

MINNESOTA MINING & MFG CO INDUSTRIAL CHEM PRODUCTS -- FC-72 FLUORINERT BRAND  
ELECTRONIC LIQUID (SUPPLEMENTAL) -- 6850-01-125-5270

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

Product ID:FC-72 FLUORINERT BRAND ELECTRONIC LIQUID (SUPPLEMENTAL)

MSDS Date:12/02/1992

FSC:6850

NIIN:01-125-5270

MSDS Number: BGMZN

=== Responsible Party ===

Company Name:MINNESOTA MINING & MFG CO INDUSTRIAL CHEM PRODUCTS

Address:3M CTR

City:ST PAUL

State:MN

ZIP:55144

Country:US

Info Phone Num:612

-733-1000

Emergency Phone Num:612-733-5454

CAGE:28112

=== Contractor Identification ===

Company Name:MINNESOTA MINING AND MFG CO, DBA 3M

Address:3M CENTER BLDG 224-5S-04

Box:City:SAINT PAUL

State:MN

ZIP:55144-1000

Country:US

Phone:866-556 5712 / 612-733-1110

CAGE:76381

Company Name:MINNESOTA MINING AND MFG CO PERFORMANCE CHEM AND FLUIDS DIV

Address:3M CTR

Box:City:SAINT PAUL

State:MN

ZIP:55144-1000

Country:US

Phone:800-364-3577/651-737-6501

CAGE:28112

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

Ingred Name:PERFLUORO COMPOUNDS, PRIMARILY COMPOUNDS WITH 6 CARBONS)

CAS:86508-42-1

Fraction by Wt: 100%

Other REC Limits:NONE RECOMMENDED

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

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

Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO

Health Hazards Acute and Chronic:SKIN/EYE:NOT EXPECTED TO RESULT IN

SIGN IRRIT.AFT PROD HAS BEEN IN USE CONTAMINANTS MAY BE INTRO THAT

MAY CAUSE S

KIN/EYE IRRIT.INHAL:NOT EXPECTED UNLESS PROD IS  
OVERHEATED & DECOMPOSITION OCCURS. INGE ST:NOT A LIKELY ROUTE OR  
EXPO.CONTAMINANTS MAY EVOLVE DURING USE OF PROD WHICH CAN BE TOXIC  
IF INGEST.

Explanation of Carcinogenicity:THERE ARE NO INGREDIENTS ABOVE 0.1%  
WHICH ARE IDENTIFIED AS CARCINOGENS BY NTP,IARC OR OSHA.

Effects of

Overexposure:EYES:REDNESS,SWELLING,PAIN,TEARING.SKIN:REDNESS,SWELLI  
NG,ITCHING.

Medical Cond Aggravated by Exposure:NOT REPORTED.

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

First Aid:EYE:IMMED FLUSH W/LG AMTS OF WATER. GET IMMED MED ATTN.  
SKIN:WASH W/SOAP & WATER. FLUSH SKIN W/LG AMTS OF WATER. IF IRRIT  
PERSISTS GET MED ATTN. INHAL:IF SIGNS/SYPMTOMS OCCUR REMOVE PERSON  
TO FRESH. I F SIGNS/SYPMTOMS CONTINUE CALL PHYSICIAN. INGEST:DRINK  
TWO GLASSES OF WATER. CALL PHYSICIAN.

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

Flash Point Method:SCC

Flash Point:NONE

Extinguishing Medi

a:NOT APPLICABLE HOWEVER USE APPROPRIATE  
EXTINGUISHING MEDIA FOR SURROUNDING MATL/FIRE.

Fire Fighting Procedures:WHEN FIRE CONDITIONS ARE SEVERE/TOT THERM  
DECOMP OF PROD POSSIBLE WEAR FULL PORT CLOTH(HELMET,SCBA  
+PRESS/PREE DEMAND,BUNKER COAT/PANTS,BANDED ARMS/WAIST/LEGS)

Unusual Fire/Explosion Hazard:CARBON MONOXIDE, CARBON DIOXIDE, HYDROGEN  
FLUORIDE, PERFLUOROISOBUTYLENE(PFIB),TRACE DECOMPOSITIN @200C &  
INCREASED DECOMPOSITION W/INCREASED SURFACE TEMP.

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Accidental Release Measures =====

Spill Release Procedures:OBSERVE PRECAUTIONS FROM MSDS.VENTILATE  
AREA.CONTAIN SPILL.COVER W/INORG ABSORBENT MATL.COLLECT SPILLED  
MATL.CLEAN UP RESIDUE W/APPROPRIATE ORG SOLVENT.READ/FOLLOW SAF  
PRECAUTIONS ON SOLVENT LABEL/MSD S.PLACE IN APPROVED METAL CNTNR &  
SEAL.

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

Handling and Storage Precautions:DO NOT STORE CNTNRS ON THEIR  
SIDES.STORE @RM TEMP.KEEP CNTNR

CLSD WHEN NOT IN USE.KEEP CNTNR

TIGHTLY CLSD.AVOID EYE CONTACT & PROLONGED BREATH OF VAP.

Other Precautions:IF PROD IS EXPO TO EXTREME CONDITION OF HEAT FROM MISUSE/EQPMT FAILURE TOXIC DECOMPOSITION PROD THAT INCLUDE HYDROGEN FLUORIDE & PERFLUOROISOBUTYLENE CAN OCCUR. FOR INDUSTRIAL USE ONLY. NOT INTENDED F OR USE AS MEDICAL DEVICE OR DRUG.

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

Respiratory Protection:AVOID BREATH THERM DECOMP PROD.SELECT ONE OF

FOLLOWING NIOSH APPROVED RESP BASED ON AIRBORNE CONC OF CONTAMINANTS & IAW OSHA REGS:HALF-MASK SUPPLIED AIR RESP, FULL-FACE SUPPLIED AIR RESP.

Ventilation:LOC EXHAU VENTI W/MIN CAPTURE VEL OF 50LINEAR FT/MIN SHOULD BE PROVIDED FOR @/>BPT.IF INTERFERING AIR CURRENTS (SUPPLEM)

Protective Gloves:NOT NEEDED IN NORMAL SERVICE.

Eye Protection:SAFETY GLASSES W/SIDE SHIELDS

Other Protective Equipment:PROVIDE A LOCAL EYE WASH STATION AND SAFETY SHOWER.

Work Hygienic Practices:USE REASONA

BLE CARE IN HANDLING THIS

PRODUCT.WASH HANDS AFTER USE AND BEFORE EATING.

Supplemental Safety and Health

3M

ID#:ZF-0002-0802-3;98-0211-0216-9;98-0211-0217-7;98-0211-0267-2;98-0211-1795-1;98-0211-4860-0;98-0211-5506-8;98-0211-5533-2;98-0211-6414-4;98-0211-7346-7;98-0211-7992-8. VENTILATION:PRESENT MIN CAPTURE VEL SHOULD BE @LEAST 100LINEAR FT/MIN.

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

HCC:N1

Boiling Pt:B.P. Text:133F/56C

Decomp Temp:Decomp T

ext:392F,200C

Vapor Pres:232 @RT

Vapor Density:11.7 @RT

Spec Gravity:1.7

Viscosity:0.4SCS

Evaporation Rate & Reference:>1.0 (N-BUTYL ACETATE=1)

Solubility in Water:NIL

Appearance and Odor:COLORLESS, CLEAR, ODORLESS LIQUID.

Percent Volatiles by Volume:100

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

Stability Indicator/Materials to Avoid:YES

FINELY DIVIDED ACTIVE METALS, ALKALI AND ALKALINE EARTH METALS.

Stability Condition to Avoid:TEMPERATURES ABOVE 392F.

Hazardous

Decomposition Products:CO,CO<sub>2</sub>,HYDROGEN  
FLUORIDE,PERFLUOROISOBUTYLENE(PFIB),TRACE DECOMP @200C & INCREASED  
DECOMP W/INCREASED SURFACE TEMP.

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

Waste Disposal Methods:INCINERATE IN INDUSTRIAL/COMMERCIAL FACILITY IN  
PRESENCE OF COMBUSTIBLE MATL.COMBUSTION PROD WILL INCLUDE  
HF.RECLAIM IF FEASIBLE.TO RECLAIM/RETURN CONTACT YOUR 3M SALES  
REPRESENTATIVE.SINCE REGS VARY CONSULT APPLICABLE REGS/AUTHOR  
BEFORE DISPO  
SAL.

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