NEW ERA ENVIRONMENTAL -- 134A -- 6830-01-370-6207 Product ID:134A MSDS Date:12/01/1994 FSC:6830 NIIN:01-370-6207 MSDS Number: CFKKP === Responsible Party === Company Name: NEW ERA ENVIRONMENTAL Address:44880 FALCON PLACE SUITE 105 City:STERLING State:VA ZIP:20166 Country:US Info Phone Num:703-904-7570 Emergency Phone Num:800-237-5701 CAGE:0Z1V9 === Contractor Identification === Company Name: NEW ERA ENVIRONMENTAL Address:44880 **FALCON PLACE SUITE 105** Box:City:STERLING State:VA ZIP:20166 Country:US Phone:703-904-7570 CAGE:0Z1V9 ======= Composition/Information on Ingredients ========= Ingred Name: ETHANE, 1,1,1,2-TETRAFLUORO CAS:811-97-2 Fraction by Wt: 100% Other REC Limits: NONE RECOMMENDED

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

LD50 LC50 Mixture:INHALATION-RAT-4/HR LC50=567000 PPM

Routes of Entry: Inhalation:YES Skin:NO Ingestion:NO

Reports of Carcinogenicity:NTP:NO IAR

## C:NO OSHA:NO

Health Hazards Acute and Chronic:OVEREXPOSURE BY INHALATION TO VERY HIGH CONCENTRATIONS MAY CAUSE TEMPORARY ALTERATION OF THE HEART'S ELECTRICAL ACTIVITY WITH IRREGULAR PULSE, PALPITATIONS, OR INADEQUATE CIRCULATION. INTENTIONAL MISU SE OR DELIBERATE INHALATION MAY CAUSE DEATH WITH OUT WARNING. SKIN CONTACT WITH THE LIQUID MAY CAUSE FROSTBITE.

Explanation of Carcinogenicity:MANUFACTURER STATES THAT NONE OF THE COMPONENTS IN THIS MATERIAL IS LISTED AS CARCINOG ENIC

Effects of Overexposure:INHALED-NAUSEA, HEADACHE, WEAKNESS, DIZZINESS, CONFUSION, INCOORDINATION, LOSS OF CONSCIOUSNESS, COUGH, DISCOMFORT, SHORTNESS OF BREATH, IRREGULAR PULSE, HEART PALPITATIONS. FROSTBITE: WHITE TO RED SK IN, PAIN, BLISTERS. Medical Cond Aggravated by Exposure:CENTRAL NERVOUS SYSTEM DISEASES,

First Aid:INHALATION: IMMEDIATELY REMOVE TO FRESH AIR. IF BREA THING IS

CARDIOVASCULAR SYSTEM DISEASES.

DIFFICULT GIVE OXYGEN. CALL A PHYSICIAN. SKIN CONTACT: FLUSH WITH WATER. TREAT FOR FROSTBITE IF NECESSARY. EYE CONTACT: IMMEDIATELY FLUSH E YES WITH PLENTY OF WATER. CALL A PHYSICIAN. INGESTION: NOT CONSIDERED AS A POTENTIAL ROUTE OF EXPOSURE. NOTE TO DOCTOR: USE SPECIAL CAUTION WITH CATECHOLAMINE DRUGS, SUCH AS EPINEPHRINE.

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

Flash Point Method:TOC Flash Point:WILL NOT BURN Autoignition Temp:Autoig nition Temp Text:1382F

Extinguishing Media: AS APPROPRIATE FOR COMBUSTIBLES IN AREA.
Fire Fighting Procedures: USE WATER SPRAY TO COOL CONTAINERS. SELFCONTAINED BREATHING APPARATUS (SCBA) IS REQUIRED IF CYLINDERS

RUPTURE OR RELEASE UNDER FIRE CONDITIONS.

Unusual Fire/Explosion Hazard:PRODUCT IS NOT FLAMMABLE AT AMBIENT TEMPERATURES AND PRESSURES. HOWEVER, IT CAN BE COMBUSTIBLE AT VERY HIGH CONCENTRATIONS (>60%/VOLUME) AND >177F.

======= Accidental Release Measures =

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Spill Release Procedures:REVIEW FIRE AND EXPLOSION HAZARDS & SAFETY PRECAUTIONS BEFORE CLEANING-UP. VENTILATE AREA, ESPECIALLY LOW OR ENCLOSED PLACES WHERE HEAVY VAPORS MIGHT COLLECT. REMOVE OPEN FLAMES. USE SELF- CONTAINED B REATHING APPARATUS IF LARGE SPILL OR LEAK OCCURS.

Neutralizing Agent: NONE SPECIFIED BY MANUFACTURER.

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

Handling and Storage Precautions:STORE IN A COOL, DRY PLACE AWAY FRO M

INCOMPATIBLE MATERIALS. DO NOT HEAT ABOVE 125F (52C).

Other Precautions:AVOID BREATHING VAPORS. AVOID CONTACT WITH SKIN WITH LIQUID OR COLD VAPORS. USE WITH SUFFICIENT VENTILATION TO KEEP EMPLOYEE EXPOSURE BELOW RECOMMENDED LIMITS. DO NOT MIX WITH AIR OR USE WITH AIR ABOV E ATMOSPHERIC PRESSURE.

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

Respiratory Protection: UNDER NORMAL MANUFACTURING CONDITIONS, NO RESPIRATORY PROTECTION IS NORMALLY REQUIRED. UNDER EMERGENCY

CONDITIONS; USE NIOSH/MSHA APPROVED SELF-CONTAINED BREATHING APPARATUS. USE IAW 29 CFR 1910.134 A ND MANUFACTURER'S RECOMMENDATIONS.

Ventilation: NORMAL VENTILATION FOR STANDARD MANUFACURING PROCEDURES IS GENERALLY ADEQUATE. LOCAL EXHAUST USED FOR LARGE RELEASES.

Protective Gloves: IMPERVIOUS

Eye Protection: CHEMICAL SPLASH GOGGLES

Other Protective Equipment: NONE SPECIFIED BY MANUFACTURER.

Work Hygienic Practices:WASH HANDS AFTER USE AND BEFORE EATING, DRINKING, O

R SMOKING. LAUNDER CONTAMINATED CLOTHES BEFORE REUSE.

Supplemental Safety and Health

DENSITY=1.21 G/CC AT 25 C (77F)[LIQUID]. CONTACT WITH CHLORINE OR OTHER STRONG OXIDIZING AGENTS SHOULD ALSO BE AVOIDED. THIS MSDS WAS GENERATED BY HMIS FOR RECOVERED R-134A PREPARED AT DDRV DEPOT.

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

HCC:G3

Boiling Pt:B.P. Text:-15F,-26C Vapor Pres:4963 MM HG Vapor Density:3.6 Solubility in Water:SLIGHT

Appearance and Odor:CLEAR, COLORLE

SS GAS; SLIGHT ETHEREAL ODOR Percent Volatiles by Volume:100

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

Stability Indicator/Materials to Avoid:YES

ALKALI OR ALKALINE EARTH METALS-POWDERED AL, ZN, BE, ETC.

Stability Condition to Avoid:AVOID OPEN FLAMES AND HIGH TEMPERATURES; INCOMPATIBLE MATERIALS.

Hazardous Decomposition Products:HYDROFLUORIC ACID, POSSIBLY CARBONYL FLUORIDE.

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

Waste Disposal M

ethods:COMPLY WITH FEDERAL, STATE, AND LOCAL REGULATIONS. RECLAIM BY DISTILLATION OR REMOVE TO A PERMITTED WASTE DISPOSAL FACILITY.

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