

MINNESOTA MINING & MFG INDUSTR -- FC-206CF LIGHT WATER AFFF 6%

=====  
MSDS Safety Information  
=====

FSC: 4210  
NIIN: 01-056-8343  
MSDS Date: 03/16/2000  
MSDS Num: CKTQR  
Product ID: FC-206CF LIGHT WATER AFFF 6%  
MFN: 09  
Responsible Party  
Cage: 28112  
Name: MINNESOTA MINING & MFG CO INDUSTRIAL CHEM PRODUCTS  
Address: 3M  
CTR  
City: SAINT PAUL MN 55144  
Info Phone Number: 612-733-1000  
Emergency Phone Number: 800-364-3577  
Resp. Party Other MSDS No.: 10-4323-1  
Proprietary Ind: Y  
Review Ind: Y  
Published: Y

=====  
Contractor Summary  
=====

Cage: 28112  
Name: MINNESOTA MINING AND MFG CO PERFORMANCE CHEM AND FLUIDS DIV  
Address: 3M CTR  
City: SAINT PAUL MN 55144-1000  
Phone: 800-364-3577/651-737-6501

=====  
Item Description Information  
=====

Item Manager: S9I  
Item Name: FOAM LIQUID,FIRE EXTINGUISHING  
Specification Number: MIL-F-24385  
Type/Grade/Class: 6 TYPE  
Unit of Issue: CN  
Quantitative Expression: 00000000005GL  
UI Container Qty: 1  
Type of Container: CAN

=====  
Ingredients  
=====

Name: \*\*\* PROPRIETARY \*\*\*  
-----

-----  
=====

Health Hazards Data

=====

LD50 LC50 Mixture: NONE PROVIDED BY MFR.

Effects of Exposure: EYE CONTACT: MODERATE EYE IRRITATION. SKIN CONTACT: MILD SKIN IRRITATION (AFTER PROLONGED OR REPEATED CONTACT). INHALATION: CENTRAL NERVOUS SYSTEM DEPRESSION, IRRITATION (UPPER RESPIRATORY). INGESTION : MAY CAUSE ASPIRATION PNEUMONITIS, IRRITATION OF GI TISSUES, CNS DEPRESSION.

ANI  
MAL STUDIES CONDUCTED ON ORGANIC FLUORO-CHEMICALS WHICH ARE PRESENT IN PRODUCT INDICATE EFFECTS INCLUDING LIVER DISTURBANCES, WEIGHT LOSS, LOSS OF APPETITE, LETHARGY, AND NEUROLOGICAL, PANCREATIC, ADRENAL AND HEMATOLOGIC EFFECTS. THERE ARE NO KNOWN HUMAN HEALTH EFFECTS FROM ANTICIPATED EXPOSURE TO THESE FLUORO-CHEMICALS WHEN USED AS INTENDED.

Explanation Of Carcinogenicity: NONE PROVIDED BY MFR.

Signs And Symptoms Of Overexposure: EYE CONTACT: REDNESS, SWELLING, PAIN, TEARING, AND HAZ

Y VISION. SKIN CONTACT: REDNESS, SWELLING AND ITCHING.  
INHALATION: HEADACHE, DIZZINESS, DROWSINESS, INCOORDINATION, SLOWED REACTION TIME, SLURRED SPEECH, GIDDINESS AND UNCONSCIOUSNESS, SORENESS OF NOSE AND THROAT, COUGHING AND SNEEZING. INGESTION: COUGHING, DIFFICULTY BREATHING, WHEEZING, COUGHING UP BLOOD AND PNEUMONIA, WHICH CAN BE FATAL.

Medical Cond Aggravated By Exposure: THERE ARE NO KNOWN HUMAN HEALTH EFFECTS FROM ANTICIPATED EXPOSURE TO THESE ORGANIC FLUORO-CHEMICALS WHEN USED AS

INTENDED AND INSTRUCTED.

First Aid: EYE CONTACT: IMMEDIATELY FLUSH EYES WITH LARGE AMOUNTS OF WATER. GET IMMEDIATE MEDICAL ATTENTION. SKIN CONTACT: FLUSH SKIN WITH LARGE AMOUNTS OF WATER. IF IRRITATION PERSISTS, GET MEDICAL ATTENTION. I NHALATION: IF SIGNS/SYMPTOMS OCCUR, REMOVE PERSON TO FRESH AIR. IF SIGNS/SYMPTOMS CONTINUE, CALL A PHYSICIAN. IF SWALLOWED: IF SWALLOWED, CALL A PHYSICIAN IMMEDIATELY. ONLY INDUCE VOMITING AT THE INST RUCTION OF A PHYSICIAN. NEVER GIVE ANYTHING

B  
Y MOUTH TO AN UNCONSCIOUS PERSON.

