Product ID:THIOKOL MC-236 ACCELERATOR MSDS Date:12/16/1996 FSC:8030 NIIN:00-685-0915 Kit Part:Y MSDS Number: CHKHM === 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) Preparer's Name: DAVID WIENCKOWSKI 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 Fr action by Wt: 60-70% Other REC Limits:NONE RECOMMENDED OSHA PEL:1 MG/M3 ACGIH TLV:5 MG/M3

Ingred Name:HYDROGENATED TERPHENYLS CAS:61788-32-7 RTECS #:WZ6535000 Fraction by Wt: 20-30% Other REC Limits:NONE RECOMMENDED OSHA PEL:0.5 PPM ACGIH TLV:0.5 PPM-CEILING

Ingred Name:1,3 DIPHENYL GUANIDINE CAS:102-06-7 Fraction by Wt: 1-5% Other REC Limits:NONE RECOMMENDED

Ingred Name:TERPHENYL CAS:26140-60-3 RTECS #:WZ6450000 Fraction by Wt: 1-5% Other REC Limits:NONE RECOMMENDED OSHA PEL:0.5 PPM-CEILING ACGIH TLV:0.53 PPM-CEILING

Ingred Name:POLYOXYETHYLENE NONYL PHENYL PHOSPHATE CAS:51811-79-1 Fraction by Wt: 1-5% Other REC Limits:NONE RECOMMENDED

Ingred Name:SODIUM HYDROXIDE (CERCLA) CAS:1310-73-2 RTECS #:WB4900000 Fraction by Wt: 1-5% Other REC Limits:NONE RECOMMENDED OSHA PEL:2 MG/M3 ACGIH TLV:2 MG/M3 EPA Rpt Qty:1000 LBS DOT Rpt Qty:1000 LBS

LD50 LC50 Mixture:* Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO Health Hazards Acute and Chronic:EYE: SLIGHT TO MODERATE IRRITATION, BURNS. SKIN: SLIGHT TO MILD IRRITATION, ALLERGIC REACTION, SENSITIZATION, BURNS. INHAL: IRRITATION, DIZZY, HEADACHE, INCOORDINATION, RESPIRATORY TRACT IRRIT. INGEST : IRRIT, NAUSEA, VOMIT, ABDOMINAL PAIN,DIARRHEA. LIVER DAMAGE. Medical Cond Aggravated by Exposure:LIVER, KIDNEY, LUNGS AND RESPIRATORY SYSTEM, SKIN, IMMUNE SYSTEM & CHEMICAL ALLERGIES.

First Aid:EYE: FLUSH W/WATER 15 MINUTES, GET MED AID. SKIN: WASH W/SOAP & WATER. REMOVE CONTAM CLOTHES/SHOES, WASH BEFORE REUSE. GET MED AID. INHAL: REMOVE TO FRESH AIR. IF NOT BREATHING, GIVE CPR/ARTIF RESP. G ET MED AID. INGEST: INDUCE VOMIT. NEVERGIVE ANYTHING BY MOUTH TO UNCONSCIOUS PERSON. GET MED AID.

Flash Point Method:SCC Flash Point:>200F ,>93C Extinguishing Media:SM FIRES: DRY CHEMICAL, CARBON DIOXIDE, HALON, WATER SPRAY, FOAM. LG FIRES: WATER SPRAY, FOG, ALCOHOL FOAM. Fire Fighting Procedures:NIOSH APPROVED POSITIVE PRESSURE SCBA AND FULL PROTECTIVE CLOTHING.

Unusual Fire/Explosion Hazard: IRRITATING & HIGHLY TOXIC GASES MAY BE GENERATED.

Spill Release Procedures:COVER SPILL W/ABSORBENT. PLACE IN CLOSED CONTAINERS. ISOLATE AREA, EVACUATE. ELIMI NATE IGNITITION SOURCES. STOP LEAK. DIKE/CONTAIN MATERIAL. DONT CONTAM SOIL/SEWERS/BODIES OF

WATER. RQ FOR SODIUM HYDR OXIDE 1000 LBS.

Handling and Storage Precautions:STORE IN COOL, DRY WELL VENTED AREA AWAY FROM HEAT/IGNITION SOURCES/DIRECT SUNLIGHT. KEEP CONTAINERS TIGHTLY CLOSED.

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

Respiratory Protection: AVOID BREATHING VAPORS/MISTS. WEAR N

IOSH/MSHA APPROVED RESPIRATOR, SCBA OR SUPPLIED AIR RESPIRATOR IN COMPLIANCE W/29CFR 1910.134. Ventilation:LOCAL EXHAUST Protective Gloves: IMPERVIOUS Eye Protection: CHEMICAL SPLASH GOGGLES Other Protective Equipment: EYEWASH FACILITY Work Hygienic Practices: WASH THOROUGHLY AFTER HANDLING, BEFORE EATING/DRINKING/SMOKING/RESTROOM. WASH EQUIPMENT. Supplemental Safety and Health * TERPHENYL HYDROGENATED LD50 17500 MG/KG ORAL RAT 12500 MG/KG ORAL MOUSE 2000 MG/KG DERMAL RABBIT. DIPHENY L GUANIDINE LD50 507 MG/KG ORAL RAT 280 MG/KG ORAL MOUSE TERPHENYL 13200 MG/KG ORAL RAT. LD50 ETHXOLATED NONYLPHENYL PHOSPHATE LD50 3630MG/KG ORAL RAT SODIUM HYDROXIDE LD50 1000 MG/KG DERMAL RABBIT.

Boiling Pt:B.P. Text:NA Decomp Temp:Decomp Text:NA Vapor Pres:0.1 Vapor Density:>1.0 Spec Gravity:2.1 pH:NA Evaporation Rate & amp; Reference: