

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:04/14/1995

FSC:4210

NIIN:01-056-0883

MSDS Number: BVHGS

=== Responsible Party ===

Company Name:MINNESOTA MINING & MFG CO INDUSTRIAL CHEM PRODUCTS

Address:3M CTR

C

ity: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 +/-5%

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%

TRIETHANOLAMINE)  
CAS:102-71-6  
RTECS #:KL9275000  
Fraction by Wt: 0.1-1.0%  
Other REC Limits:NONE SPECIFIED  
ACGIH TLV:5 MG/M3

Ingred Name:UREA  
CAS:57-13-6  
RTECS #:YR6250000  
Fraction by Wt: 3 - 7%  
Other REC Limits:NONE SPECIFIED

Ingred Name:PERFLUOROALKYL 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:MANUFACTURER GAVE NO INFORMATION ABOUT CARCINOGENICITY. HMIS FOUND NO LISTING & DOES NOT EXPECT IT TO BE CARCINOGENIC.

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:GET IMMEDIATE MEDICAL ATTENTION.

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

First Aid:EYES:IMMEDIATE

ATELY 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:REMOV E 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

Extinguishing Media:PRODUCT IS A FIRE EXTINGUISH  
ING AGENT.

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

#### ===== 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:MFR GAVE NO INFORMATION ON MSDS.

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

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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 RESP IRATOR WITH DUST/MIST PREFILTER.

Ventilation:USE WITH ADEQUATE DILUTION VENTILATION.

Protective Gloves:BUTYL RUBBER GLOVES RECOMMENDED.

Eye Protection:WEAR VENTED GOGGLES.

Other Protective Equipment:MFR GAVE NO INFORMATION ON MSDS.

Work Hygienic Practices:MFR:?. HMIS:USE GOOD CHEMICAL HYGIENE

PRACTICES. AVOID CONTACT IF AT ALL POSSIBLE. WASH THOROUGHLY AFTER  
HANDLING.

Supplemental Safety and Health

NONE

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

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HCC:N1  
NRC/State Lic Num:NONE  
Boiling Pt:B.P. Text:212F,100C  
Vapor Pres:30.400 MM  
Vapor Density:0.62  
Spec Gravity:1  
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 Decomp  
osition Products:CARBON MONOXIDE, CARBON DIOXIDE,  
OXIDES OF NITROGEN, OXIDES OF SULFUR, HYDROGEB CYANIDE, HYDROGEN  
FLUORIDE, AMMONIA.  
Conditions to Avoid Polymerization:WILL NOT OCCUR.

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

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