

MINNESOTA MINING & MFG CO INDUSTRIAL CHEM PRODUCTS -- FC-40 FLUORINERT BRAND
ELECTRONIC LIQ (SEE SUPPLEM FOR ID#) -- 6850-01-194-6614

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

Product ID:FC-40 FLUORINERT BRAND ELECTRONIC LIQ (SEE SUPPLEM FOR ID#)

MSDS Date:02/18/1994

FSC:6850

NIIN:01-194-6614

MSDS Number: BGQHG

=== Responsible Party ===

Company Name:MINNESOTA MINING & MFG CO INDUSTRIAL CHEM PRODUCTS

Add

ress:3M CTR

City:ST PAUL

State:MN

ZIP:55144

Country:US

Info Phone Num:612-733-5454

Emergency Phone Num:612-733-5454/612-733-1110

Preparer's Name:(DOC #:10-3783-7)

CAGE:28112

=== Contractor Identification ===

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, (PR
IMARILY COMPOUNDS WITH 12 CARBONS)

CAS:86508-42-1

Fraction by Wt: 100%

Other REC Limits:NONE RECOMMENDED

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

LD50 LC50 Mixture:ORAL LD50 (RAT) IS UNKNOWN.

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

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

Health Hazards Acute and Chronic:NO ADVERSE HEALTH EFFECTS EXPECTED

FROM EYE & SKIN CONTACT,INHAL EXPOSURE & INGEST.MATL NOT EXPECTED
TO PRODUCE SIGNIFICANT EYE I

IRRITANT. AFT MATL HAS BEEN IN USE CONTAMIN

MAY BE INTRO THAT MAY CAUSE EYE & SKIN IRRIT. NO HEALTH EFFECTS FROM INHAL EXPECTED UNLESS MATL IS OVER HEATED & DECOMP OCCURS. CONTAMIN MATL TOXIC IF ING

Explanation of Carcinogenicity: PRODUCT CONTAINS NO INGREDIENTS CURRENTLY CLASSIFIED AS CARCINOGENIC BY NTP, IARC OR OSHA.

Effects of Overexposure: EYE: REDNESS, SWELLING, PAIN, AND TEARING. SKIN: REDNESS, SWELLING, ITCHING. A 3M PRODUCT TOXICITY SUMMARY SHEET IS AVAILABLE. IF PRODUCT I

S EXPOSED TO EXTREME CONDITION OF HEAT FROM MISUSE OR EQUIPMENT FAILURE, TOXIC DECOMPOSITION PRODUCTS THAT INCLUDE HYDROGEN FLUORIDE & PERFLUOROISOBUTYLENE CAN OCCUR.

Medical Cond Aggravated by Exposure: NONE SPECIFIED BY MANUFACTURER.

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

First Aid: EYE: IMMEDIATELY FLUSH EYES WITH LARGE AMOUNTS OF WATER. GET IMMEDIATE MEDICAL ATTENTION.
SKIN: WASH AFFECTED AREA WITH SOAP & WATER. INHALATION: IF SIGNS/SYMPTOMS OCCUR REMOVE PERSON TO FRESH AIR. IF SIGNS/SYMPTOMS CONTINUE CALL PHYSICIAN.
INGESTION: DRINK TWO GLASSES OF WATER. CALL PHYSICIAN.

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

Flash Point Method: SCC

Flash Point: NONE

Extinguishing Media: NOT APPLICABLE PER MSDS. USE STANDARD FIREFIGHTING PROCEDURES FOR SURROUNDING MATERIALS IN THE FIRE.

Fire Fighting Procedures: WEAR FULL PROTECTIVE CLOTHING (HELMET, SCBA, + PRESSURE OR PRESSURE DEMAND BREATHING APPARATUS, BUNKER COAT, PANTS, BANDS AROUND ARM/WAIST/LEGS, FACEMASK, COVERING FOR HEAT)

Unusual Fire/Explosion Hazard: SEE HAZARDOUS DECOMPOSITION SECTION FOR PRODUCTS OF COMBUSTION.

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

Spill Release Procedures: OBSERVE PRECAUTIONS FROM OTHER SECTIONS. COVER WITH INORGANIC ABSORBENT MATERIAL. COLLECT SPILLED MATERIAL. PLACE IN A CLOSED CONTAINER.

Neutralizing Agent: NONE SPECIFIED BY MANUFACTURER.

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

Handling and Storage Pre

cautions:DO NOT STORE CONTAINERS ON THEIR SIDES. STORE AT ROOM TEMPERATURE. KEEP OUT OF THE REACH OF CHILDREN.

Other Precautions:NO SMOKING WHILE HANDLING THIS MATERIAL. AVOID PROLONGED BREATHING OF VAPORS. AVOID BREATHING OF THERMAL DECOMPOSITION PRODUCTS.

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

Respiratory Protection:IF THERMAL DECOMPOSITION OCCURS, SELECT ONE OF FOLLOWING NIOSH APPROVED RESP BASED ON AIRBORNE CONCENTRATION OF CONTAMINANTS

& IAW OSHA REGS:HALF-MASK SUPPLIED AIR RESPIRATOR, FULL-FACE SUPPLIED AIR RESPIRATOR.

Ventilation:LOC EXHA VENTI.VENTI W/MIN CAPTURE VEL OF 50 LINEAR FT/MIN FOR WORK @ OR ABOVE BP,100 LINEAR FT/MIN FOR INTERFERING AIR.

Protective Gloves:NOT REQUIRED AT ROOM TEMPERATURE.

Eye Protection:SAFETY GLASSES W/SIDE SHIELDS.

Other Protective Equipment:NONE SPECIFIED BY MANUFACTURER.

Work Hygienic Practices:AVOID EYE CONTACT. WASH HANDS AFTER HANDLING.

Supplemental Safety and Health

3M ID #:98-021

1-5594-4; 98-0204-0901-1; 98-0204-0904-5; 98-0211-3507-8;

98-0211-3972-4; 98-0211-3973-2; 98-0211-5502-7; 98-0204-0903-7.

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

HCC:N1

Boiling Pt:B.P. Text:311F,155C

Vapor Pres:3 @RT

Vapor Density:22.5 @RT

Spec Gravity:1.9

Viscosity:2.7SC @RT

Evaporation Rate & Reference: