

MATERIAL SAFETY DATA SHEET

For R&D use only. Not for drug, household or other uses.

Click <http://www.lookchem.com/cas-420/420-46-2.html> for suppliers of this product.

Composition/Information on Ingredient

Cas:

420-46-2

Code:

T

RTECS:

KJ4110000

Code:

T

Name:

ETHANE, 1,1,1-TRIFLUORO- Environmental Wt: 2 O

Other REC Limits:

NONE RECOMMENDED

OSHA PEL:

NOT ESTABLISHED

Code:

M

OSHA STEL:

Code:

ACGIH TLV:

NOT ESTABLISHED

Code:

M

ACGIH STEL:

N/P

Code:

Control Measures

Respiratory Protection:

UNDER NORMAL MANUFACTURING CONDITIONS, NO RESPIRATORY PROTECTION IS REQUIRED WHEN USING THIS PRODUCT. SELF-CONTAINED BREATHING APPARATUS IS REQUIRED IF LARGE RELEASE OCCURS.

Ventilation:

LOCAL EXHAUST IF LARGE AMOUNTS ARE RELEASED. MECHANICAL VENTILATION SHOULD BE USED IN LOW/ENCLOSED PLACES.

Protective Gloves:

IMPERVIOUS GLOVES SHOULD BE USED TO AVOID PROLONGED EXPOSURE.

Eye Protection:

CHEMICAL SPLASH GOGGLES SHOULD BE AVAILABLE FOR USE.

Other Protective Equipment:

Equipment 5 AVOID BREATHING VAPORS. AVOID CONTACT WITH SKIN AND EYES. USE WITH SUFFICIENT VENTILATION TO KEEP EMPLOYEE EXPOSURE BELOW RECOMMENDED EXPOSURE LIMITS.

Work Hygienic Practices:

WASH THOROUGHLY AFTER HANDLING. WASH CONTAMINATED CLOTHING BEFORE REUSE.

Supplemental Safety and Health:

NOTE TO PHYSICIAN: THIS MATERIAL MAY MAKE THE HEART MORE SUSCEPTIBLE TO ARRHYTHMIAS. CATECHOLAMINES SUCH AS ADRENALINE, AND OTHER COMPOUNDS HAVING SIMILAR EFFECTS, SHOULD BE RESERVED FOR EMERGENCIES AND THEN USED ONLY WITH CAUTION.

Health Hazards Data

LD50/LC50 Mixture:

ORAL LD50(RAT): THE BLEND IS UNTESTED.

Route Of Entry Inds - Inhalation:

N/P

Skin:

N/P

Ingestion:

N/P

Carcinogenicity Inds - NTP:

NO

IARC:

NO

OSHA:

NO

Health Hazards Acute And Chronic:

INHALATION OF HIGH CONCENTRATIONS OF VAPOR IS HARMFUL AND MAY CAUSE HEART IRREGULARITIES, UNCONSCIOUSNESS, OR DEATH. INTENTIONAL MISUSES OR DELIBERATE INHALATION MAY CAUSE DEATH WITHOUT WARNING. VAPOR REDUCES OXYGEN AVAILABLE FOR BREATHING AND IS HEAVIER THAN AIR. LIQUID CONTACT CAN CAUSE FROSTBITE.

Explanation Of Carcinogenicity:

3 NONE OF THE COMPONENTS PRESENT IN THIS MATERIAL AT CONCENTRATIONS EQUAL TO OR GREATER THAN 0.1% ARE LISTED BY IARC, NTP, OSHA, OR ACGIH AS A CARCINOGEN.

Signs And Symptoms Of Overexposure:

OVEREXPOSURE TO THE VAPORS BY INHALATION MAY INCLUDE TEMPORARY NERVOUS SYSTEM DEPRESSION WITH ANESTHETIC EFFECTS SUCH AS DIZZINESS, HEADACHE, CONFUSION, INCOORDINATION AND LOSS OF CONSCIOUSNESS. HIGHER EXPOSURES TO THE VAPORS MAY CAUSE TEMPORARY ALTERATION OF THE HEART'S ELECTRICAL ACTIVITY WITH IRREGULAR PULSE, PALPITATION, OR INADEQUATE CIRCULATION; OR FATALITY FROM GROSS OVEREXPOSURE. CONTACT WITH LIQUID CAN CAUSE FROSTBITE.

Medical Cond Aggravated By Exposure:

INDIVIDUALS WITH PREEXISTING DISEASE OF THE CENTRAL NERVOUS OR CARDIOVASCULAR SYSTEM MAY HAVE INCREASED SUSCEPTIBILITY TO THE TOXICITY OF INCREASED EXPOSURES.

First Aid:

INHALATION: REMOVE TO FRESH AIR. KEEP PERSON CALM, IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN. CALL A PHYSICIAN. SKIN: FLUSH WITH LUKE WARM WATER. DO NOT USE HOT WATER. IF FROSTBITE HAS OCCURRED, CALL A PHYSICIAN. EYES: IMMEDIATELY FLUSH EYES WITH PLENTY OF WATER FOR 15 MINUTES. CALL A PHYSICIAN. INGESTION: NOT A PROBABLE ROUTE; HOWEVER, IN CASE OF ACCIDENTAL INGESTION, CALL A PHYSICIAN.

Spill Release Procedures:

VENTILATE AREA USING FORCED VENTILATION, ESPECIALLY IN LOW OR ENCLOSED PLACES WHERE HEAVY VAPORS MIGHT COLLECT.

REMOVE OPEN FLAMES. USE SELF-CONTAINED BREATHING APPARATUS FOR LARGE SPILLS OR RELEASES. NOTE: REVIEW FIRE FIGHTING MEASURES & HANDLING SECTIONS BEFORE PROCEEDING WITH CLEAN-UP. USE APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT DURING CLEAN-UP.

Neutralizing Agent:

N/P

Waste Disposal Methods:

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

Handling And Storage Precautions:

CLEAN, DRY AREA. DO NOT HEAT ABOVE 52C (126F).

Other Precautions:

AVOID BREATHING VAPORS. AVOID LIQUID CONTACT WITH EYES OR SKIN. USE WITH SUFFICIENT VENTILATION TO KEEP EMPLOYEE EXPOSURE BELOW THE RECOMMENDED LIMIT. CONTACT WITH CHLORINE OR OTHER STRONG OXIDIZING AGENTS SHOULD ALSO BE AVOIDED.

Fire and Explosion Hazard Information

Flash Point Method:

N/P

Flash Point:

Flash Point Text:

WILL NOT BURN

Autoignition Temp:

N/D

Autoignition Temp Text:

N/D

Lower Limits:

N/D

Upper Limits:

N/D

Extinguishing Media:

AS APPROPRIATE FOR COMBUSTIBLES IN AREA.

Fire Fighting Procedures: WITH WATER SPRAY OR FOG. SELF-CONTAINED BREATHING APPARATUS IS REQUIRED IF CYLINDERS RUPTURE AND CONTAINERS ARE WATER RELEASED UNDER FIRE CONDITIONS.

Unusual Fire/Explosion Hazard: CYLINDERS MAY RUPTURE UNDER FIRE CONDITIONS. DECOMPOSITION MAY OCCUR.

Physical/Chemical Properties

G3:

N/R/State Lic No:

N/R

Net Wt For Ammo:

N/R

Boiling Point:

-46.7C, -52.0F

Melt/Freeze Pt:

N/R

Decomp Text:

N/R

Decomp Text:

N/R

Viscosity:

N/R

Evaporation Rate & Reference:

(CARBON TETRA CHLORIDE=1)>1

Solubility in Water:

0.1 WT%

Appearance and Odor:

CLEAR, COLORLESS LIQUIDIFIED GAS W/SLIGHT ETHERIC ODOR

Percent Volatiles by Volume:

100/WT

Corrosion Rate:

N/R

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