

MINNESOTA MINING & MFG CO INDUSTRIAL CHEM PRODUCTS -- FC-203CF LIGHT WATER BRAND  
AQUEOUS FILM FORMING FOAM -- 4210-01-144-0291

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Product Identification  
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Product ID:FC-203CF LIGHT WATER BRAND AQUEOUS FILM FORMING FOAM

MSDS Date:11/13/1995

FSC:4210

NIIN:01-144-0291

MSDS Number: CBQRL

=== Responsible Party ===

Company Name:MINNESOTA MINING & MFG CO INDUSTRIAL CHEM PRODUCTS

Address:3M CTR

Ci

ty:ST PAUL

State:MN

ZIP:55144

Country:US

Info Phone Num:612-733-1000

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

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Composition/Information on Ingredients  
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Ingred Name:WATER

CAS:7732-18-5

RTECS #:ZC0110000

Fraction by Wt: 69-71%

Other REC Limits:NONE RE

COMMENDED

Ingred Name:DIETHYLENE GLYCOL MONOBUTYL ETHER;

(2-(2-BUTOXYETHOXY)-ETHANOL)

CAS:112-34-5

RTECS #:KJ9100000

Fraction by Wt: 19-21%

Other REC Limits:NONE RECOMMENDED

Ingred Name:ALKYL SULFATE SALTS (2), NEW JERSEY TRADE SECRET REG

NO:04499600-58059, -5806P.

Fraction by Wt: 4-6%

Other REC Limits:NONE RECOMMENDED

Ingred Name:AMPHOTERIC FLUOROALKYLAMIDE DERIVATIVE, NEW JERSEY TRADE

SECRET REG NO: 04499600-5804P.

Fraction by Wt: 1-5%

Other REC Limits:NONE RECOMMENDED

Ingred N

ame:ETHANOL, 2,2',2"-NITRILOTRI-; (TRIETHANOLAMINE)

CAS:102-71-6

RTECS #:KL9275000

Fraction by Wt: 0.5-1.5%

Other REC Limits:NONE RECOMMENDED

ACGIH TLV:5 MG/M3

Ingred Name:PERFLUOROALKYL SULFONATE SALTS (5), NEW JERSEY TRADE SECRET

REG NO: 04499600-5804P.

Fraction by Wt: 0.5-1.5%

Other REC Limits:NONE RECOMMENDED

Ingred Name:1H-BENZOTRIAZOLE,METHYL-

CAS:29385-43-1

RTECS #:DM1300000

Fraction by Wt: 0-0.1%

Other REC Limits:NONE RECOMMENDED

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===== Hazards Identification =====  
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LD50 LC50 Mixture:NONE SPECIFIED BY MANUFACTURER.

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

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

Health Hazards Acute and Chronic:EYE/SKIN:MODERATE IRRIT(AFT PROL/REP

SKIN CONTACT).PROL/REP EXPO MAY BE ABSORBED THRU SKIN IN HARMFUL

AMTS.INHAL:SINGLE OVEREXPO ABOVE RECOMMENDED GUIDELINES MAY CAUSE

CNS DEPRESS,IRRIT.PROL/REP OVERE XPO ABOVE RECOMMENDED GUIDELINES

MAY CAUSE BLOOD DISORDERS,BONE MARROW DEP

RESS,KIDNEY/LIVER

EFFECTS,PULM EDEMA.

Effects of Overexposure:EYE:RED,SWELL,PAIN,TEAR,HAZY

VISION.SKIN:RED,SWELL,ITCH,DRY.INHAL:CNS

DEPRESS:HEAD,DIZZ,DROWS,INCOORD,SLOW RX TIME,SLURR

SPEECH,GIDDINESS,UNCONSC;IRRIT UPPER RESP:NOSE/THROAT

SORENESS,COUGH,SNEEZE;BLO OD/BONE MARROW DEPRESS:PROL

WEAK,FTG;KIDNEY:RED URINE VOL,BLOOD IN URINE,BACK

PAIN;LIVER:JAUNDICE,TENDER UPPER ABD;(SUP)

Medical Cond Aggravated by Exposure:NONE SPECIFIED BY MANUFACTURER.

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

First Aid:EYE:IMMED FLUSH W/LG AMTS OF WATER FOR @LEAST 15MINS.GET MED  
ATTN IMMED. SKIN:FLUSH W/LG AMTS OF WATER.IRRIT PERSISTS GET MED  
ATTN. INHAL:SIGNS/SYPMTOMS OCCUR REMOVE PERSON TO FRESH  
AIR.SIGNS/PSYMTOM S CONT CALL PHYSICIAN. INGEST:DRINK TWOGLASSES  
OF WATER.CALL PHYSICIAN.

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

Flash Point Method:SCC  
Flash Point:NONE  
Autoignition Temp:Autoignition Temp Tex  
t:NA  
Lower Limits:NA  
Upper Limits:NA  
Extinguishing Media:PRODUCT IS A FIRE-EXTINGUISHING AGENT.  
Unusual Fire/Explosion Hazard:THERMAL DECOMPOSITION OF USAGE  
CONCENTRATIONS DOES NOT PRESENT A HAZARD.

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

Spill Release Procedures:OBSERVE PRECAUT FRM OTHER SECS.VENTILATE  
AREA.CONTAIN SPILL.COVER W/ABSORBENT MATL.COLLECT MATL.CLEAN UP  
RESIDUE W/WATER.PLACE IN APPROVED METAL CNTNR.SEAL CNTNR.  
Neutralizing Agent:NONE SPECIFI  
ED BY MANUFACTURER.

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

Handling and Storage Precautions:STORE AWAY FROM HEAT.KEEP CNTNR CLSD  
WHEN NOT IN USE.  
Other Precautions:AVOID EYE CONTACT W/VAP/SPRAY/MIST.AVOID SKIN  
CONTACT.DO NOT EAT/DRINK/SMOKE WHEN USING PRODUCT.WASH EXPO AREAS  
THOROUGHLY W/SOAP/WATER.

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

Respiratory Protection:AVOID BREATH OF VAP/MIST/SPRAY.SELECT ONE OF  
FOLLOWING NIOS

H APPROVED RES BASED ON AIRBORNE CONCEN OF  
CONTAMINANTS & IAW OSHA REGS:HALF-MASK ORGANIC VAP RESP W/DUST/MIST  
PREFILTER.

Ventilation:USE W/ADEQUATE DILUTION VENTILATION.

Protective Gloves:BUTYL RUBBER GLOVES.

Eye Protection:WEAR VENTED GOGG.

Other Protective Equipment:NONE SPECIFIED BY MANUFACTURER.

Work Hygienic Practices:INGESTION IS NOT LIKELY ROUTE OF EXPO TO THIS  
PRODUCT. WASH HANDS AFT HNDLG/BEF EATING.

Supplemental Safety and Health

HEALTH:PULM EDE:COUGH,CONGEST,DIFF BREATH,R

ESP FAILURE,DEATH. DISPO:TOX

CHEM SUBJ TO REPORTING REQMTS SEC 313 TITLE III

EPCRA/40CFR372:2-(2-BUTOXYEHTYOXY)-ETHANOL.3M PROD ENVIRO DATA

SHEET AVAILABLE.C ONSULT APPLICABLE REG/AUTHORITIES BEF DISPO.IF

UNCONTROLLED RELEASE USER DETERMINE IF QUALIFY AS RQ.EPA

HAZWASTE#:NONE

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

HCC:N1

Boiling Pt:B.P. Text:212F,100C

Melt/Freeze Pt:M.P/F.P Text:NA

Decomp Temp:Decomp Text:NP

Vapor Pres:17 @20C

Vapor Density:0.7

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Spec Gravity:1.0

VOC Pounds/Gallon:500

pH:8.5

Viscosity:ND

Evaporation Rate & Reference: