,94

OEL-AUSTRALIA: TWA 2 MG/M3 JAN93

OEL-BELGIUM: STEL 2 MG/M3 JAN93

OEL-DENMARK: TWA 2 MG/M3 JAN93

OEL-FINLAND: TWA 2 MG/M3 JAN93

85INAB 6,1416,91

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MATERIAL SAFETY DATA SHEET PAGE 5

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NAME: SODIUM HYDROXIDE ANHYDROUS PELLETS

OEL-FRANCE:TWA 2 MG/M3 JAN93
OEL-GERMANY:TWA 2 MG/M3 JAN93
OEL-JAPAN:STEL 2 MG/M3 JAN93
OEL-THE NETHERLANDS:TWA 2 MG/M3 JAN93
OEL-THE PHILIPPINES:TWA 2 MG/M3 JAN93
OEL-SWEDEN:TWA 2 MG/M3 JAN93
OEL-SWITZERLAND:TWA 2 MG/M3;STEL 4 MG/M3 JAN93
OEL-THAILAND:TWA 2 MG/M3 JAN93
OEL-TURKEY:TWA 2 MG/M3 JAN93
OEL-UNITED KINGDOM:TWA 2 MG/M3;STEL 2 MG/M3 JAN93
OEL IN BULGARIA, COLOMBIA, JORDAN, KOREA CHECK ACGIH TLV
OEL IN NEW ZEALAND, SINGAPORE, VIETNAM CHECK ACGIH TLV
NIOSH REL TO SODIUM HYDROXIDE-AIR:CL 2 MG/M3/15M
NIOSH* DHHS #92-100,92
NOHS 1974: HZD 69070; NIS 359; TNF 112525; NOS 192; TNE 1122583
NOES 1983: HZD X3782; NIS 167; TNF 21989; NOS 120; TNE 370582; TFE
137156
NOES 1983: HZD 69070; NIS 426; TNF 133757; NOS 246; TNE 2819743; TFE
995960
EPA GENETOX PROGRAM 1988, NEGATIVE: CELL TRANSFORM.-SA7/SHE
EPA TSCA SECTION 8(B) CHEMICAL INVENTORY
EPA TSCA TEST SUBMISSION (TSCATS) DATA BASE, OCTOBER 1995
NIOSH ANALYTICAL METHOD, 1994: ALKALINE DUSTS, 7401

SECTION 16. OTHER INFORMATION

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