=====

Handling and Disposal

=====

Spill Release Procedures: OBSERVE PRECAUTIONS IN OTHER SECTIONS OF MSDS. VENTILATE AREA. CONTAIN SPILL. COVER WITH ABSORBENT MATERIAL. COLLECT SPILLED MATERIAL. CLEAN UP RESIDUE WITH WATER. PLACE IN A CLOSED CONTAINER FOR DISP OSAL.

Neutralizing Agent: NONE PROVIDED BY MFR.

Waste Disposal Methods: DISCHARGE SPENT SOLUTIONS A

ND SMALL QUANTITIES (LESS THAN 5 GAL. (19 L) TO A WASTEWATER TREATMENT SYSTEM. REDUCE DISCHARGE RATE IF FOAMING OCCURS. LARGE QUANTITIES MAY ADVERSELY AFFECT BIOGLOICAL WAST EWATER TREATMENT SYSTEMS. INCINERATE LARGE QUANTITIES IN AN INDUSTRIAL OR COMMERICAL INCINERATOR. CO MBUSTION PRODUCTS WILL INCLUDE HF.

Handling And Storage Precautions: STORE AWAY FROM AREAS WHERE PRODUCT MAY COME INTO CONTACT WITH FOOD OR PHARMACEUTICALS. STORE AT TEMPERATURES BELOW 120 DEG F (49 DEG C). STORE

AT TEMPERATURES ABOVE 32 DEG F (0 DEG C). KEEP CONTAINER CLOSED WHEN NOT IN USE. KEEP CONTAINER IN WELL VENTILATED AREA.

Other Precautions: KEEP CONTAINER TIGHTLY CLOSED. NONFLAMMABLE. NO SMOKING: SMOKING WHILE USING THIS PRODUCT CAN RESULT IN CONTAMINATION OF THE TOBACCO AND/OR SMOKE AND LEAD TO FORMATION OF HAZARDOUS DECOMPOSITION PROD UCTS MENTIONED IN REACTIVITY DATA SECTION OF THIS MSDS.

=====  
Fire and Explosion Hazard Information

=====  
Flash Point Method: SCC

Flash Point Text: NONE

Extinguishing Media: PRODUCT IS FIRE-EXTINGUISHING AGENT.

Unusual Fire/Explosion Hazard: PRODUCTS OF COMBUSTION INCLUDE CARBON MONOXIDE, CARBON DIOXIDE, OXIDES OF NITROGEN, OXIDES OF SULFUR, HYDROGEN CYANIDE, HYDROGEN FLUORIDE, AMMONIA. THERMAL DECOMPOSITION OF USAGE CONCENTRATIONS DOES N OT PRESENT A HAZARD.

=====  
Control Measures

=====  
Respiratory Protection: AVOID BREATHING OF AIRBORNE MATERIAL. SELECT ONE OF THE FOLLOWING NIOSH APPROVED RESPIRATORS BASED ON AIRBORNE CONCENTRATION OF CONTAMINANTS AND IN ACCORDANCE WITH OSHA REGULATIONS: HALF-MASK ORGANIC VAPOR RESPIRATOR WITH DUST/MIST PREFILTER.

Ventilation: PROVIDE VENTILATION ADEQUATE TO CONTROL VAPOR CONCENTRATIONS BELOW RECOMMENDED EXPOSURE LIMITS AND/OR CONTROL SPRAY OR MIST.

Protective Gloves: BUTYL RUBBER GLOVES ARE RECOMMENDED.

Eye Protection: AVOID EYE CONTACT WITH VAPOR, SPRAY, OR MIST. WEAR VENTED GOGGLES.

Other Protective Equipment: AVOID SKIN CONTACT.

Work Hygienic Practices: NONE PROVIDED BY MFR.

Supplemental Safety and Health: PREVENTION OF ACCIDENTAL INGESTION: DO NOT EAT, DRINK, OR SMOKE WHEN USING THIS PRODUCT. WASH EXPOSED AREAS THOROUGHLY WITH SOAP AND WATER. WASH HANDS AFTER HANDLING AND BEFORE EATING.

=====  
Physical/Chemical Prop

erties

=====  
HCC: N1

Boiling Point: =100.C, 212.F

B.P. Text: INITIAL

Decomp Text: NONE PROVIDED BY MFR.

Vapor Pres: APPROX 17.8 MMHG @ 20C

Vapor Density: 0.69(AIR=1

Spec Gravity: 1.03 (WATER=1)

PH: APPROX 8.5

Viscosity: NOT DETERMINED

Solubility in Water: MISCIBLE.

Appearance and Odor: CLEAR, AMBER COLORED LIQUID.

Percent Volatiles by Volume: APPROX 90%

Corrosion Rate: NONE PROVIDED BY MFR  
=====

#### Reactivity Data

=====

Stability Indicator: YES

Stability Condition To Avoid: NONE PROVIDED BY MFR.

Hazardous Decomposition Products: CARBON MONOXIDE AND CARBON DIOXIDE, OXIDES OF NITROGEN, OXIDES OF SULFUR, HYDROGEN CYANIDE, HYDROGEN FLUORIDE, AMMONIA. THERMAL DECOMPOSITION OF USAGE CONCENTRATION DOES NOT PRESENT A HAZARD.

Hazardous Polymerization Indicator: NO

Conditions To Avoid Polymerization: WILL NOT OCCUR.  
=====

#### Toxicological Information

=====

Toxicological Information: A PRODUCT TOXICITY SUMMARY SHEET IS AVAILABLE. THIS PRODUCT CONTAINS ORGANIC FLUORO CHEMICALS THAT HAVE POTENTIAL TO BE ABSORBED AND REMAIN IN BODY FOR LONG PERIODS OF TIME, EITHER AS THE PARENT MOLECULE OR AS METABOLITES, AND MAY ACCUMULATE WITH REPEATED EXPOSURES. THERE ARE NO KNOWN HUMAN HEALTH EFFECTS FROM ANTICIPATED EXPOSURE TO THESE ORGANIC FLUO

ROCHEMICALS WHEN USED AS INTENDED AND INSTRUCTED . THIS PRODUCT CONTAINS ONE OR MORE ORGANIC FLUORO CHEMICALS THAT HAVE THE POTENTIAL TO RESIST DEGRADATION AND PERSIST IN THE ENVIRONMENT.  
=====

#### Ecological Information

=====

Ecological: PRODUCT ENVIRONMENTAL DATA SHEET (PED) IS AVAILABLE. 5-DAY BIOLOGICAL OXYGEN DEMAND: 0.16 G/G; 20-DAY BIOLOGICAL OXYGEN DEMAND (BOD20): 0.18G/G; CHEMICAL OXY

GEN DEMAND (COD): 0.34G/G; 20-DAY BOD/COD : 0.53,  
96-HR LC50, FATHEAD MINNOW (PIMEPHALES PROMELAS): >1000 MG/L; 48-HR EC50,  
DAPHNIA MAGNA: >1,000 MG/L; 96-HR STATIC ALGAE (SELENASTRUM  
CAPRICORNUTUM): 254 MG/L (233-277); 30MIN. EC50, PHOTOBACT ERIUM PHOSPHOREUM  
(MICROTOX SYSTEM): 680 MG/L(610-750); 3-HR EC50 (DECD METHOD #209): >1000  
MG/L. VOLATILE ORGANIC COMPOUNDS: 103 GMS/LITER SOUTH COAST AIR QUALITY MGMT  
DIST METHOD CALC. @ 20C. VOC LE SS WATER AND EXEMPT SOLVENTS: N/D

=====  
MSDS Transport Information  
=====

=====  
Regulatory Information  
=====

Sara Title III Information: SECJ 313 OF TITLE III OF EPCRA:DIETHYLENE GLYCOL  
BUTYL ETHER.

Federal Regulatory Information: THE COMPONENTS OF THIS PRODUCT ARE IN  
COMPLIANCE WITH CHEMICAL REGISTRATION REQUIREMENTS OF: TSC

A, EINECS, CDSL,

AICS, MITI. SINCE REGULATIONS VARY, CONSULT APPLICABLE REGULATIONS OR  
AUTHORITIES BEFORE DISPOSAL. IN THE EVENT OF AN UNCONTROLLED RELEASE OF THIS  
MATERIAL, THE USER SHOULD DETERMINE IF THE RELEASE QUALIFIES AS A REPORTABLE  
QUANTITY. U.S. EPA HAZARDOUS WASTE NUMBER = NONE (NOT A U.S. EP A HAZARDOUS).

