

MATERIAL SAFETY DATA SHEET



Refer to Section 16 for List of Acronyms and Abbreviations

SECTION 1: IDENTIFICATION		
1.1 Product Name:	ROCKET PARACHUTE FLARE	MSC.48(66)MSC.81(70)
1.2 Product Code:	JHR-4	
1.3 Description:	The Rocket Parachute flare is pyrotechnic device which produces a bright red flame for outdoor signalling in emergency or distress situations.	
1.4 Manufacturers Name:	<i>Manufacturer:</i> Jiangsu Huahai Marine Signals Manufacturing Co., Ltd. No.158, Ruijiang North Road, Haimen District, Nantong City, Jiangsu Province. China.	
1.5 Address:	TEL: +86 (513) 82212760 FAX: +86(513) 82207771 Email: huahai@cn-huahai.com tonybocelle@hotmail.com Web site: www.cn-huahai.cn	
1.6 Tel No&Email		
SECTION 2: INFORMATION ON HAZARDOUS INGREDIENTS		
This device contains intimate mixtures of the ingredients listed below. These mixtures cannot be converted back to individual ingredients and are sealed inside the product.		
INGREDIENT	CAS NO.	MASS PER PRODUCT
Magnesium	7439-95-4	31g
Strontium Nitrate	10042-76-9	17g
Potassium Perchlorate	7778-74-7	26g
Phenol-formaldehyde Resin	9003-35-4	14g
Poly Vinyl Chloride	9002-86-2	10g
Pyrotechnic Composition	N/A	2g
		Total:100g
SECTION 3: HAZARD IDENTIFICATION		
3.1 General Hazards: (When fired, a rocket projectile is forcefully ejected from this product.)		
<ul style="list-style-type: none"> • Do not point (and fire) product at people or property. • Keep out of reach of children. • Do not fire in confined spaces. Product is designed for outdoor use only. • In its unfired form, the product presents no hazard. Keep fire away . 		
3.2 Health Hazards:		
<ul style="list-style-type: none"> • If product is damaged, the contents may be harmful to skin, eyes and respiratory tract. • Smoke produced on ignition may cause irritation to eyes and throat. • Where this product is used for training purposes and therefore potential exposure increased, every effort must be made to ensure that personnel are upwind of the smoke. • Risk of receiving burns during normal usage is highly unlikely. 		
3.3 Environmental Hazards:		
<ul style="list-style-type: none"> • Noise and smoke are produced on ignition of this product. Products of combustion include salts of potassium and strontium, oxides of magnesium and small traces of carbon dioxide and carbon monoxide.		
SECTION 4: FIRST AID MEASURES		
In the unlikely event of receiving burns from this product, seek medical attention at once. Exposure to smoke may cause irritation to eyes and throat. Move patient to fresh air. Other measures to be taken as follows:		
4.1 Eye Contact:	Flush with water for a lot once. If symptoms persist seek medical advice.	
4.2 Skin Contact:	Remove contaminated clothing. Wash exposed areas with soap and water. Do not use solvents or thinners of any kind.	
4.3 Ingestion:	Make patient drink water. Do not induce vomiting. Seek medical attention at once.	
SECTION 5: FIRE FIGHTING MEASURES		
Flammable Properties: N/A	Flash Point LTL (°C): N/A	Auto Ignition Temperature: N/A
Flammability Limits: N/A		
5.1 Extinguishing Agent:	Use copious amounts of water to control the burn.	
5.2 Special Fire Fighting Procedures:	Once product has ignited the store will burn until all composition has been exhausted. Projectile Hazard will be present during and after fire.	
5.3 Fire Fighting Equipment:	For fires in enclosed areas fire fighters must use self-contained breathing apparatus (SCBA).	

