Product ID:THIOKOL MC-275 ACCELERATOR MSDS Date:04/16/1993 FSC:8030 NIIN:00-560-8759 Kit Part:Y MSDS Number: CHKHD === Responsible Party === Company Name:MORTON Address:7341 ANACONDA AVE. **City:GARDEN GROVE** State:CA ZIP:92641 Info Phone Num:714-373-2837 Emergency Phone Num:800-424-9300 (CHEMTREC) CAGE:KO006 === Contractor Identification === **Company Name: MORTON** Address:7341 ANACONDA AVE. **City:GARDEN GROVE** State:CA ZIP:92641 Country:US Phone:714-373-2837 CAGE:KO006 Company Name: MORTON INTERNATIONAL AEROSPACE POLYMER SYSTEMS Address:7341 ANACONDA AVENUE Box:City:GARDEN GROVE State:CA ZIP:92641 Country:US Phone:714-373-2837 CAGE:0U317

Ingred Name:MANGANESE DIOXIDE CAS:1313-13-9 RTECS #:OP0350000 Fraction by Wt: 66.4% Other REC Limi ts:NONE RECOMMENDED ACGIH TLV:1 MG/M3/STEL 3MG/M3

Ingred Name:HYDROGENATED TERPHENYLS LD50 >10000 MG/KG ORAL RAT CAS:61788-32-7 RTECS #:WZ6535000 Fraction by Wt: 22.7% Other REC Limits:NONE RECOMMENDED OSHA PEL:0.5 PPM CEILING ACGIH TLV:0.5 PPM Ingred Name:TERPHENYL LD50 13200 MG/KG ORAL RAT CAS:26140-60-3 RTECS #:WZ6450000

RTECS #:WZ6450000 Fraction by Wt: 0.19% Other REC Limits:NONE RECOMMENDED OSHA PEL:0.5 PPM ACGIH TLV:0.5 PPM

Ingred Name:EXOLATED NONYL PHENYL PHOSPHATE LD50 36.30 MG/KG ORAL RAT CAS:51811-79-1 Fraction by Wt: 2.9% Other REC Limits:NONE RECOMMENDED

Ingred Name:1,3 DIPHENYL GUANIDINE LD50 507 MG/KG ORAL RAT LD50 290 MG/KG ORAL MOUSE CAS:102-06-7 Fraction by Wt: 4.8% Other REC Limits:NONE RECOMMENDED

Ingred Name:SODIUM HYDROXIDE (CERCLA) CAS:1310-73-2 RTECS #:WB4900000 Fraction by Wt: 0.7% Other REC Limits:NONE RECOMMENDED OSHA PEL:2 MG/M3 CEILING ACGIH TLV:2 MG/M3 CEILING EPA Rpt Qty:1000 LBS DOT Rpt Qty:1000 LBS

Routes of Entry: Inhalation:NO Skin:YES Ingestion:YES Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO Health Hazards Acute and Chronic: EYE: IRRIT, REDNESS, PAIN, BURNS, CORNEAL CLOUDING, BLINDNESS CORROSIVE. SKIN: IRRIT, REDNESS, PAIN, BLISTERS, BURNS. ABSORBED THROUGH SKIN, SENSITIZATION, CORROSIVE. INHAL: IRRIT TO MUCOUS MEMBRANE, COUGHING, BREATHING DIFFICULT, CORROSIVE. INGEST: GI IRRIT, NAUSEA, VOMITING & GI UPSET, ABDOMINAL PAIN, FEVER, LIVER * Effects of Overexposure:* KIDNEY DAMAGE, EYE, SKIN IMMUNE SYSTEM AND ALLERGIC REACTION. HEADACHE, NAUSEA, DIARRHEA, ANEMIA, BURNS TO MOUTH/THROAT PULMONARY EDEMA. Medical Cond Aggravated by Exposure:LIVER/KIDNEY, SKIN, IMMUNE, SYSTEM, CHEMICAL ALLERGIES. First Aid: EYES: FLUSH W/WATER FOR 15 MINUTES, LIFT LIDS. GET MED AID. SKIN: WASH W/SOAP & WATER. REMOVE CONTAM CLOTHES/SHOES, WASH BEFORE REUSE. INHAL: REMOVE TO FR ESH AIR, GET MED AID. ARTIF RESP/CPR IF BREATH ING DIFFICULT. INGEST: INDUCE VOMITING W/SYRUP OF IPECAC, DRINK 2 GLASSES WATER OR STICK FINGER DOWN THROAT. DONT GIVE ANYTHING BY MOUTH TO UNCONSCIOUS PERSON. GET MED AID. Flash Point Method:SCC Flash Point:>200F,>93C Lower Limits:NA Upper Limits:NA Extinguishing Media: SM FIRES: DRY CHEMICAL, CARBON DIOXIDE, HALON, WATER SPRAY OR FOAM. LG FIRE: WATER SPRAY, FOG O R ALCOHOL FOAM. Fire Fighting Procedures: NIOSH APPROVED POSITIVE PRESSURE SCBA & FULL PROTECTIVE CLOTHING. **Unusual Fire/Explosion Hazard:NONE** Spill Release Procedures: SHOVEL/VACUUM SPILLED PRODUCT. PLACE IN CLOSED CONTAINER. DO NOT FLUSH TO STREAMS/SEWERS/ANY BODIES OF WATER. Handling and Storage Precautions: STORE IN COOL, DRY WELL VENTED AREA.

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MPTY CONTAINERS MAY CONTAIN PRODUCT RESIDUE DO NOT REUSE CONTAINER. Other Precautions: IF AIRBORNE CONCENTRATIONS EXCEED EXPOSURE LIMITS. EVAC & VENTILATE AREA. USE AIR SUPPLIED RESPIRATOR/SCBA IN INADEQUATELY VENTED AREAS. Respiratory Protection: USE NIOSH/MSHA APPROVED EQUIPMENT. USE SCBA/SUPPLIED AIR RESPIRATOR. COMPLY W/29CFR1910.134. Ventilation: LOCAL EXHAUST RECOMMENDED TO MAINTAIN AIRBORNE CONCENTRATIO NS BELOW LIMITS. GENERAL DILUTION ACCEPTABLE. Protective Gloves: IMPERVIOUS Eve Protection: CHEMICAL SPLASH GOGGLES Other Protective Equipment: EYEWASH FACILITY, PROTECTIVE CLOTHING. Work Hygienic Practices: WASH THOROUGHLY AFTER HANDLING AND BEFORE EATING/SMOKING/DRINKING/USING RESTROOM FACILITIES. Supplemental Safety and Health NK Boiling Pt:B.P. Text:NA Vapor Pres:0.1 @ 25C Vapor Density:>1.0 Spec Gravity:2.1 WATER = 1 pH: NA Evaporation Rate & amp; Reference:>1.0 Solubility in Water:NA Appearance and Odor:BLACK PASTE, PHENYL ODOR. Percent Volatiles by Volume:NA Corrosion Rate:NA Stability Indicator/Materials to Avoid:YES OXIDIZING AGENTS, NICKEL, COBALT, IRON OR COPPER. Hazardous Decomposition Products: AMINES, SMOKE, SOOT AND TOXIC FUMES,

OXIDES OF CARBON & METAL OXIDES.

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aste Disposal Methods: IF DISCARDED IN UNUSED FORM, DISPOSE OF AT LICENSED FACILITY ACCORDING TO FEDERAL, STATE AND LOCAL REGULATIONS. CONTACT EPA IF NEEDED.

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