State Regulatory Information: PRODUCT NOT KNOWN TO CONTAIN ANY SUBSTANCES  
REGULATED UNDER CA PROP 65.

=====  
Other Inform  
ation  
=====

Other Information: EPCRA HAZARD CLASS: FIRE HAZARD: NO. PRESSURE: NO.  
REACTIVITY: NO. ACUTE: YES. CHRONIC: NO.

=====  
Transportation Information  
=====

Responsible Party Cage: 28112

Trans ID NO: 154857

Product ID: FC-206CF LIGHT WATER AFFF 6%

MSDS Prepared Date: 03/16/2000

Review Date: 10/03/2000

MFN: 9

Net Unit Weight: 43 LBS

Multipl

e KIT Number: 0  
Unit Of Issue: CN  
Container QTY: 1  
Type Of Container: CAN

=====  
Detail DOT Information  
=====

DOT PSN Code: ZZZ  
DOT Proper Shipping Name: NOT REGULATED BY THIS MODE OF TRANSPORTATION  
=====

=====  
Detail IMO Information  
=====

IMO PSN Code: ZZZ  
IMO Proper Shipping Name: NOT REGULATED FOR THIS MODE OF TRANSPORTATION  
=====

=====  
Detail IATA Information  
=====

IATA PSN Code: ZZZ  
IATA Proper Shipping Name: NOT REGULATED BY THIS MODE OF TRANSPORTATION  
=====

=====  
Detail AFI Information  
=====

AFI PSN Code: ZZZ  
AFI Proper Shipping Name: NOT REGULATED BY THIS MODE OF TRANSPORTATION  
=====

=====  
HAZCOM Label  
=====

Product ID: FC-206CF LIGHT WATER AFFF 6%  
Cage: 28112  
Company Name: MINNESOTA MINING AND MFG CO PERFORMANCE CHEM AND FLUIDS DIV  
Street: 3M CTR  
City: SAINT PAUL MN  
Zipcode: 55144-1000  
Health Emergency Phone: 800-364-3577  
Label Required IND: Y  
Date Of Label Review: 10/03/2000  
Status Code: A  
Label Date: 10/03/2000  
Origination Code: F  
Eye Protection IND: YES  
Skin Protection IND: YES  
Signal Word: CAU

TION

Respiratory Protection IND: YES

Health Hazard: Slight

Contact Hazard: Slight

Fire Hazard: None

Reactivity Hazard: None

Hazard And Precautions: EYE CONTACT: MODERATE EYE IRRITATION. SKIN CONTACT: MILD SKIN IRRITATION (AFTER PROLONGED OR REPEATED CONTACT). INHALATION: CENTRAL NERVOUS SYSTEM DEPRESSION, IRRITATION (UPPER RESPIRATORY). INGESTION : MAY CAUSE ASPIRATION PNEUMONITIS, IRRITATION OF GI TISSUES, CNS DEPRESSION. ANIMAL STUDIES CONDUCTED ON ORGANIC FLUORO-CHEMICALS WHICH ARE PRE

SENT IN

PRODUCT INDICATE EFFECTS INCLUDING LIVER DISTURBANCES, WEIGHT LOSS, LOSS OF APPETITE, LETHARGY, AND NEUROLOGICAL, PANCREATIC, ADRENAL AND HEMATOLOGIC EFFECTS. THERE ARE NO KNOWN HUMAN HEALTH EFFECTS FROM ANTICIPATED EXPOSURE TO THESE FLUORO-CHEMICALS WHEN USED AS INTENDED.

=====

Disclaimer (provided with this information by the compiling agencies): This information is formulated for use by elements of the Department of Defense.

The United States of America in no manner whatsoever expressly or implied warrants, states, or intends said information to have any application, use or viability by or to any person or persons outside the Department of Defense nor any person or persons contracting with any instrumentality of the United States of America and disclaims all liability for such use. Any person utilizing this instruction who is not a military or civilian employee of the United States of America should s

seek competent professional advice to verify and assume responsibility for the suitability of this information to their particular situation regardless of similarity to a corresponding Department of Defense or other government situation.