

3M COMPANY -- FC-104 FLUORINERT BRAND FLASHTUBE COOLANT -- 6850-00-408-0547

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

Product ID:FC-104 FLUORINERT BRAND FLASHTUBE COOLANT

MSDS Date:08/20/1996

FSC:6850

NIIN:00-408-0547

MSDS Number: BDXWZ

=== Responsible Party ===

Company Name:3M COMPANY

Address:3M CENTER BLDG 223-3N

City:SAINT PAUL

State:MN

ZIP:55144-0001

Country:US

Info Phone Num:612-733-5454

Emergency P

hone Num:612-733-5454

CAGE:76381

=== 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 PERFOMANCE 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 =====

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Ingred Name:PERFLUORO COMPOUNDS, C5-18  
CAS:86508-42-1  
Fraction by Wt: 100.0%  
Other REC Limits:NONE SPECIFIED

Ingred Name:PRODUCT OF THERMAL DECOMPOSITION! - HYDROGEN FLUORIDE (SARA  
302/313) (CERCLA)  
CAS:7664-39-3  
RTECS #:MW7875000  
Other REC Limits:NONE RECOMMENDED  
OSHA PEL:3 PPM (F)  
ACGIH TLV:C 3 PPM(F); 9495  
EPA Rpt Qty:100 LBS  
DOT Rpt Qty:100 LBS

Ingred Name:PRODUCT OF THERMAL DECOMPOSITION! - PERFLUOROISOBUTYLENE  
CAS:382-21-8  
RTECS #:UD1800000  
Other REC Limits:NONE RECOMMENDED  
ACG  
IH TLV:C 0.01 PPM; 9495

===== 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:USE IS NOT EXPECTED TO RESULT IN  
SIGNIFICANT IRRITATION. IF PRODUCT IS EXPOSED TO EXTREME HEAT,  
TOXIC DECOMPOSITION PRODUCTS MAY INCLUDE HYDROGEN FLUORIDE &  
PERFLUOROISOBUTYLENE.  
Explanation of Carcinogenicity:MANUFACTURER GAVE NO INFORMATION ABOUT  
CARCINOGENICITY. HMIS FOUND NO LISTING & DOES NOT EXPECT IT TO BE  
CARCINOGENIC.  
Effects of Overexposure:MFR GAVE NO INFORMATION OF MSDS.  
Medical Cond Aggravated by Exposure:MFR GAVE NO INFORMATION OF MSDS.

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

First Aid:EYES:FLUSH WITH LARGE AMOUNTS OF WATER, IF IRRITATION  
PERSISTS GET MEDICAL ATTENTION. SKIN:WASH AREA W/SOAP & WATER. IF  
IRRITATION PERSISTS, GET MEDICAL ATTENTION. INHALATION:MOVE TO  
FRESH AIR. I

F SIG NS/SYMPTOMS CONTINUE, GET MEDICAL ATTENTION.  
INGESTION:NO NEED FOR FIRST AID IS ANTICIPATED.

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

Flash Point Method:SCC  
Flash Point:NONE  
Autoignition Temp:Autoignition Temp Text:NONE  
Lower Limits:NONFLAMMABLE  
Upper Limits:NONFLAMMABLE  
Extinguishing Media:NONFLAMMABLE  
Fire Fighting Procedures:WEAR SELF-CONTAINED BREATHING APPARATUS & FULL  
PROTECTIVE CLOTHING. COOL FIRE EXPOSED CONTAINERS W/WATER.  
Unusual Fire/Explosi  
on Hazard:EXPOSURE TO EXTREME HEAT MAY CAUSE  
THERMAL DECOMPOSITION.

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

Spill Release Procedures:PROVIDE EXHAUST VENTILATION FOR LARGE SPILLS  
OR CONFINED SPACES. COLLECT SPILL W/ABSORBENT & PLACE IN APPROVED  
CONTAINER.  
Neutralizing Agent:MFR GAVE NO INFORMATION OF MSDS.

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

Handling and Storage Precautions:STORE AT ROOM TEMPERATURE. DO NOT  
SMOKE WHIL  
E HANDLING THIS PRODUCT.  
Other Precautions:THIS PRODUCT IS FOR INDUSTRIAL USE ONLY. IT IS NOT  
INTENDED FOR USE AS A MEDICAL DEVICE OR DRUG.

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

Respiratory Protection:AVOID PROLONGED BREATHING OF VAPORS. USE NIOSH  
APPROVED SUPPLIED AIR RESPIRATOR TO AVOID BREATHING THERMAL  
DECOMPOSITION PRODUCTS.  
Ventilation:USE LOCAL EXHAUST TO KEEP EXPOSURE 1 (BUTYL ACETATE=1)  
Solubility in Water:NIL  
Appearance and Odor:COLORLESS ODO

RLESS 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:HIGHLY STABLE UNLESS SEVERELY OVERHEATED.

Hazardous Decomposition Products:MFR GAVE NO INFORMATION OF MSDS.

Conditions to Avoid Polymerization:WILL NOT OCCUR.

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

Waste Disposal Methods:

INCINERATE IN THE PRESENCE OF COMBUSTIBLE

MATERIAL IN AN INDUSTRIAL OR COMMERCIAL FACILITY CAPABLE OF  
HANDLING HALOGENATED WASTE. RECLAIM IF FEASIBLE. FOR MORE  
INFORMATION, CONTACT YOUR DISTRIBUTER.

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