Product ID:WIDE RANGE PH INDICATOR;CAT NO.12167,12168 MSDS Date:03/01/1991 FSC:6810 NIIN:00-937-0975 **MSDS Number: BJXPR** === Responsible Party === Company Name: HF SCIENTIFIC INC. Address:3052 METRO PARKWAY S.E. City:FORT MYERS State:FL ZIP:33916-7539 Country:US Info Phone Num:813 -337-2116 Emergency Phone Num:813-337-2116 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

Ingred Name:ETHYL ALCOHOL (ETHANOL) CAS:64-17-5 RTECS #:KQ6300000 Fraction by Wt: 24.0% Other REC Limits:NONE SPECIFIED OSHA PEL:1000 PPM ACGIH TLV:1000 PPM; 9192

Ingred Name: METHYL ALCOHOL (METH

ANOL) (SARA III) CAS:67-56-1 RTECS #:PC1400000 Other REC Limits:NONE SPECIFIED OSHA PEL:S,200PPM/250STEL ACGIH TLV:S,200PPM/250STEL; 93 EPA Rpt Qty:5000 LBS DOT Rpt Qty:5000 LBS

Ingred Name:OTHER COMPONENTS (TYPE NOT SPECIFIED) Fraction by Wt: BALANCE Other REC Limits:NONE SPECIFIED

Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO Health Hazards Acute and Chronic:

ACUTE: INHALATION:MAY CAUSE HEADACHE,

DROWINESS & LASSITUDE.IRRITATION OF THE THROAT. INGESTION:CAN CAUSE DEPRESSION OF CNS, NAUSEA, VOMITING & DIARRHEA. EYE:LIQUID OR VAPOR MAY CAUSE IRRITATION. SKIN :MAY CAUSE IRRITATION AND DEFATTING OF SKIN ON PROLONGED CONTACT.

Explanation of Carcinogenicity:DATA PER MSDS

Effects of Overexposure:SEE HEALTH HAZARDS DATA.

Medical Cond Aggravated by Exposure:PERSONS WITH A HISTORY OF AILMENTS OR WITH A PRE-EXISTING DISEASE INVOLVING THE SKI

N, EYE, RESPIRATORY TRACT, LIVER OR KIDNEY MAY BE AT INCREASED RISK FROM EXPOSURE.

First Aid:INHALATION:REMOVE TO FRESH AIR. RESUSCITATE IF NOT BREATHING. GET MEDICAL ATTENTION. EYES:IMMEDIATELY FLUSH WITH PLENTY OF WATER FOR 15 MINUTES. GET MEDICAL ATTENTION. SKIN:REMOVE CONTAMINATED CLOTHIN G. FLUSH WITH WATER. IF IRRITATION PERSISTS, GET MEDICAL ADVICE. INGESTION:DO NOT INDUCE VOMITING UNLESS INSTRUCTE D TO DO

SO. GIVE NOTHING BY MOUTH IF UNCONSCIOUS. GET IMMEDIATE MEDICAL ATTENTION.

Flash Point Method:CC

Flash Point:53.6F,12.0C

Extinguishing Media:USE WATER FOG, CARBON DIOXIDE, FOAM, OR DRY CHEMICAL.

Fire Fighting Procedures:WEAR FIRE FIGHTING PROTECTIVE EQUIPMENT AND A FULL FACED SELF CONTAINED BREATHING APPARATUS. EVACUATE AREA. COOL FIRE EXPOSED CONTAINERS WITH WATER SPRAY. Unusual Fire/Explosion Haz ard:MAY CATCH FIRE IF HEATED OR DUE TO EXTREME HEAT.COMBUSTION OR HEAT OF FIRE MAY PRODUCE HAZARDOUS DECOMPOSITION PRODUCTS AND VAPORS.

Spill Release Procedures:WEAR APPROPRIATE RESPIRATORY PROTECTION AND PROTECTIVE CLOTHING. CONTAIN SPILLED MATERIAL. TRANSFER TO SECURE CONTAINERS. WHERE NECESSARY, COLLECT USING ABSORBENT MEDIA. ELIMINATE ANY SOURCE OF IGNITI ON. VENTILATE AREA. WASH RESIDUE WITH WATER.

Neutralizing Agent:NOT APPLICABLE.

Handling and Storage Precautions:STORE IN A FLAMMABLE LIQUID STORAGE ROOM OR CABINET. KEEP CONTAINERS TIGHTLY CLOSED WHEN NOT IN USE. PROTECT CONTAINERS FROM PHYSICAL DAMAGE.

Other Precautions: AVOID CONTACT WITH EYES AND SKIN.DO NOT TAKE INTERNALLY.

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

Respiratory Protection: IF VENTILATION DOES NOT MAINTAIN INHALA TION

EXPOSURES BELOW PEL(TLV), USE NIOSH/MSHA APPROVED RESPIRATORS. RESPIRATORS SHOULD BE SELECTED BASED ON THE FORM AND CONCENTRATION OF CONTAMINANT IN AIR & IN ACCORDANCE WITH OSHA (29 CFR 1910.134). Ventilation:MECHANICAL (GENERAL) ROOM VENTILATION IS NORMALLY ADEQUATE.

Protective Gloves:NEOPRENE, NITRILE, VPC OR NATURAL RUBBER Eye Protection:SAFETY GOGGLES WITH OPTIONAL FACE SHIELD Other Protective Equipment:EYE WASH STATION AND SAFETY SHOWER.

INDUSTRIAL-TYPE WORK CLOTH

ING AND APRON AS REQUIRED.

Work Hygienic Practices:OBSERVE GOOD PERSONAL HYGIENE PRACTICES AND RECOMMENDED PROCEDURES. DO NOT WEAR CONTAMINATED CLOTHING OR FOOTWEAR.

Supplemental Safety and Health

AVOID PROLONGED OR REPEATED EXPOSURE. DO NOT GET ON SKIN OR IN EYES. DO NOT BREATHE VAPORS OR MISTS.

HCC:F2

Solubility in Water:SOLUBLE Appearance and Odor:DARK GREEN LIQUID,ALCOHOLIC ODOR

====== Stability a

nd Reactivity Data ================

Stability Indicator/Materials to Avoid:YES STRONG OXIDIZING AGENTS Stability Condition to Avoid:HIGH HEAT, OPEN FLAMES AND OTHER SOURCES OF IGNITION Hazardous Decomposition Products:NOT KNOWN

Waste Disposal Methods:ALL RECOVERED MATERIAL SHOULD BE PACKAGED, LABELED, TRANSPORTED, AND DISPOSED OR RECLAIMED IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL LAWS AND REGUL ATIONS AND IN CONFORMANCE WITH GOOD ENGINEERING PRACTICES.

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