3M GENERAL OFFICES -- EC-1137 ADHESIVE -- 8030-00-680-2039 Product ID:EC-1137 ADHESIVE MSDS Date:11/25/1997 FSC:8030 NIIN:00-680-2039 MSDS Number: CHVND === Responsible Party === Company Name: 3M GENERAL OFFICES Address:3M CENTER City:ST PAUL State:MN ZIP:55144-1000 Country:US Info Phone Num:612-737-6501 Emergency Phone Num:800-364-3577 CAGE:1BY21

Company Name: MINNESOTA MINING AND MFG CO ENGINEERING DOCUMENT SYSTEMS

======= Composition/Information on Ingredients ========

=== Contractor Identification ===

Box:City:SAINT PAUL

Address:3M CENTER BLDG 224-5S-04

Phone:866-556 5712 / 612-733-1110

3M

State:MN

ZIP:55144-1000 Country:US

CAGE:76381

Address:3M CTR Box:City:SAINT PAUL

ZIP:55144-1000 Country:US

CAGE:1BY21

CAS:1344-09-8

OSHA PEL:N/K ACGIH TLV:N/K

C

Fraction by Wt: 40-50%

Ingred Name:WATER

Phone:612-737-4114

Ingred Name:SODIUM SILICATE

DIV

State:MN

Company Name: MINNESOTA MINING AND MFG CO, DBA

AS:7732-18-5 RTECS #:ZC0110000

Fraction by Wt: 30-40%

OSHA PEL:N/K ACGIH TLV:N/K

Ingred Name: COPPER; (COPPER POWDER) (SARA 313) (CERCLA)

CAS:7440-50-8

RTECS #:GL5325000 Fraction by Wt: 7-13%

OSHA PEL:0.1MG/M3 FUME/1 DUST ACGIH TLV:0.2 MG/M3 FUME; 9495

EPA Rpt Qty:5000 LBS DOT Rpt Qty:5000 LBS

Ingred Name: ZINC OXIDE (SARA 313) (CERCLA)

CAS:1314-13-2

RTECS #:ZH4810000 Fraction by Wt: 1-5%

OSHA PEL:15 MG/M3 TDUST

ACGIH TLV:10 MG/M3 TDUST; 9495

Ingred Name: STAINLESS STEEL FLAKES

Fraction by Wt:

20-30%

OSHA PEL:N/K ACGIH TLV:N/K

========== Hazards Identification ================

LD50 LC50 Mixture: NONE SPECIFIED BY MANUFACTURER.

Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO

Health Hazards Acute and Chronic:EYE: SEV EYE IRRIT: SIGNS/SYMPS CAN INCL REDNESS, SWELL, PAIN, TEARING, CLOUDY APPEAR OF CORNEA, IMPAIRED VISION & POSS PERMANENTLY IMPAIRED VISION. SKIN: SEV SKIN IRRIT (AFTER PRLNG/RPTD

CNTCT): SIGN S/SYMP CAN INCL REDNESS,

SWELL, ITCHING, DRYNESS, CRACKING, BLISTERING, & PAIN. INHAL: DUST FROM (EFTS OF OVEREXP)

Explanation of Carcinogenicity: NOT RELEVANT.

Effects of Overexposure:HLTH HAZ: CUTTING, GRINDING, SANDING/MACHINING MAY CAUSE IRRIT OF THE RESP SYSTEM. INGEST: MAY CAUSE: IRRITATION OF GI TISSUES: SIGNS/SYMPTOMS CAN INCLUDE PAIN, VOMITING, ABDOMINAL TENDERNESS, NAUSEA, BLOOD IN VOMITUS, AND BLOOD IN FECES.

Medical Cond Aggravated by Exposure: NONE SP

ECIFIED BY MANUFACTURER.X
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First Aid:EYE: IMMED FLUSH W/LRG AMTS OF H*20 FOR AT LEAST 15 MIN. GET IMMED MED ATTN. SKIN: IMMED FLUSH W/LRG AMTS OF H*20. REMOVE CONTAMINATED CLOTHING. IF IRRITATION PERSISTS, CALL A PHYSICIAN. WASH CONTAMIN ATED CLOTHING BEFORE REUSE. INHAL: IF SIGNS/SYMPTOMS OCCUR, REMOVE PERSON TO FRESH AIR. IF SIGNS/SYMPTOMS CONTINUE, CALL A MD. INGEST: DO NOT INDUCE VOMITING. DRINK TWO GLA SSES OF WATER. CALL A MD.
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Flash Point:NONE Extinguishing Media:WATER SPRAY, CARBON DIXOIDE, DRY CHEMICAL, FOAM. Fire Fighting Procedures:USE NIOSH APPROVED SCBA & FULL PROTECTIVE EQUIPMENT. Unusual Fire/Explosion Hazard:CONTACT WITH ALUMINUM OR ZINC IN A PRESSURIZED SYSTEM MAY GENERATE HYDROGEN GAS WHICH COULD CREATE AN EXPLOSION HAZARD.
======== Accidental Release Measures ==========
Sp ill Release Procedures:REFER TO OTHER SECTIONS OF THIS MSDS FOR INFO REGARDING PHYSICAL & HEALTH HAZARDS, RESP PROTECTION, VENT, AND PERSONAL PROTECTIVE EQUIPMENT. COVER WITH APBSORBENT MATERIAL. COLLECT SPILL MATERIAL. PLA CE IN A U.S. DOT - APPROVED CONTAINER. Neutralizing Agent:NONE SPECIFIED BY MANUFACTURER.
============ Handling and Storage ============
Handling and Storage Precautions:STORE AT TEMPS ABOVE 32 DEGREES F (0 DEGREES C). KEEP AWAY FROM ALU MINUM & ZINC. KEEP CONTAINER CLOSED WHEN NOT IN USE. KEEP OUT OF REACH OF CHILDREN. Other Precautions:FIRE AND EXPLOSION AVOIDANCE: KEEP CONTAINER TIGHTLY CLOSED.
====== Exposure Controls/Personal Protection ========
Respiratory Protection: AVOID BREATHING OF DUST CREATED BY CUTTING, SANDING OR GRINDING. SELECT ONE OF THE FOLLOWING NIOSH APPROVED RESPIRATORS BASED ON AIRBORNE CONCENTRATIONS OF CONTAMINANTS AND IN ACCORCANCE WITH OSHA REG ULATIONS: HALF-MASK DUS

T RESPIRATOR.

Ventilation:PROVIDE APPROP LOC EXHST FOR GRINDING, CUTTING/SANDING CURED MATL. USE IN WELL-VENTD AREA. PROVIDE SUFFICIENT (SUPDAT)

Protective Gloves:BUTYL/NATURAL/NEOPRENE/NITRILE RUBBER.

Eye Protection: ANSI APPROVED CHEM WORKERS GOGGS.

Other Protective Equipment:EYE WASH FOUNTAIN & DELUGE SHOWER WHICH MEET ANSI DESIGN CRITERIA .

Work Hygienic Practices: NONE SPECIFIED BY MANUFACTURER.

Supplemental Safety and Health

VENT: VENTILATION TO MAINTAIN EMISSIONS BELOW RECOMMENDED EXPOSURE

LIMITS. IF EXHAUST VENTILATION IS NOT ADEQUATE, USE NIOSH APPROVED APPROPRIATE RESPIRATORY PROTECTION.

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

Boiling Pt:B.P. Text:212F,100C Vapor Pres:25.0000 Vapor Density: