

Material Safety Data Sheet

May be used to comply with OSHA's Hazard Communication Standard, 1910.1200. Standard must be consulted for specific requirements.

U.S. Department of Labor

Occupational Safety and Health 29 CFR Administration (Non-Mandatory Form)

IDENTITY (As Used on Label and List) Proximate Mine Series – Mini Mine, Crackle Mine, HP Mine, Crossette Mine – All Sizes, All Colors	Note: Blank spaces are not permitted. If any item is not applicable or not information is available, the space must be marked to indicate that.
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SECTION I

Manufacturer's Name RES Specialty Pyrotechnics, Inc.	Emergency Telephone Number 800-255-3924
Address (Number, Street, City, State and ZIP Code) 21595 286th Street Belle Plaine, MN 56011	Telephone Number for Information 952-873-3113
	Date Prepared March 2, 2009
	Signature of Preparer (optional)

SECTION II - Hazardous Ingredients/Identity Information

Hazardous Components (Specific Chemical Identity: Common Name(s)):	OSHA PEL	ACGIH TLV	Other Limits Recommended	%(Optional)
POTASSIUM PERCHLORATE CAS#7778-74-7	N/A	N/A		
POTASSIUM NITRATE CAS#7757-79-1 (Salt Peter)	N/A	N/A		
BARIUM CARBONATE CAS#513-77-9	0.74mg/m3	N/A		
BARIUM NITRATE CAS#10022-31-8	0.5 mg/m3	0.5mg/m3		
BARIUM SULFATE CAS#7727-43-7	15mg/m3	10mg/m3		
STRONTIUM CARBONATE CAS#1633-05-2	10mg/m3 (Nuisance dust)			
STRONTIUM NITRATE CAS#10042-76-9	N/A	N/A		
COPPER OXIDE CAS#1317-38-0	N/A	1mg/m3		
ALUMINUM CAS#7429-90-5	15mg/m3	15mg/m3		
ALUMINUM/MAGNESIUM ALLOY	N/A	N/A	Oral dog LD50: 230mg/kg	
MAGNESIUM CAS#7439-95-4	N/A	N/A		
CHLORINATED BUTADIENE CAS#9006-03-5 (Parlon)	N/A	N/A		
VINYLDENE CHLORIDE CAS#9011-06-7 (Saran Resin)	5ppm (as HCl)	5ppm (as HCl)		
SODIUM OXYLATE CAS#62-76-0	N/A	10mg/kg		
SULFUR CAS#7704-34-9	none	10mg/m3		
CHARCOAL CAS#64365-11-3	N/A	N/A	Nuisance dust	
ACCAROIDES RESIN CAS#9000-20-8 (Red Gum)	N/A	5mg/m3 (Respirable fraction)		
DEXTRIN CAS#9004-53-9 (Starch)	15mg/m3	10mg/m3 (Total dust)		
MAGNESIUM CAS#7439-95-4	N/A	N/A		
MAGNESIUM CARBONATE CAS#7760-50-1	N/A	N/A		
BISMUTH OXIDE CAS#1304-76-3	N/A	N/A		
NITROCELLULOSE CAS#9004-70-0	10mg/m3	N/A	Nuisance dust	
TITANIUM CAS# 7440-32-6				

Contains a pyrotechnic composition, a solid mixture of fuel and oxidizer, which burns rapidly if ignited. These items are classified as 1.4G Explosives by the U.S. Department of Transportation. No chemical composition is exposed during normal storage and handling.

SECTION III - Physical/Chemical Characteristics

Boiling Point N/A	Specific Gravity (H ₂ O = 1) N/A
Vapor Pressure (mm Hg.) N/A	Melting Point Ignites
Vapor Density (AIR = 1) N/A	Evaporation Rate (Butyl Acetate = 1) N/A
Solubility in Water Oxidizer component may dissolve after extended exposure to water	
Appearance and Odor Small pellets and granules contained in paper tube, no odor	

SECTION IV - Fire and Explosion Hazard Data

Flash Point (Method Used) N/A	Flammable Limits N/A	LEL N/A	UEL N/A
Extinguishing Media Water			
Special Fire Fighting Procedures Do not use suffocation methods, pyrotechnic composition supplies its own oxygen. Clear area and allow to burn out, then treat as normal fire.			
Unusual Fire and Explosion Hazards Devices may burn explosively and rupture storage containers.			

SECTION V - Reactivity Data

Stability	Unstable		Conditions to Avoid: Heat, sparks, open flames, static electricity
	Stable	X	
Incompatibility (Materials to Avoid) Acids, Water			
Hazardous Decomposition or Byproducts Oxides of Strontium, Barium, Metal alloys, Nitrogen and Hydrogen Chloride.			
Hazardous Polymerization	May Occur		Conditions to Avoid NONE
	Will Not Occur	X	

SECTION VI - Health Hazard Data

Route(s) of Entry	Inhalation? NO	Skin? NO	Ingestion? NO
Health Hazards (Acute and Chronic) Exposure to finished items does not pose any health hazard			
Carcinogenicity	NTP? NO	IARC Monographs? NO	OSHA Regulated? NO
Signs and Symptoms of Exposure Eye, skin and respiratory irritation possible.			
Medical Conditions Generally Aggravated By Exposure Pre-existing respiratory conditions such as asthma, allergies or sensitivity to ingredients.			
Emergency and First Aid Procedures Eyes: Flush with water. Respiratory: Remove patient to fresh air and contact physician if condition persists.			

SECTION VII - Precautions for Safe Handling and Use

Steps to be Taken in Case Material is Released or Spilled		No smoking or open flames. Sweep spilled materials into cardboard container.
Waste Disposal Method	Dispose in compliance with state, federal and local regulations.	
Precautions to be Taken in Handling and Storing Keep materials cool and dry. Keep away from heat and other sources of possible ignition.		
Other Precautions NONE		

SECTION VIII - Control Measures

Respiratory Protection (Specify Type) NONE		
Ventilation	Local Exhaust Acceptable	Special NONE
	Mechanical (General)	Other
Protective gloves	None required	Eye Protection Safety glasses recommended
Other Protective Clothing or Equipment Cotton clothing		
Work/Hygienic Practice No smoking, eating or drinking when handling		