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IMPORTANT SAFETY INFORMATION -- DO NOT DISCARD.

PLEASE ROUTE TO COMPANY SAFETY OFFICER.

MS DS  
SENT TO  
SAFETY OFFICER  
DATE 10-23-87

FISHER SCIENTIFIC HAS A  
COMPLETE LINE OF SAFETY  
PRODUCTS AND INFORMATION  
FOR THE LABORATORY.  
CONTACT YOUR LOCAL FISHER  
BRANCH FOR FILMS, BRO-  
CHURES, CATALOGS AND PRO-  
DUCTS.

UNIVERSITY OF  
WISCONSIN-WHITEWATER  
CENTRAL REC/STORES  
WHITEWATER WI 53190

FOR EACH CHEMICAL, AN MSDS SHEET WILL BE  
SENT ONLY ON THE 1ST SHIPMENT UNLESS A  
SUBSTANTIAL REVISION OCCURS.

IF NAME AND/OR ADDRESS  
HAVE CHANGED, CONTACT  
YOUR FISHER SALES  
REPRESENTATIVE OR YOUR  
LOCAL FISHER BRANCH.

REQUIRED MATERIAL SAFETY DATA SHEETS (MSDS) NOT  
INCLUDED IN THIS MAILING WILL FOLLOW UNDER SEP-  
ARATE COVER.

THIS PACKET MAY CONTAIN MSDS FOR PRODUCTS MAN-  
UFACTURED BY OTHERS AND DISTRIBUTED BY FISHER  
SCIENTIFIC COMPANY. THESE MSDS WERE PREPARED  
BY THE MANUFACTURER AND FISHER DISCLAIMS ALL  
LIABILITY FOR THE CONTENT.

AMMONIUM SULFIDE, LIGHT

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MATERIAL SAFETY DATA SHEET

FISHER SCIENTIFIC  
CHEMICAL DIVISION  
1 REAGENT LANE  
FAIR LAWN NJ 07410  
(201) 796-7100

EMERGENCY CONTACTS  
GASTON L. PILLORI  
(201) 796-7100

DATE 10/13/87  
PO NBR: 09335  
ACCT: 888328-01  
INDEX: 05872790509  
CAT NO: A705500

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SAFETY OFFICER  
DATE 10-23-87

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SUBSTANCE IDENTIFICATION

CAS-NUMBER 12135-76-1

SUBSTANCE: \*\*AMMONIUM SULFIDE, LIGHT\*\*

TRADE NAMES/SYNONYMS:

AMMONIUM HYDROGEN SULFIDE SOLUTION; AMMONIUM BISULFIDE;  
AMMONIUM HYDROSULFIDE; AMMONIUM MERCAPTAN; MONOAMMONIUM SULFIDE;  
AMMONIUM SULFHYDRATE SOLUTION; A-705; ACC01425

CHEMICAL FAMILY:  
INORGANIC SALT

MOLECULAR FORMULA: N2-H8-S                      MOL WT: 68.15

CERCLA RATINGS (SCALE 0-3): HEALTH=3 FIRE=3 REACTIVITY=1 PERSISTENCE=0

COMPONENTS AND CONTAMINANTS

COMPONENT: AMMONIUM SULFIDE                      PERCENT: <24  
COMPONENT: WATER                                      PERCENT: >76

OTHER CONTAMINANTS: POLYMERIZATION INHIBITOR

EXPOSURE LIMITS:

20 PPM OSHA CEILING; 10 PPM ACGIH TWA (HYDROGEN SULFIDE)

PHYSICAL DATA

DESCRIPTION: YELLOW LIQUID WITH A FOUL ODOR.                      SPECIFIC GRAVITY: 1.2

SOLUBILITY IN WATER: SOLUBLE

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FIRE AND EXPLOSION DATA

FIRE AND EXPLOSION HAZARD:  
DANGEROUS FIRE/SEVERE EXPLOSION HAZARD WHEN EXPOSED TO HEAT OR FLAME.

FLASH POINT: >150 F (>66 C)

FIREFIGHTING MEDIA:  
DRY CHEMICAL, CARBON DIOXIDE, WATER SPRAY OR FOAM  
(1984 EMERGENCY RESPONSE GUIDEBOOK, DOT P 5800.3).

FOR LARGER FIRES, USE WATER SPRAY, FOG OR ALCOHOL FOAM  
(1984 EMERGENCY RESPONSE GUIDEBOOK, DOT P 5800.3).

FIREFIGHTING:  
MOVE CONTAINER FROM FIRE AREA IF POSSIBLE. DO NOT SCATTER SPILLED MATERIAL  
WITH MORE WATER THAN NEEDED FOR FIRE CONTROL. DIKE FIRE CONTROL WATER FOR  
LATER DISPOSAL (1984 EMERGENCY RESPONSE GUIDEBOOK, DOT P 5800.3, GUIDE  
PAGE 31).

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TOXICITY

CARCINOGEN STATUS: NONE.

AMMONIUM SULFIDE SOLUTION IS A STRONG EYE, MUCOUS MEMBRANE, AND SKIN  
IRRITANT. IT IS TOXIC BY SKIN ABSORPTION, INHALATION, OR INGESTION.

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HEALTH EFFECTS AND FIRST AID

INHALATION:

CORROSIVE. 300 PPM (HYDROGEN SULFIDE) IMMEDIATELY DANGEROUS TO LIFE/HEALTH.  
ACUTE EXPOSURE- EVOLVES HYDROGEN SULFIDE. 500 PPM FOR 30 MINUTES MAY CAUSE  
HEADACHE, DIZZINESS, BRONCHIAL PNEUMONIA, PULMONARY EDEMA,  
DROWSINESS, BLURRED VISION, OR CONJUNCTIVITIS. 600 PPM FOR  
30 MINUTES MAY CAUSE LOSS OF CONSCIOUSNESS, DEPRESSED  
RESPIRATION, AND DEATH.

CHRONIC EXPOSURE- PROLONGED EXPOSURE MAY CAUSE SYMPTOMS OF CHRONIC HYDROGEN  
SULFIDE EXPOSURE: PERSISTENT LOW BLOOD PRESSURE, NAUSEA,  
ANOREXIA, WEIGHT LOSS, IMPAIRED GAIT AND BALANCE,  
CONJUNCTIVITIS, OR CHRONIC COUGH.

FIRST AID- REMOVE FROM EXPOSURE IMMEDIATELY. IF BREATHING HAS STOPPED, GIVE  
ARTIFICIAL RESPIRATION. MAINTAIN AIRWAY AND BLOOD PRESSURE AND  
ADMINISTER OXYGEN IF AVAILABLE. KEEP AFFECTED PERSON WARM AND AT  
REST.

SKIN CONTACT:

CORROSIVE.

ACUTE EXPOSURE- MAY CAUSE BURNING, PAIN, AND IRRITATION.

CHRONIC EXPOSURE- MAY CAUSE IRRITATION OR BURNS.

FIRST AID- REMOVE CONTAMINATED CLOTHING AND SHOES IMMEDIATELY. WASH AFFECTED  
AREA WITH SOAP OR MILD DETERGENT AND LARGE AMOUNTS OF WATER UNTIL

\*\*AMMONIUM SULFIDE, LIGHT PAGE 03 OF 05  
NO EVIDENCE OF CHEMICAL REMAINS (APPROXIMATELY 15-20 MINUTES).  
GET MEDICAL ATTENTION.

EYE CONTACT:  
CORROSIVE.

ACUTE EXPOSURE- DIRECT CONTACT MAY CAUSE SEVERE BURNS, CONJUNCTIVITIS,  
KERATOCONJUNCTIVITIS, CORNEAL VESICULATION, OR CORNEAL  
OPACITIES.

CHRONIC EXPOSURE- MAY CAUSE CONJUNCTIVITIS.

FIRST AID- WASH EYES IMMEDIATELY WITH LARGE AMOUNTS OF WATER, OCCASIONALLY  
LIFTING UPPER AND LOWER LIDS, UNTIL NO EVIDENCE OF CHEMICAL  
REMAINS (APPROXIMATELY 15-20 MINUTES). GET MEDICAL ATTENTION.

INGESTION:  
CORROSIVE.

ACUTE EXPOSURE- MAY CAUSE NAUSEA, SEVERE STOMACH IRRITATION, MUCOUS MEMBRANE  
IRRITATION, DIZZINESS, CONJUNCTIVITIS, DROWSINESS, OR  
ANOREXIA. LETHAL AMOUNTS MAY CAUSE UNCONSCIOUSNESS,  
RESPIRATORY DEPRESSION, AND DEATH.

FIRST AID- IF VICTIM IS CONSCIOUS, IMMEDIATELY GIVE 2 TO 4 GLASSES OF WATER,  
AND INDUCE VOMITING BY TOUCHING FINGER TO BACK OF THROAT. GET MEDICAL  
ATTENTION IMMEDIATELY.

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REACTIVITY

REACTIVITY:

NON-VIOLENT UNDER NORMAL CONDITIONS. MAY EXPLODE IF PLACED IN ZINC CONTAINERS.

