Product ID:GRAFOIL MSDS Date:10/20/1992 FSC:5330 NIIN:01-373-7885 MSDS Number: BVNJJ === Responsible Party === Company Name: UCAR CARBON CO INC Address:39 OLD RIDGEBURY RD City:DANBURY State:CT ZIP:06817-0001 Country:US Info Phone Num:800-822-4357 Emergency Phone Num:800-822-4357 CAGE:42451 === Contractor Identifi cation === Company Name: UCAR CARBON CO INC SUB OF UNION CARBIDE CORP Address:12900 SNOW RD Box:City:PARMA State:OH ZIP:44130-1012 Country:US Phone:216-676-2000 CAGE:42451 Company Name: UNION CARBIDE CORP Address:39 OLD RIDGEBURY ROAD Box:City:DANBURY State:CT ZIP:06817-0001 Country:US Phone:800-822-4357/732-563-5522 (MSDS) CAGE:61637

Ingred Name:GRAPHITE; (NATURAL GRAPHITE) CAS:7782-42-5 RTECS #:MD9659600 Fraction by Wt: 100% OSHA PEL:15 MPPCF ACGIH TLV:2 MG/M3 RDUST

Ingred Name:SUPP DATA:SEWERS, GROUNDWATER OR SOIL. RELEASES MAY BE REPORTABLE TO LOCAL, STATE OR FEDERAL AUTHORITIES. RTECS #:9999999ZZ

Ingred Name:OTHER PREC:UP ANY SPILLS THAT MAY OCCUR. ANY DUSTS GENERATED DURING HNDLG/PROCESSING SHOULD BE CLEANED UP BY WET (ING 4) DTECS #:000000077

RTECS #:9999999ZZ

Ingred Name:ING 3:MOPPING/VACUUMING W/UNIT WHICH CONTAINS HEPA FILTER. DRY SWEEPING CAN RESUSPEND PARTICULATE MATTER IN ATM. (ING 5) RTECS #:99999992Z

Ingred Name:ING 4:GRAPHITE DUSTS ARE ELEC CONDUCTIVE. ACCUMS OF DUST MAY CAUSE SHORTING OF ELEC CIRCUITS. CARE SHOULD BE (ING 6) RTECS #:9999999ZZ

Ingred Name:ING 5:TAKEN TO SEAL ELEC CIRCUITS & SWITCHES THAT MAY BE AFFECTED. DUSTS SHOULD NOT BE EMITTED TO ATM WHERE THEY (ING 7) RTECS #:9999999ZZ

Ingred Name:ING 6:MAY SETTLE ON & CAUSE SHORTING OF OUTSIDE ELECTRICAL EQUIPMENT. RTECS #:99999992Z

Ingred Name:RESP PROT:HYGIENIST/YOUR RESP PROT EQUIP SUPPLIER FOR SELECTION OF PROP ER EQUIP. EVAL OF NEED FOR RESP PROT (ING 9) RTECS #:99999992Z

Ingred Name:ING 8:SHOULD BE DETERMINED BY A PROFESSIONAL INDUSTRIAL HYGIENIST. RTECS #:9999999ZZ

Ingred Name:VENT:DESIGN DETAILS FOR LOC EXHST VENT SYS MAY BE FOUND IN LATEST EDITION OF "INDUS VENT:MANUAL OF REC PRACTS" (ING 11) RTECS #:9999999ZZ

Ingred Name:ING 10:PUBLISHED BY ACGIH COMMITTEE ON INDUS VENT, P.O. BOX 16153, LANSING, MI 48910. NEED FOR LOC EXHST VENT (ING 12) RTECS #:9999999ZZ

Ingred Name:ING 11:SHOULD

BE EVALUATED BY PROFESSIONAL INDUSTRIAL HYGIENIST. LOC EXHST VENT SYS SHOULD BE DESIGNED BY (ING 13) RTECS #:9999999ZZ

Ingred Name:ING 12:PROFESSIONAL ENGINEER. RTECS #:99999992Z

LD50 LC50 Mixture:NONE SPECIFIED BY MANUFACTURER.
Routes of Entry: Inhalation:YES Skin:NO Ingestion:NO
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO
Health Hazards Acute and Chronic:ACUTE:HIGH CONCENTRATIONS OF GRAPHITE DUSTS MAY B
E IRRITATING TO EYES, SKIN, MUCOUS MEMBRANES & RESPIRATORY TRACT. CHRONIC:INHALATION OF HIGH CONCENTRATIONS OF GRAPHITE DUSTS OVER PROLONGED PERIODS OF TIME MAY CAUSE GRAPHITE PNEUMOCONIOSIS. SYMPTOMS CAN INCLUDE COUGH, SHORTNESS OF BREATH & DECREASE IN (EFTS OF OVEREXP)
Explanation of Carcinogenicity:NOT RELEVANT
Effects of Overexposure:HLTH HAZ:PULMONARY FUNCTION.
Medical Cond Aggravated by Exposure:PREEXISTING PULMONARY DISORDERS SUCH AS EMPHYSEMA MAY POSSIBLY BE AGGRAVAT
ED BY PROLONGED EXPOSURE

TO HIGH CONCENTRATIONS OF GRAPHITE DUSTS.

First Aid:INHAL:REMOVE EXPOS PERS TO FRESH AIR. IF BRTHG IS DFCLT, OXYGEN MAY BE ADMIN. IF BRTHG HAS STOPPED, ARTF RESP SHOULD BE STARTED IMMED. SEEK MED ATTN. EYE:FLUSH W/WATER FOR AT LST 15 MINS. SEEK MED ATT N IF IRRIT DEVELOPS/PERSISTS. SKIN:WASHTHORO W/MILD SOAP & WATER. SEEK MED ATTN IF IRRIT DEVELOPS/PERSISTS. DERM SHOULD BE TREA

TED SYMPTOMATICALLY BY MD. INGEST:GIVE 2 GLASSES OF WATER & (SUPP DATA)

Extinguishing Media:BULK MATERIAL IS NON-COMBUSTIBLE. DUSTS ARE COMBUSTIBLE - USE WATER, CARBON DIOXIDE, DRY CHEMICAL OR FOAM. Fire Fighting Procedures:USE NIOSH/MSHA APPROVED SCBA & FULL PROTECTIVE EQUIPMENT . MATERIAL IN OR NEAR FIRES SHOULD BE COOLED W/WATER SPRAY OR FOG.

Unusual Fire/Explosion Hazard:NONE SPECIFIED BY MANUFACTURER.

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Spill Release Procedures:SPILLED/RELS MATL SHOULD BE PICKED UP W/SUITABLE IMPLEMENT & RETURNED TO ORIGINAL CNTNR IF REUSABLE. IF NOT REUSABLE, MATL SHOULD BE PLACED IN DOT APPRVD CNTNRS FOR DISP. PERS INVOLVED IN CLEANUP SHOU LD WEAR APPROP PERSONAL PROT EQUIP. UNAUTH(SUPDAT) Neutralizing Agent:NONE SPECIFIED BY MANUFACTURER.

Handling and Storag
e Precautions:ALL CHEMS SHOULD BE HNDLD SO AS TO
PVNT EYE CONT & EXESSIVE/RPTD SKIN CONT. APPROP EYE & SKIN PROT SHOULD BE EMPLOYED.
Other Precautions:INHAL OF DUSTS & VAPS SHOULD BE AVOIDED. STORE IN
LABELED, CLSD CNTNRS AWAY FROM HEAT, SPKS, OPEN FLAMES & OTHER

SOURCES OF IGNIT. DO NOT STORE WITH/NEAR INCOMPAT CHEMS. DO NOT LET CNTNRS OF MATL ACCU M IN WORKPLACE. PROMPTLY CLEAN (ING 3)

Respiratory Protect

ion: IF EXPOS EXCEED LIMS BY LESS THAN FACTOR OF 10,

USE MIN NIOSH/MSHA APPRVD 1/2 FACEPIECE RESP EQUIPPED W/CARTRIDGES FOR PARTICULATE MATTER W/EXPOS LIM OF NOT 5000F,>2760C. % VOLAT:NON-VOLAT. HAZ DECOMP PROD:HAS NOT BEEN CHARACT. THESE WOULD BE EXPECTED ONLY DURING EMER CNDTNS. FIRST AID

PROC:INDUCE VOMIT. NEVER GIVE ANYTHING BY MOUTH TO UNCON PERS. SEE K MED ATTN. SPILL PROC:PERS SHOULD BE KEPT CLEAR OF AREA OF SPILLS/RELS. DO NOT ALLOW MATL TO ENTER STORM/SANIT (ING 2

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Melt/Freeze Pt:M.P/F.P Text:SUPP DATA Spec Gravity:0.3-1.8 Solubility in Water:NEGLIGIBLE Appearance and Odor:BLACK, FLEXIBLE SHEET, SHAPES; NO ODOR. Percent Volatiles by Volume:SUPDAT

Stability Indicator/Materials to Avoid:YES AVOID CONTACT W/STRONG OXIDIZING AGENTS. Stability Condition to Avoid:NONE THAT ARE KNOWN. Hazardous Decomposition Products:THERM

AL DECOMP/COMBUST MAY PRDCE DENSE SMOKE, OXIDES OF CARBON & LOW MOLECULAR WT ORG CMPDS WHOSE COMPOSITION (SUPDAT)

Waste Disposal Methods:MATERIAL SHOULD BE DISPOSED OF I/A/W ALL APPLICABLE FEDERAL, STATE & LOCAL REGULATIONS. DISPOSAL IN AN EPA APPROVED LANDFILL IS RECOMMENDED.

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