

MINNESOTA MINING & MFG CO INDUSTRIAL CHEM PRODUCTS -- FC-206CF, LIGHT WATER BRAND  
AQUEOUS FILM FORMING FOAM -- 4210-01-056-0883

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

Product ID:FC-206CF, LIGHT WATER BRAND AQUEOUS FILM FORMING FOAM

MSDS Date:08/22/1996

FSC:4210

NIIN:01-056-0883

MSDS Number: CCHXQ

=== Responsible Party ===

Company Name:MINNESOTA MINING & MFG CO INDUSTRIAL CHEM PRODUCTS

Address:3M CTR

C

City:ST PAUL

State:MN

ZIP:55144

Country:US

Info Phone Num:612-733-5454

Emergency Phone Num:612-733-5454

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:WATER

CAS:7732-18-5

RTECS #:ZC0110000

Fraction by Wt: 78-81%

Other REC Limits:NONE S

PECIFIED

Ingred Name:DIETHYLENE GLYCOL MONOBUTYL ETHER

CAS:112-34-5

RTECS #:KJ9100000

Fraction by Wt: 10%

Other REC Limits:NONE SPECIFIED

Ingred Name:FLUOROALKYLAMIDE DERIVATIVE

Fraction by Wt: 1 - 2%

Other REC Limits:NONE SPECIFIED

Ingred Name:ALKYL SULFATE SALTS

Fraction by Wt: 1 - 5%

Other REC Limits:NONE SPECIFIED

Ingred Name:1H-BENZOTRIAZOLE,METHYL-

CAS:29385-43-1

RTECS #:DM1300000

Fraction by Wt: 0 - 0.1%

reaction by Wt: 3 - 7%  
Other REC Limits:NONE SPECIFIED

Ingred Name:PERFLUOROAKYL SULFONATE SALTS  
Fraction by Wt: 0.1 - 1%  
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:MODERATE EYE IRRITATION. MILD SKIN  
IRRITATION. SKIN MAY ABSORB HARMFUL AMOUNTS. SINGLE OVEREXPOSURE,  
MAY CAUSE CENTRAL NERVOUS SYSTEM DEPRESSION & IRRITATION (UPPER  
RESPIRATORY), BLOOD DISORDERS, BONE MARROW DEPRESSION, KIDNEY  
EFFECTS, LIVER EFFECTS, PULMONARY EDEMA. INGESTION IS NOT A LIKELY  
ROUTE EXPOSURE.  
Explanation of Carcinogenicity:THIS COMPOUND CONTAINS NO INGREDIENTS AT  
CONCENTRATIONS OF 0.1% OR GREATER THAT ARE CARCINOGENS OR SUSPECT  
CARCINOGENS.  
Effects of Overexposure:EYE:REDNESS, SWELLING, PAIN, TEARING & HAZY  
VISION. SKIN:REDNESS, SWELLING, & ITCHING. INHALATION:HEADACHE,  
DIZZINESS, DROWSINESS, INCOORDINATION, SLOWED REACTION TIME,  
SLURRED SPEECH, GIDDINESS & UNCONSCIOUSNESS. SORENESS OF THE NOSE  
& THROAT, COUGHING AND SNEEZING.  
Medical Cond Aggravated by Exposure:NONE SPECIFIED BY MANUFACTURER.

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

First Aid:EYES:IMMEDIATELY FLUSH WITH WATER FOR AT LEAST 15 MINUTES.  
GET MEDICAL ATTENTION. SKIN:FLUSH SKIN WITH LARGE AMOUNTS OF WATER.  
IF IRRITATION PERSISTS, GET IMMEDIATE MEDICAL ATTENTION.  
INHALATION:REMOVE PERSON TO FRESH AIR. IF SYMPTOMS CONTINUE, CALL  
A PHYSICIAN. INGESTION:DRINK TWO GLASSES OF WATER. CALL A PHYSICIAN  
IMMEDIATELY.

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

Flash Point Method:SCC  
Flash Point:NONE  
Lower Limits:NOT GIVEN  
Upper Limits:NOT GIVEN  
Extinguishing Media:PRODUCT IS A FIRE EXTINGUISHING AGENT.  
Unusual Fire/Explosion Hazard:SEE HAZARDOUS DECOMPOSITION PRODUCTS  
SECTION FOR PRODUCTS OF COMBUSTION.

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

Spill Release Procedures:OBSERVE PRECAUTIONS FROM OTHER SECTIONS. COVER WITH ABSORBENT MATERIAL. COLLECT SPILLED MATERIAL. CLEANUP RESIDUE WITH WATER. PLACE IN APPROVED METAL CONTAINER.

Neutralizing Agent:NONE SPECIFIED BY MANUFACTURER.

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

Handling and Storage Precautions:STORE IN A COOL PLACE. STORE AWAY FROM HEAT. STORE OUT OF DIRECT SUNLIGHT. KEEP CONTAINER DRY. KEEP

CONTAINER IN WELL- VENTILATED AREA.

Other Precautions:KEEP CONTAINER TIGHTLY CLOSED.

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

Respiratory Protection:AVOID BREATHING OF VAPORS, MISTS OR SPRAY. SELECT ONE OF THE FOLLOWING NIOSH APPROVED RESPIRATORS BASED ON AIRBORNE CONCENTRATION OF CONTAMINANTS & I/A/W OSHA REGULATIONS: HALF MASK ORGANIC VAPOR RESPIRATOR WITH DUST/MIST PREFILTER.

Ventilation:USE WITH ADEQUATE DILUTION VENTILATION.

Protective

Gloves:BUTYL RUBBER GLOVES RECOMMENDED.

Eye Protection:WEAR VENTED GOGGLES.

Other Protective Equipment:NONE SPECIFIED BY MANUFACTURER.

Work Hygienic Practices:WASH HANDS THOROUGHLY WITH SOAP AND WATER BEFORE EATING, DRINKING, SMOKING OR USING TOILET FACILITIES.

Supplemental Safety and Health

NONE SPECIFIED BY MANUFACTURER.

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

HCC:N1

NRC/State Lic Num:NONE

Boiling Pt:=100.C, 212.F

Melt/Freeze Pt:M.P/F.P Text:NOT GIVEN

Vapor

Pressure:17.8

Vapor Density:0.62

Spec Gravity:1

VOC Pounds/Gallon:103

pH:8.50

Evaporation Rate & Reference:< 1 (BUTYL ACETATE = 1)

Solubility in Water:MISCIBLE

Appearance and Odor:CLEAR, AMBER COLORED LIQUID

Percent Volatiles by Volume:90

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

Stability Indicator/Materials to Avoid:YES

Stability Condition to Avoid:NONE SPECIFIED BY MANUFACTURER.

Hazardous Decomposition Products:CARBON MONOXIDE, CARBON DIOXIDE, OXIDES OF NIT

ROGEN, OXIDES OF SULFUR, HYDROGEN CYANIDE, HYDROGEN  
FLUORIDE, AMMONIA.

Conditions to Avoid Polymerization: WILL NOT OCCUR.

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

Waste Disposal Methods: SLOWLY DISCHARGE SPENT SOL & SMALL AMOUNTS (