



**MATERIAL SAFETY DATA SHEET &
EMERGENCY RESPONSE INFORMATION**

Revised: 5/25/04

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: Model rocket motor using White Lightning, Blue Thunder, Black Jack/Black Max or other propellant authorized by EX1982050051, and Redline model rocket motors (EX2001040079)

Synonyms: Hobby Rocket Motor, Toy Propellant Device

**Basic Description:
(Domestic)** Model rocket motor, 1.4S, NA0323, PG II
(30 grams or less propellant per motor)

SECTION II - HAZARDOUS INGREDIENTS

Model rocket motors contain propellant and delay charge modules which consist primarily of ammonium perchlorate (NH₄ClO₄) dispersed in synthetic rubber. Model rocket motor ejection charges, if included, contain small quantities of black powder.

SECTION III - PHYSICAL DATA

Boiling Point Range: Decomposes

Specific Gravity: Propellant ranges from .058 to .076 lb/cubic inch

Appearance: Black plastic cylinders

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.:	Model rocket motors may present a propulsive hazard. Protect against toxic fumes.
Unusual Fire Hazard:	Model rocket motors may become propulsive in a fire. 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.

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 model rocket motors in boxes and seal securely.
- Waste Disposal Method:** Pack motor firmly in hole in ground with nozzle pointing up. Ignite motor electrically and wait 5 minutes before approaching. Dispose of spent motor in inert trash.

SECTION IX - SPECIAL PROTECTION INFORMATION

- Ventilation Requirements:** None. Do not use model rocket motors indoors.

Specific Personal Protective Equipment

- Respiratory:** None. Avoid breathing exhaust fumes.

Other Handling and Storage Requirements:

Store model rocket motors away from sources of heat and highly flammable materials.