

HF SCIENTIFIC INC. -- 11961, FORMALDEHYDE -- 6810-01-017-3542

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Product Identification
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Product ID: 11961, FORMALDEHYDE

MSDS Date: 05/22/1995

FSC: 6810

NIIN: 01-017-3542

MSDS Number: BXYDS

=== Responsible Party ===

Company Name: HF SCIENTIFIC INC.

Address: 3170 METRO PARKWAY S.E.

City: FORT MYERS

State: FL

ZIP: 33916-7537

Country: US

Info Phone Num: 813-337-2116

Emergency Phone Num: 800-424-9300

Prepa

Preparer's Name: NONE

CAGE: 58177

=== Contractor Identification ===

Company Name: HF SCIENTIFIC INC.

Address: 3170 METRO PARKWAY S.E.

City: FORT MYERS

State: FL

ZIP: 33916-7539

Country: US

Phone: 941-337-2116

CAGE: 58177

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Composition/Information on Ingredients
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Ingredient Name: FORMALDEHYDE (SARA III)

CAS: 50-00-0

RTECS #: LP8925000

Fraction by Wt: 4%

Other REC Limits: MFR, TLV STEL: 2PPM

OSHA PEL: 1 PPM, SEE 1910.1048

ACGIH TLV: C 0.3 PPM; A2; 9394

EPA Rpt Qty: 100 LBS

DOT Rpt Qty: 100 LBS

ingred Name:METHYL ALCOHOL (METHANOL) (SARA III)

CAS:67-56-1

RTECS #:PC1400000

Fraction by Wt: 1.0-1.5%

Other REC Limits:250 PPM STEL

OSHA PEL:S,200PPM/250STEL

ACGIH TLV:S,200PPM/250STEL; 94

EPA Rpt Qty:5000 LBS

DOT Rpt Qty:5000 LBS

ingred Name:WATER

CAS:7732-18-5

RTECS #:ZC0110000

Fraction by Wt: BALANCE

Other REC Limits:NONE RECOMMENDED

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

LD50 LC50 Mixture:ORAL LD50 (RAT) IS 800 MG/KG.

Routes of Entry: Inhalation:YES Skin:YE

S Ingestion:YES

Reports of Carcinogenicity:NTP:YES IARC:YES OSHA:YES

Health Hazards Acute and Chronic:ACUTE: EYES:IRRITATION,DAMAGE.

SKIN:IRRITATION,BURNS,ABSORBTION WITH SAME SYMPTOMS AS INGESTION.

INHALATION:RESPIRATORY TRACT IRRITATION,INJURY,DEATH.

INGESTION:IRRITATION,VOMITING,DIARRHEA,BLINDNESS,

UNCONSCIOUSNESS,DEATH. CHRONIC:DERMATITIS,ALLERGIC REACTION,VISION

IMPAIRMENT,LIVER ENLARGEMENT,SUSPECTED CARCINOGEN.

Explanation of Carcinogenicity:CONTAINS F [50-00

-0] WHICH IS

LISTED BY NTP AND IARC AND REGULATED BY OSHA AS A CARCINOGEN.

Effects of Overexposure:EYES:IRRITATION,PAIN,BLURRED VISION,DAMAGE.

SKIN:IRRITATION, PAIN,BURNS,ABSORBTION WITH SAME SYMPTOMS AS

INGESTION. INHALATION:SORE THROAT,RESPIRATORY TRACT

IRRITATION,INJURY,PULMONARY EDEMA,PNEUMONIT IS,DEATH.

INGESTION:PAIN,VOMITING,HEADACHE,DIARRHEA,GI TRACT PAIN,WEAK

IRREGULAR PULSE,BLINDNESS,UNCONSCIOUSNESS,DEATH.

Medical Cond Aggravated by Exposure:PERSONS WITH PRE-EXI

STING SKIN AND

EYE PROBLEMS,IMPAIRED LIVER,KIDNEY OR RESPIRATORY FUNCTION MAY BE

AT INCREASED RISK FROM EXPOSURE.PREVIOUSLY EXPOSURE MAY CAUSE

ALLERGIC REACTION TO FUTURE EXP0SURE.

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

First Aid:EYES: FLUSH WITH LARGE AMOUNTS OF WATER. GET MEDICAL

ATTENTION. SKIN: REMOVE CONTAMINATED CLOTHING. FLUSH AREA WITH

LARGE AMOUNTS OF WATER. GET MEDICAL ATTENTION. INHALATION: MOVE TO

FRESH AIR. IF NOT BREATHING, G

IVE CPR. IF BREATHING DIFFICULT,
GIVE OXYGEN. GET MEDICAL ATTENTION. INGESTION: INDUCE VOMITING BY
GIVING TWO GLASSES OF WATER/MILK AND STICKING FINGER DOWN THROAT.
GET MEDICAL ATTENTION.

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

Flash Point:140F,60C

Lower Limits:7.0%

Upper Limits:73%

Extinguishing Media:USE WATER TO EXTINGUISH FIRES AND COOL FIRE EXPOSED
CONTAINERS. USE WATER SPRAY TO KEEP FIRE EXPOSED CONTAINERS COOL.

