Product ID:THIOKOL MC-236 ACCELERATOR MSDS Date:07/09/1992 FSC:8030 NIIN:00-841-6832 Kit Part:Y MSDS Number: BZLHS === Responsible Party === **Company Name: MORTON INTL** Address:7341 ANACONDA AVE **City:GARDEN GROVE** State:CA ZIP:92641 Country:US Info Phone Num:714-373-2837 Emergency Phone Num:800-424-9300 Ρ reparer's Name: DAVID B. WIENCKOWSKI CAGE:0U317 === Contractor Identification === 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 Company Name: MORTON INTERNATIONAL, INC. Address:100 NORTH RIVERSIDE PLAZA Box:City:CHICAGO State:IL ZIP:60606-1598 Country:US Phone:312-807-2000;714-730-4200 CAGE:03UL8

Ingred N

ame:MANGANESE DIOXIDE CAS:1313-13-9 RTECS #:OP0350000 Fraction by Wt: 60-70% Other REC Limits:NONE SPECIFIED

Ingred Name:HYDROGENATED TERPHENYL CAS:61788-32-7 Fraction by Wt: 10-30% Other REC Limits:NONE SPECIFIED

Ingred Name:TERPHENYL CAS:26140-60-3 RTECS #:WZ6450000 Fraction by Wt: 1-5% Other REC Limits:NONE SPECIFIED OSHA PEL:C 1.0 PPM ACGIH TLV:C 0.53 PPM; 9394

Ingred Name:ETHOXYLATED NONYLPHEOL PHOSPHATE CAS:51811-79-1 Fraction by Wt: 1-5% Other REC Limits:NONE SPECIFIED

Ingred Name:1,3 -DIPHENYL GUANADINE CAS:102-06-7 RTECS #:MF0875000 Fraction by Wt: 1-5% Other REC Limits:NONE SPECIFIED

Ingred Name:SODIUM HYDROXIDE CAS:1310-73-2 RTECS #:WB4900000 Fraction by Wt: 1-5% Other REC Limits:NONE SPECIFIED OSHA PEL:2 MG/M3 ACGIH TLV:C 2 MG/M3; 9293 EPA Rpt Qty:1000 LBS DOT Rpt Qty:1000 LBS

LD50 LC50 Mixture:ORAL LD50 (RAT) IS >10,000 MG/KG Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO Health Hazards Acute and Chronic:DEPENDING ON THE ROUTE, FREQUENCY, & DURATION OF EXPOSURE TOXICITY MAY EFFECT IN THE FOLLOWING ORGANS AND OR SYSTEMS: LIVER, KIDNEY, EYE, SKIN, IMMUNE SYSTEM (E.G. ALLERGIC REACTIONS). Explanation of Carcinogenicity:NOT CARCINOGENIC.

Effects of Overexposure:EYE: CAN CAUSE MILD TO MODERATE IRRITATION. SKIN: IRRITATION CAN OCCUR FOLLOWING REPEATED/PROLONGED CONTACT & HYPERSENSITVITY (I.E. ALLERGIC) REACTIONS IN SUSCEPTIBLE INDIVIDUALS. INHALATION: CAN CAUS E DIZ

ZINESS, HEADACHES, &

INCO-ORDINATION. INGESTION: CAN CAUSE GASTROINTESTINAL IRRITATION & UPSET, & VOMITING.

Medical Cond Aggravated by Exposure:SOME OF THE COMPONENTS IN THIS PRODUCT MAY AGGRAVATE EXISTING MEDICAL CONDITIONS. INDIVIDUALS W/MEDICAL CONDITIONS INVOLVING THE FOLLOWING: LIVER, KIDNEY, SKIN, IMMUE SYSTEM &/OR SPECIFIC CHEM ALLERGY

First Aid:EYE: FLUSH EYES WITH WATER FOR AT LEAST 15 MINUTES. IF

IRRITATION DEVELOPS, CONSULT A PHYSICIAN. SKIN: WASH AFFECTED AREA WITH SOAP & WATER. IF IRRITATION DEVELOPS, CONSULT A PHYSICIAN. INHALATION: RE MOVE TO FRESH AIR. IF SYMPTOMS DEVELOP, SEEK MED AID IMMED. RESTORE BREATHING. INGESTION: GET MED AID. UNLESS ADVISED OTHERWISE, INDUCE VOMITING. DO NOT GIVE ANYTHING BY MOUTH IF DROWSY OR UNCONSCIOUS

Flash Point Method:SCC Flash Point:>200F,>93C Extinguishin g Media:SM FIRES: USE DRY CHEMICAL, CARBON DIOXIDE (CO2), HALON, WATER SPRAY, FOAM. LRG FIRES USE WATER SPRAY, FOG, ALOCOHL FOAM Fire Fighting Procedures:FIRE FIGHTERS & OTHERS WHO MAY BE EXPOSED TO THE PRODUCTS OF COMBUSTION SHOULD BE EQUIPPED WITH POSITIVE PRESSURE SCBA & FULL PROTECTIVE CLOTHING.

Unusual Fire/Explosion Hazard:NONE KNOWN

Spill Release Procedures: SHOVEL OR VACUUM SPILLED PRODUCT & PLACE IN

CLOSED CONTAINERS FOR FUTHER HANDLING & DISPOSAL. DO NOT FLUSH TO SEWER, STREAM, OR OTHER BODIES OF WATER.

Handling and Storage Precautions: IF THE AIRBORNE CONCENTRATION EXCEEDS ESTABLISHED EXPOSURE LIMITS (TLV OR PEL), OR IF HIGH AIRBORNE CONCENTRATIONS CAN OCCUR, EVACAUATE & VENT AREA. Other Precautions: A SUPPLIED AIR RESPIRATOR OR SELF-CONTAINED BREATHING APPARATUS (SCBA) SHOULD BE USED FOR ENTRY INTO ENCLO SED SPACES, OR IN AREAS WITH INADEQUATE VENTILATION. Respiratory Protection: WHEN LIMITS ARE EXCEEDED USE NIOSH/MSHA APPROVED EQUIPMENT. DETERMINE THE APPROPRIATE TYPE EQUIPMENT FOR SPECIFIC APPLICATION BY CONSULTING THE RESPIRATOR MANUFACTURER OBSERVE THE RESPIRATOR USE LIMIT ATIONS SPECIFIED BY NIOSH/MSHA OR MANUF. Ventilation: MAINTAIN AIRBORNE CONCENTRATIONS BELOW LIMITS. GENERAL (DILUTION) VENTILATION AC CEPTABLE LOCAL EXHAUST IS RECOMMENDED. Protective Gloves: IMPERVIOUS GLOVES Eye Protection: CHEMICAL SPLASH GOGGLES Other Protective Equipment: AN EYE WASH FACILITY SHOULD BE READILY AVAILABLE. IMPERVIOUS CLOTHING TO PREVENT SKIN CONTACT. Work Hygienic Practices: WASH THOROUGHLY AFTER HANDLING, BEFORE EATING, SMOKING, DRINKING OR USING RESTROOM FACILITIES. Supplemental Safety and Health **REMOVE & WASH CONTAMINATED CLOTHING BEFORE REUSE.** ================== Physical/Chemical Properties ====== _____ HCC:N1 Vapor Pres:0.1 Spec Gravity:2.1 (WATER=1) Viscosity:100-500 POISE Evaporation Rate & amp; Reference: < 1 (N-BUTYL ACETATE = 1) Solubility in Water:SLIGHTLY SOLUBLE Appearance and Odor:BLACK PASTE; PHENYL ODOR

Stability Indicator/Materials to Avoid:YES
OXIDIZING AGENTS, CHEMICALLY ACTIVE METALS (E.G. NICKEL, COBALT, IRON, COPPER).
Stability Condition to Avoid:NONE SPECIFIED BY MANUFACTURER.
Hazardous Dec

omposition Products:HEATED HIGH TEMP,EMIT FOLLOWING: AMINES, OXIDES OF NITROGEN,SMOKE,SOOT,TOXIC FUMES,CARBON MONOXIDE/DIOXIDE,METAL OXIDES.

Waste Disposal Methods: IF DISCARDED IN ITS ORIGINAL UNUSED FORM, THIS PRODUCT SHOULD BE MANAGED AT AN AUTHORIZED FACILITY IN COMPLIANCE WITH LOCAL, STATE & FEDERAL REGULATIONS. CONTACT APPROPRIATE GOV'T EPA IF FURTHER DISPO SAL GUIDANCE IS REQUIRED.

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