INCOMPATIBILITIES:

SEVERELY ERODES COPPER, ZINC, AND THEIR ALLOYS. MAY EXPLODE IF HELD IN ZINC  
CONTAINERS.

DECOMPOSITION:

RELEASES HIGHLY TOXIC HYDROGEN SULFIDE GAS WHEN HEATED OR ON CONTACT WITH  
ACID, ACID FUMES, OR OTHER CORROSIVE MATERIALS.

POLYMERIZATION:

POLYMERIZES READILY AT ROOM TEMPERATURE.

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CONDITIONS TO AVOID

MAY BE IGNITED BY HEAT, SPARKS OR FLAMES. CONTAINER MAY EXPLODE IN HEAT OF  
FIRE. VAPOR EXPLOSION AND POISON HAZARD INDOORS, OUTDOORS OR IN SEWERS.  
RUNOFF TO SEWER MAY CREATE FIRE OR EXPLOSION HAZARD.

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SPILL AND LEAK PROCEDURES

SOIL SPILL:

DIG HOLDING AREA SUCH AS LAGOON, POND OR PIT FOR CONTAINMENT.

USE PROTECTIVE COVER SUCH AS A PLASTIC SHEET TO PREVENT MATERIAL FROM

\*\*AMMONIUM SULFIDE, LIGHT  
DISSOLVING IN FIRE EXTINGUISHING WATER OR RAIN.

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USE CEMENT POWDER OR FLY ASH TO ABSORB LIQUID MASS.

AIR SPILL:  
KNOCK DOWN VAPORS WITH WATER SPRAY. KEEP UPWIND.

WATER SPILL:  
ADD CALCIUM HYPOCHLORITE TO SPILL.

ADD SUITABLE AGENT TO NEUTRALIZE SPILLED MATERIAL TO PH-7.

OCCUPATIONAL SPILL:  
SHUT OFF IGNITION SOURCES. DO NOT TOUCH SPILLED MATERIAL. STOP LEAK IF YOU  
CAN DO IT WITHOUT RISK. USE WATER SPRAY TO REDUCE VAPORS. FOR SMALL SPILLS,  
TAKE UP WITH SAND OR OTHER ABSORBENT MATERIAL AND PLACE INTO CONTAINERS FOR  
LATER DISPOSAL. FOR LARGER SPILLS, DIKE FAR AHEAD OF SPILL FOR LATER  
DISPOSAL. NO SMOKING, FLAMES OR FLARES IN HAZARD AREA! KEEP UNNECESSARY PEOPLE  
AWAY; ISOLATE HAZARD AREA AND DENY ENTRY.

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PROTECTIVE EQUIPMENT

VENTILATION:  
PROVIDE LOCAL EXHAUST OR GENERAL DILUTION VENTILATION SYSTEM.

RESPIRATOR:  
FOR HYDROGEN SULFIDE:

300 PPM- SUPPLIED-AIR RESPIRATORY WITH A FULL FACEPIECE, HELMET, OR HOOD.  
SELF-CONTAINED BREATHING APPARATUS WITH A FULL FACEPIECE.

ESCAPE- GAS MASK WITH AN ACID GAS CANISTER (CHIN-STYLE OR FRONT- OR BACK-  
MOUNTED CANISTER) PROVIDING PROTECTION AGAINST HYDROGEN  
SULFIDE.

CLOTHING:  
EMPLOYEE MUST WEAR APPROPRIATE PROTECTIVE (IMPERVIOUS) CLOTHING AND EQUIPMENT  
TO PREVENT REPEATED OR PROLONGED SKIN CONTACT WITH THIS SUBSTANCE.

GLOVES:  
EMPLOYEE MUST WEAR APPROPRIATE PROTECTIVE GLOVES TO PREVENT CONTACT WITH THIS  
SUBSTANCE.

EYE PROTECTION:  
EMPLOYEE MUST WEAR SPLASH-PROOF OR DUST-RESISTANT SAFETY GOGGLES AND A  
FACESHIELD TO PREVENT CONTACT WITH THIS SUBSTANCE.

WHERE THERE IS ANY POSSIBILITY THAT AN EMPLOYEE'S EYES MAY BE EXPOSED TO  
THIS SUBSTANCE, THE EMPLOYER SHALL PROVIDE AN EYE-WASH FOUNTAIN WITHIN THE  
IMMEDIATE WORK AREA FOR EMERGENCY USE.

AUTHORIZED - FISHER SCIENTIFIC GROUP, INC.  
CREATION DATE: 01/19/85 REVISION DATE: 05/02/85

-ADDITIONAL INFORMATION-

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