Fire Fighting Procedures:USE WA

TER TO FLUSH SPILLS FROM EXPOSURE AND

DILUTE TO NON-FLAMMABLE MIXTURE. USE SCBA WITH FULL FACEPIECE IN
PRESSURE DEMAND OR POSITIVE PRESSURE MODE.

Unusual Fire/Explosion Hazard:VAPOR FORMS EXPLOSIVE MIXTURE WITH AIR
BETWEEN UPPER AND LOWER EXPLOSIVE LIMITS. FLASH BACK ALONG VAPOR
TRAIL MAY OCCUR. WEAR FULL PROTECTIVE CLOTHING.

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

Spill Release Procedures:VENTILATE AREA.REMOVE IGNITION SOURCES.WEAR
RESPIRATORY P

ROTECTION.DO NOT FLUSH TO SEWER OR SURFACE

WATERS.ABSORB ON SAND OR VERMICULITE AND PLACE IN CLOSED CONTAINER
FOR DISPOSAL.REPORTABLE QUANTITY (CERCLA): 1000 LBS FORMALDEHYDE,
5000 LBS METHANE.

Neutralizing Agent:NONE SPECIFIED BY MANUFACTURER.

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

Handling and Storage Precautions:KEEP IN CLOSED CONTAINERS.PROTECT FROM
PHYSICAL DAMAGE.OUTSIDE OR DETACHED STORAGE PREFERRED.INSIDE
STORAGE SHOULD BE STANDARD FLAM

MABLE ROOM/CABINET.

Other Precautions:STORE FROM OXIDIZERS.DO NOT EAT,DRINK,SMOKE IN

STORAGE OR WORK AREAS.WASH HANDS,FACE,FOREARMS,NECK ON EXITING
RESTRICTED AREAS. SHOWER, DISPOSE OF OUTER CLOTHING,CHANGE TO CLEAN
GARMENTS AT DAYS END.A VOID CROSS-CONTAMINATING STREET CLOTHS.

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

Respiratory Protection:IF PEL IS EXCEEDED, A FULL-FACE RESPIRATOR WITH
CARTRIDGES OR CANISTERS SPECIFICALLY APPROVED FOR PROTECTION

AGAINST FORMALDEHYDE MAY BE WORN UP TO CONCENTRATIONS OF 10 PPM.
Ventilation:LOCAL AND/OR GENERAL EXHAUST IS RECOMMENDED. LOCAL EXHAUST IS GENERALLY PREFERRED SINCE IT CONTROLS EMISIONS AT SOURCE.
Protective Gloves:WEAR IMPERVIOUS GLOVES.
Eye Protection:CHEMICAL SAFETY GOGGLE AND/OR FACESHIELD
Other Protective Equipment:EYE WASH STATION AND SAFETY SHOWER. DO NOT WEAR CONTACT LENSES. WEAR IMPERVIOUS PROTECTIVE CLOTHING, BOOTS.
Work Hygienic Practices:WASH AFTER HANDLING AND BEFORE EATING

DRINKING, OR SMOKING. LAUNDER CONTAMINATED CLOTHING BEFORE REUSE.
Supplemental Safety and Health
REACTION OF FORMALDEHYDE WITH HYDRCHLORIC ACID MAY FORM BIS-CHLOROMETHYL ETHER, AN OSHA REGULATED CARCINOGEN.

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

HCC:F6
Boiling Pt:B.P. Text:205F,96C
Melt/Freeze Pt:M.P/F.P Text:5F,-15C
Vapor Density:1.04
Spec Gravity:1.08
Solubility in Water:INFINITE
Appearance and Odor:CLEAR, COLORLESS LIQUID. PUNGENT ODOR.

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

Stability Indicator/Materials to Avoid:YES
REACTS EXPLOSIVELY WITH NITROGEN DIOXIDE AT 356F; VIOLENTLY WITH PERCHLORIC ACID,NITROMETHANE,PERCHACID-ANILINE MIXTURE.
Stability Condition to Avoid:EXTREMES IN TEMPERATURE, SPARKS, AND FLAME. AVOID OXIDIZING AGENTS AND ALKALIES.
Hazardous Decomposition Products:IF INVOLVED IN FIRE, IRRITATING GASEOUS FORMALDEHYDE AND CABON MONOXIDE MAY BE RELEASED.
Conditions to Avoid Polymerization:T
RIOXYMETHYLENE PRECIPITATE CAN FORM ON STANDING AT VERY LOW TEMPERATURES. PARAFORMALDEHYDE MAY FORM AT LOW TEMPERATURE.

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

Waste Disposal Methods:DISPOSE IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REGULATIONS. IF PERMITTED, MAY BE DISPOSED IN APPROVED FACILITY OR DISSOLVED IN APPROPRIATE COMBUSTIBLE SOLVENT AND ATOMIZED IN A RCRA APPROVED CHE MICAL INCINERATOR EQUIPPED WITH AN AFTERBURNER.

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