



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

Revised: 3/1/05

Manufacturer: Industrial Solid Propulsion Division
RCS Rocket Motor Components, Inc.

Address: 2113 W. 850 N. St.
Cedar City, UT 84720

**Emergency Response
Telephone Number:** (800) 535-5053

SECTION I - PRODUCT IDENTIFICATION

Product Name: Rocket Motor

Synonyms: RDS Motors, Fin Motors, Sounding Rocket Motors

Basic Description: Rocket Motors, 1.3C, UN0186, PG II

SECTION II - HAZARDOUS INGREDIENTS

Rocket motors contain a propellant composition which consists 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: Black plastic or metallic cylinders

Odor: None

Physical State: Solid

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Autoignition Temp.: 550 Deg. F

Flammability Class: Flammable

SECTION IV - FIRE AND EXPLOSION HAZARD DATA (Cont'd)

Extinguishing Media: Water only

Special Fire Proc.: **Rocket motors present a propulsive hazard.** Protect against toxic fumes.

Unusual Fire Hazard: **Rocket motors will likely 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.
- 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 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 rocket motors indoors.

Specific Personal Protective Equipment

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

Other Handling and Storage Requirements:

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