



SIGMA-ALDRICH

ALDRICH CHEMICAL COMPANY, INC.
P.O. BOX 355
MILWAUKEE, WISCONSIN 53201, USA

ATTN: SAFETY DIRECTOR

EMERGENCY PHONE 1-414-273-3850

SCHOOLCRAFT COLLEGE
18600 HAGGERTY ROAD
LIVONIA MI 48152

DATE 02/04/99
CUST#: 938609
PO#: 88221

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 1

SECTION 1. - - - - - C H E M I C A L I D E N T I F I C A T I O N - - - - -

CATALOG #: 20804-3
NAME: SODIUM SULFIDE NONAHYDRATE, 98+%,
A.C.S. REAGENT

SECTION 2. - - - - - C O M P O S I T I O N / I N F O R M A T I O N O N I N G R E D I E N T S - - - - -

CAS #: 1313-84-4
MF: NA2S

SYNONYMS

SODIUM SULPHIDE NONAHYDRATE * SULFURE DE SODIUM (FRENCH) *

SECTION 3. - - - - - H A Z A R D S I D E N T I F I C A T I O N - - - - -

LABEL PRECAUTIONARY STATEMENTS

FLAMMABLE (USA)
HIGHLY FLAMMABLE (EU)
TOXIC
CONTACT WITH ACIDS LIBERATES TOXIC GAS.
TOXIC BY INHALATION, IN CONTACT WITH SKIN AND IF SWALLOWED.
CAUSES BURNS
TARGET ORGAN(S):
NERVES
CARDIOVASCULAR SYSTEM
KEEP AWAY FROM SOURCES OF IGNITION - NO SMOKING.
IN CASE OF CONTACT WITH EYES, RINSE IMMEDIATELY WITH PLENTY OF
WATER AND SEEK MEDICAL ADVICE.
WEAR SUITABLE PROTECTIVE CLOTHING, GLOVES AND EYE/FACE
PROTECTION.
DO NOT BREATHE DUST.
HYGROSCOPIC
AIR AND LIGHT SENSITIVE
REFRIGERATE.
AVOID CONTACT WITH ACID.

SECTION 4. - - - - - F I R S T - A I D M E A S U R E S - - - - -

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.

CONTINUED ON NEXT PAGE

13232

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PAGE 2

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SECTION 5. - - - - - FIRE FIGHTING MEASURES - - - - -

EXTINGUISHING MEDIA

WATER SPRAY.
CARBON DIOXIDE, DRY CHEMICAL POWDER OR APPROPRIATE FOAM.

SPECIAL FIREFIGHTING PROCEDURES

WEAR SELF-CONTAINED BREATHING APPARATUS AND PROTECTIVE CLOTHING TO
PREVENT CONTACT WITH SKIN AND EYES.
FLAMMABLE SOLID.

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.

AVOID RAISING DUST.

VENTILATE AREA AND WASH SPILL SITE AFTER MATERIAL PICKUP IS COMPLETE.

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

REFER TO SECTION 8.

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.

DO NOT BREATHE DUST.

DO NOT GET IN EYES, ON SKIN, ON CLOTHING.

AVOID PROLONGED OR REPEATED EXPOSURE.

WASH THOROUGHLY AFTER HANDLING.

CORROSIVE.

TOXIC.

KEEP TIGHTLY CLOSED.

AVOID CONTACT WITH ACID.

KEEP AWAY FROM HEAT, SPARKS, AND OPEN FLAME.

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

APPEARANCE AND ODOR

COLORLESS CRYSTALS WITH NO MORE THAN SLIGHT YELLOW(ACS)

PHYSICAL PROPERTIES

SPECIFIC GRAVITY: 1.427

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13233



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PAGE 3

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

INCOMPATIBILITIES

ACIDS
OXIDIZING AGENTS
ALUMINUM
COPPER
ZINC
AND THEIR ALLOYS.
PROTECT FROM MOISTURE.
LIGHT SENSITIVE
AIR SENSITIVE
EXPOSURE TO AIR CONVERTS THE MATERIAL TO SODIUM THIOSULFATE AND
SODIUM CARBONATE.

HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS

SULFUR OXIDES
HYDROGEN SULFIDE GAS

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.
INHALATION MAY RESULT IN 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.
EXPOSURE CAN CAUSE:
DIZZINESS
DROWSINESS
CONFUSION
WEAKNESS
HEART PALPITATIONS
IRREGULAR BREATHING
UNCONSCIOUSNESS
TARGET ORGAN(S):
NERVES
CARDIOVASCULAR SYSTEM
TO THE BEST OF OUR KNOWLEDGE, THE CHEMICAL, PHYSICAL, AND
TOXICOLOGICAL PROPERTIES HAVE NOT BEEN THOROUGHLY INVESTIGATED.

ADDITIONAL INFORMATION

DIRECT CONTACT WITH THE EYE CAN CAUSE IRREVERSIBLE DAMAGE INCLUDING
BLINDNESS.
IF INGESTED, CONTACT WITH STOMACH ACIDS CAN LIBERATE TOXIC HYDROGEN
SULFIDE GAS.

RTECS #: WE1925000

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13234

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SODIUM SULFIDE, NONAHYDRATE

TOXICITY DATA

IPR-MUS LD50:53 MG/KG COREAF 257,791,1963
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 - - - - -

DATA NOT YET AVAILABLE.

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

CONTACT A LICENSED PROFESSIONAL WASTE DISPOSAL SERVICE TO DISPOSE OF
THIS MATERIAL.
OBSERVE ALL FEDERAL, STATE AND LOCAL ENVIRONMENTAL REGULATIONS.

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

CONTACT ALDRICH CHEMICAL COMPANY FOR TRANSPORTATION INFORMATION.

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

EUROPEAN INFORMATION

CAUTION: SUBSTANCE NOT YET FULLY TESTED.

HIGHLY FLAMMABLE

TOXIC

R 31

CONTACT WITH ACIDS LIBERATES TOXIC GAS.

R 23/24/25

TOXIC BY INHALATION, IN CONTACT WITH SKIN AND IF SWALLOWED.

R 34

CAUSES BURNS.

HIGHLY FLAMMABLE

S 16

KEEP AWAY FROM SOURCES OF IGNITION - NO SMOKING.

S 26

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

S 36/37/39

WEAR SUITABLE PROTECTIVE CLOTHING, GLOVES AND EYE/FACE
PROTECTION.

S 22

DO NOT BREATHE DUST.

SECTION 16. - - - - - OTHER INFORMATION - - - - -

THE ABOVE INFORMATION IS BELIEVED TO BE CORRECT BUT DOES NOT PURPORT TO
BE ALL INCLUSIVE AND SHALL BE USED ONLY AS A GUIDE. ALDRICH SHALL NOT BE
HELD LIABLE FOR ANY DAMAGE RESULTING FROM HANDLING OR FROM CONTACT WITH

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13235



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PAGE 5

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