SECTION 6: ACCIDENTAL RELEASE MEASURES			
6.1 Safeguards:	Keep product away from all sources of ignition.		
6.2 Spillage:	Collect all damaged and undamaged products and replace in original packaging for disposal. Carefully swept up and disposed of according to local authority regulations. The area should then be washed down with copious quantities of water.		
6.3 Other Precautions:	Contact appropriate emergency services.		
SECTION 7: HANDLING AND STORAGE			
7.1 Handling:	<ul style="list-style-type: none"> Avoid removing the end caps that protect the product during general transport and handling. Do not attempt to dismantle this product. 		
7.2 Storage:	<ul style="list-style-type: none"> Store packaging in a well ventilated area away from sources of heat or direct sunlight. Temperature of storage to be between -5°C and 40°C. 		
SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION			
8.1 During Function	The product is to be held at arms length (with both hands) above eye level pointing vertically upwards. Noise and smoke will be produced at launch. Do not point at people. Keep out of reach of children.		
8.2 Personal Protective Equipment:	No specific controls necessary.		
8.3 Exposure Guidelines:	No exposure guidelines are available for this product.		
SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES			
9.1 Appearance:	The product consists of a sealed plastic casing which contains the rocket projectile. The end caps of the casing are only removed prior to firing to expose the firing mechanism lever. The rocket projectile contains a solid fuel propelling motor and a consolidated flare composition. The projectile is ejected through the foil seal barrier on the casing.		
9.2 Stability in Water:	Product is waterproof.	9.3 Reaction with water:	None
9.4 Odour:	None	9.5 Boiling Point:	N/A
9.6 State:	Solid	9.7 Vapour Pressure:	N/A
9.8 Vapour Density:	N/A	9.9 Evaporation Rate:	N/A
9.10 Melting Point:	120 °C	9.11 Solubility in water:	N/A
9.12 Specific Gravity:	N/A	9.13 pH:	N/A
9.14 Colour:	Various		
SECTION 10: STABILITY AND REACTIVITY			
10.1 Stability:	This product is stable under normal conditions.		
10.2 Incompatibility:	Solvents, hydrocarbons, petroleum based products.		
10.3 Hazardous Decomposition:	N/A		
10.4 Conditions To Avoid:	Avoid extreme heat, keep away from sources of ignition.		
10.5 Hazardous Polymerisation:	N/A		
SECTION 11: TOXICOLOGICAL INFORMATION			
Under normal operating circumstances, there are no known acute toxic hazards resulting from single exposure to the products of combustion from this Para Red Rocket Mk3. However abuse or misuse of the product could result in situations where exposure to the combustion products could reach harmful levels in susceptible individuals. The following information relates to the individual constituents of the rocket composition and is more relevant to prolonged contact with these materials.			
INGREDIENT	OSHA / PEL	EH40/2002	LD50
Magnesium Metal	Not established.	None specified	None specified
Strontium Nitrate	Not established.	None specified	2750 mg/m ³ (oral rat)
Poly Vinyl Chloride	Nuisance dust 15mg/m ³ 8hr TWA.	1ppm (vinyl chloride)	None specified)
Potassium Perchlorate	Not established.	None specified.	27,675 mg/kg (oral rat)
Phenolic Resin	None specified.	None specified.	None specified
Gunpowder	Nuisance dust 15mg/m ³ 8hr TWA.	None specified.	None specified.
SECTION 12: ECOLOGICAL INFORMATION			
There is no information available at the present time relating to ecological effects for this product.			
SECTION 13: DISPOSAL CONSIDERATIONS			

13.1 Fired Products:	Subject to local authority arrangements.
13.2 Time Expired Products:	Return to our corporation or distributor or local police, fire or coastguard forces as permitted by local regulations for disposal or recycling.
13.3 Damaged Products:	Repack in original packaging and treat as time expired product.

SECTION 14: TRANSPORT INFORMATION

14.1 UN Hazard Code: 1.4G	14.2 UN Number: 0505	14.3 UN Proper Shipping Name: SIGNALS, DISTRESS
14.4 UN Packaging ID No:	4G/Y20/S/XX, CN/C230900 PI:XXX	
14.5 Transportation:	Transportation must be carried out in accordance with all statutory regulations for the carriage of dangerous goods.	

SECTION 15: REGULATORY INFORMATION

15.1 Classification:	Explosive. UN Class 1.
15.2 Hazard Symbol:	Orange Diamond - Explosive, on outer packaging.
15.3 Risk Phrases	N/A.
15.4 Safety Phrases	N/A.

SECTION 16: OTHER INFORMATION

This product is designed to be hand held and for use in emergency signalling situations. Its main application is short range distress signalling particularly at night time. When user instructions are followed, this product presents minimal risk to the user and those in the general vicinity of the product. This product is for outdoor use only. When used for demonstration purposes always stand upwind of product.

List of Acronyms and Abbreviations used within this MSDS.

CAS	Chemical Abstract Service
LTL	Lower Temperature Limit
MSDS	Material Safety Data Sheet
N/A	Not Applicable
PEL	Permissible Exposure Limit
SCBA	Self-Contained Breathing Apparatus
SFG	Sulphur Free Gunpowder
UN	United Nations
TID	Total Inhalable Dust
RD	Respirable Dust

The above information is given based on the present state of our knowledge of this product and is, to the best of our knowledge and belief, accurate at the time of publication. No warranty given, either express or implied, with respect to the accuracy, reliability or completeness of the information contained herein and we will assume no liability resulting from its use. The user must satisfy themselves that the information provided is entirely suitable for their particular use.