



**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: High-Power Rocket Motor Reload Kits

Synonyms: RMS-HP Reload Kits, Restricted Access™ Reload Kits, "KBA" Reload Kits

Basic Description: Articles, explosive, n.o.s., 1.4C, UN0351, PG II (per DOT-E 10996)

Technical Name: None

SECTION II - HAZARDOUS INGREDIENTS

Reload kits contain propellant and delay charge modules which consist primarily of ammonium perchlorate (NH₄ClO₄) dispersed in synthetic rubber.

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: None

Physical State: Solid

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Autoignition Temp.:	550 Deg. F
Flammability Class:	Flammable
Extinguishing Media:	Water only
Special Fire Proc.:	Fire action: Water. Protect against toxic fumes.
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.

SECTION VI - EMERGENCY FIRST AID PROCEDURES (Cont'd)

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

Haz. Decomp. Products: Oxides of carbon, hydrogen chloride gas

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.