

TECHNICAL CHEMICAL CO. -- TF SOLVENT R-113 -- 6850-00-935-1082

===== Product Identification =====

Product ID:TF SOLVENT R-113

MSDS Date:07/05/1988

FSC:6850

NIIN:00-935-1082

MSDS Number: BLWCH

=== Responsible Party ===

Company Name:TECHNICAL CHEMICAL CO.

Address:10737 SPANGLER ROAD

Box:20098

City:DALLAS

State:TX

ZIP:75220-7101

Country:US

Info Phone Num:214-556-1421

Emergency Phone Num:214-556-1421

Preparer's Name:KELLY BERRIOCHOA

CAGE:8X792

=== Contractor Identification ===

Company Name:TECHNICAL CHEMICAL COMPANY

Address:10737 SPANGLER ROAD

Box:20098

City:DALLAS

State:TX

ZIP:75220-7101

Country:US

Phone:972-556-1421

CAGE:8X792

===== Composition/Information on Ingredients =====

Ingred Name:1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE (FREON 113) (SARA III)

CAS:76-13-1

RTECS #:KJ4000000

Fraction by Wt: 100%

Other REC Limits:NONE SPECIFIED

OSHA PEL:1000PPM/1250STEL

ACGIH TLV

:1000PPM/1250STEL9192  
Ozone Depleting Chemical:1

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

LD50 LC50 Mixture:LD 50 ORAL RAT 43000 MG/KG  
Routes of Entry: Inhalation:YES Skin:NO Ingestion:NO  
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO  
Health Hazards Acute and Chronic:INHALATION: VAPOR IS HEAVIER THAN AIR  
AND CAN CAUSE SUFFOCATION BY REDUCING OXYGEN AVAILABLE FOR  
BREATHING. BREATHING HIGH CONCENTRATIONS OF VAPOR MAY CAUSE  
LIGHT-HEADEDNESS, GIDDINE  
SS, SHORTNESS OF B REATH, AND MAY LEAD TO  
NARCOSIS, CARDIAC IRREGULARITIES, ULNCONSCIOUSNESS OF DEATH.  
SKIN/EYE: LIQUID CAN DEFAT TISSUE.  
Explanation of Carcinogenicity:FREON 113 IS NOT LISTED AS A CARCINOGEN  
BY IARC, NTP OR OSHA.  
Effects of Overexposure:BREATHING HIGH CONCENTRATIONS OF VAPOR MAY  
CAUSE LIGHT-HEADEDNESS, GIDDINESS, SHORTNESS OF BREATH, AND MAY  
LEAD TO NARCOSIS, CARDIAC IRREGULARITIES, UNCONSCIOUSNESS OR DEATH.  
LIQUID IS NOT CORROSIVE O R AN IRRITANT, BUT C  
AN CAUSE DEFATTING OF  
TISSUE.  
Medical Cond Aggravated by Exposure:SKIN DISEASE - FREON 113 IS A  
DEFATTING AGENT AND CAN CAUSE DERMATITIS ON PROLONGED EXPOSURE.  
PERSONS WITH PRE-EXISTING SKIN DISORDERS MAY BE MORE SUSCEPTIBLE TO  
THE EFFECTS OF THIS AGENT.

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

First Aid:INHALATION: REMOVE TO FRESH AIR, CALL A PHYSICIAN. IF NOT  
BREATHING, GIVE ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFICULT,  
GIVE OXYGEN. EY  
E/SKIN: FLUSH WITH WATER FOR 15 MINUTES. IF  
IRRITATION PRESI STS, GET MEDICAL ATTENTION. ORAL: GET MEDICAL  
ATTENTION. DO NOT INDUCE VOMITING AS THE HAZARD OF ASPIRATING INTO  
THE LUNGS IS TOO GREAT.

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

Flash Point Method:TOC  
Flash Point:NONE  
Lower Limits:NONE  
Upper Limits:NONE  
Extinguishing Media:NON-FLAMMABLE. USE EXTINGUISHING MEDIA APPROPRIATE  
FOR SURROUNDING FIRE.  
Fire Fighting Procedures:WEAR FIRE FIGHTING PRO

TECTIVE EQUIPMENT AND A  
FULL FACED SELF CONTAINED BREATHING APPARATUS. COOL FIRE EXPOSED  
CONTAINERS WITH WATER SPRAY.  
Unusual Fire/Explosion Hazard:CONTAINERS MAY RUPTURE UNDER FIRE  
CONDITIONS. COMBUSTION OR HEAT OF FIRE MAY PRODUCE HAZARDOUS  
DECOMPOSITION PRODUCTS AND VAPORS.

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

Spill Release Procedures:VENTILATE AREA. DO NOT FLUSH INTO SEWERS.  
COLLECT ON ABSORBENT MATERIAL AND TRANSFER TO STEEL DRUMS FOR  
RECOVERY OR DISPOSAL. COMPLY WITH FEDERAL, STATE AND LOCAL  
REGULATIONS ON REPORTING RELEASES.  
Neutralizing Agent:NONE

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

Handling and Storage Precautions:STORE IN A CLEAN, COOL, DRY AND  
WELL-VENTILATED AREA OF LOW FIRE RISK. PROTECT CONTAINERS FROM  
PHYSICAL DAMAGE AND KEEP CLOSED.  
Other Precautions:AVOID BREATHING VAPOR, LIQUID CONTACT WITH EYES, SKIN  
OR CLOTHING. EMPTY CONTAINERS MAY CONTAIN PRODUCT RESIDUES/VAP  
ORS,  
FOLLOW THE SAME PROCEDURE AS IF THEY WERE FULL.

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

Respiratory Protection:NONE REQUIRED FOR ADEQUATELY VENTED WORK  
SITUATIONS. FOR ACCIDENTAL OR NON-VENTILATED SITUATIONS, USE A  
SELF-CONTAINED BREATHING APPARATUS OR SUPPLIED-AIR RESPIRATOR,  
APPROVED BY NIOSH.  
Ventilation:PROVIDE LOCAL EXHAUST AT FILLING ZONES AND OTHER OPERATING  
SPACES WHERE LEAKAGE IS PROBABLE. MECHANICAL FOR OTHER.  
Protective Gloves:BUT  
YL RUBBER, PVA OR NEOPRENE  
Eye Protection:CHEMICAL SPLASH GOGGLES  
Other Protective Equipment:USE IMPERVIOUS CLOTHING IF THERE IS REPEATED  
OR PROLONGED CONTACT WITH LIQUID.  
Work Hygienic Practices:REMOVE AND WASH CLOTHING PROMPTLY UPON  
CONTAMINATION.  
Supplemental Safety and Health  
NONE

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

HCC:N1  
Boiling Pt:B.P. Text:118F,48C  
Melt/Freeze Pt:M.P/F.P Text:31F FZ PT  
Vapor Pres:334 @ 77F  
Vapor Density:6.46  
Spec Gravity:1.574  
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vaporation Rate & Reference:0.1 (CCL4 = 1)

Solubility in Water:0.02% @ 77F

Appearance and Odor:CLEAR LIQUID. SLIGHT ETHEREAL ODOR.

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

Stability Indicator/Materials to Avoid:YES

CHEMICALLY ACTIVE METALS SUCH AS ALUMINUM, ZINC, BERYLLIUM, STRONG CAUSTICS AND OXIDIZERS.

Stability Condition to Avoid:HIGH HEAT, OPEN FLAMES AND OTHER SOURCES OF IGNITION

Hazardous Decomposition Products:DECOMPOSED BY HIGH TEMPERATURES (OPEN FLAMES, GLOWING METAL SURFACES, ETC.) FORMING HYDROCHLORIC AND HYDROFLUORIC ACIDS.

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

Waste Disposal Methods:COMPLY WITH FEDERAL, STATE AND LOCAL REGULATIONS. REMOVE TO A PERMITTED WASTE DISPOSAL FACILITY. EPA HAZARDOUS WATES NOS. F001 AND F002 MAY APPLY TO WASTE MATERIALS.

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