MATERIAL SAFETY DATA SHEET &

EMERGENCY RESPONSE INFORMATION

Revised: 4/27/04

Manufacturer: AeroTech Division RCS Rocket Motor Components, Inc.
Address: 2113 W. 850 N. St.
           Cedar City, UT  84720
Emergency Response Telephone Number: (800) 535-5053 (Domestic), (352) 323-3500 (Int'l)

SECTION I - PRODUCT IDENTIFICATION

Product Name: Rocket Motor Reload Kits
Synonyms: RMS™ & RMS/Hybrid™ Reload Kits, Easy Access™ Reload Kits, “KBA” Reload Kits
Basic Description: Flammable solids, organic, n.o.s., 4.1, UN1325, PG II (per DOT-E-7887)
Technical Name: Rocket motor reloading kits

SECTION II - HAZARDOUS INGREDIENTS

Solid propellant reload kits contain propellant and delay charge module(s) which consist primarily of ammonium perchlorate (NH4ClO4) dispersed in synthetic rubber. Solid propellant reload kit ejection charges contain small quantities of black powder. Hybrid reload kits contain one or more solid propellant modules as described above, a small pellet of black powder and an "electric match" igniter. All reload kits also contain a variety of inert components of various shapes and sizes.

SECTION III - PHYSICAL DATA

Boiling Point Range: Decomposes
Specific Gravity: Propellant ranges from .058 to .076 lb/cubic inch
Appearance: Plastic bags containing various colored parts
Odor: Slight to none
Physical State: Solid
SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Autoignition Temp.: 550 Deg. F
Flammability Class: Flammable
Extinguishing Media: Water only
Unusual Fire Hazard: Burning propellant gives off hydrogen chloride gas.
Unusual Explosion Hazard: None Anticipated

SECTION V - HEALTH HAZARD DATA

Effects of Overexposure

Acute: None Known.
Chronic: None Known.

Overexposure -

Eyes: Ammonium perchlorate is a mild irritant to the skin, eyes, mucous membranes and the digestive tract.
Skin: Ammonium perchlorate is a mild irritant to the skin, eyes, mucous membranes and the digestive tract.
Inhalation: No information available.
Ingestion: Ammonium perchlorate is a mild irritant to the skin, eyes, mucous membranes and the digestive tract.

SECTION VI - EMERGENCY FIRST AID PROCEDURES

Ingestion: If swallowed, induce vomiting. Call a physician.
Inhalation: Avoid breathing exhaust fumes.
Skin Contact: For mild exhaust burns use a first aid burn ointment. For severe burns see a physician immediately. If loose ammonium perchlorate contacts skin, flush with plenty of water.
Eye Contact: Immediately flush eyes with plenty of water for at least 15 minutes. Call a physician.
Note to Physician: Chemical of exposure is ammonium perchlorate, a mild gastric irritant.
SECTION VII - REACTIVITY DATA

Conditions to Avoid: Heat (propellant autoignites at 550 Deg. F).
Incompatibility: Acids

SECTION VIII - SPILL OR LEAK PROCEDURES

Spills: Replace reload kits in boxes and seal securely.
Waste Disposal Method: Load reload kit into motor hardware. Pack motor firmly in hole in ground with nozzle pointing up. Ignite motor electrically and wait 5 minutes before approaching. Dispose of spent reload components in inert trash.

SECTION IX - SPECIAL PROTECTION INFORMATION

Ventilation Requirements: None. Do not use reload kits indoors.
Specific Personal Protective Equipment
Respiratory: None. Avoid breathing exhaust fumes.
Other Handling and Storage Requirements: Store reload kits away from sources of heat and highly flammable materials.