

MATERIAL SAFETY DATA SHEET 1(5)

Issued by	Department	Telephone	Date	Edition number	Document number
Per Alenfelt	T/M	+46-581-871 00	2003-03-28	1	340100 MSDS Ikaros Rocket Red -1.doc
Product denomination					
IKAROS HAND-HELD PARACHUTE ROCKET RED					

1 Identification of the substance and of the company/undertaking

Product name	Ikaros Hand-Held Parachute Rocket Red
Article No.	340100, Datrex Item No. CI3401P
Chemical name	Contains 50 g of propellant composition, 7,5 g of black powder and 95 g of red illuminating composition.
Document number	340100 MSDS Ikaros Rocket Red -1.doc
Company/Manufacturer	Nammo LIAB AB
Company address	Box 154, 711 23 Lindesberg, Sweden
Telephone number	+46-581 87100
Telefax number	+46-581 87200
Emergency telephone number	+46-19 323425
Contact person	Marketing Department
Dangerous Goods, documentation	

2 Composition/Information on ingredients

Identification on product	Substances	CAS-number	%	Risk phrases
Black powder:	Potassium nitrate	7757-79-1	75	R9
	Charcoal	-	15	-
	Sulphur	7704-34-9	10	-
Propellant composition:	Potassium Perchlorate, KClO ₄	7778-74-7	73	R9, 22
	Phenolic resin	-	27	-
Red illuminating comp.:	Strontium nitrate	10042-76-9	45-55	<i>O,Xn</i> ; R8-22-38
	Magnesium	7439-95-4	25-35	<i>F</i> ; R15-17
	Chlorinated rubber	-	10-20	-
	Linseed oil	-	1-5	-

3 Hazard Identification

Type of hazard	Dangerous properties
Physical/Chemical	Pyrotechnic device.
Inhalation	Smoke from propellant and flare can be irritating.
Skin contact	Contact with exhaust flame or burning flare can cause severe burns.
Eye contact	Contact with smoke and/or ashes can be irritating
Fire and explosion hazards	If exposed to flame the product will eventually ignite.
Environmental hazards	NA

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4 First-aid measures

After inhalation	Move patient to fresh air. If needed visit physician.
After skin contact	If burned, wash with plenty of water for at least 20 min. Contact a physician.
After eye contact	Keep eyelid apart. Wash with a lot of water. If needed visit physician.
After ingestion	Contact a physician immediately, drink two glasses of milk.

5 Fire-fighting measures

Suitable extinguishing media	Use any fire extinguishing media at early stages of fire. Once the product has ignited it can not be extinguished.
Extinguishing media not to be used	No restriction
Special exposure hazard arising	The flying rocket is a lethal projectile. The flare burns very hot, ~2000 °C
Special protective equipment	An ignited rocket will penetrate ordinary helmets.

6 Accidental release measures

Personal precautions	Normal industrial hygiene, use protective gloves.
Environmental precautions	NA
Methods for cleaning up	Water, destruction shall be carried out by experts.

7 Handling and storage

Handling	NA
Storage	Temperature should not exceed +75 °C

8 Personal protection/Exposure controls

Engineering measures	No fire, sparks or welding close to the items. If cleaning up, use tools which can not cause sparks.
Personal protective equipment	Use protective gloves and eye-preserving glasses
Respiratory protection	Use breath protective in case of dust
Hand protection	Use protective gloves
Eye protection	Use protective glasses
Skin protection	NA
Specific hygiene measures	Normal industrial hygiene
Further information	NA

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9 Physical and chemical properties

Appearance	The product consists of a plastic tube containing a parachute flare rocket.
Colour	Red plastic tube and lids, orange label. Rocket is black.
Odour	NA
Decomposition point (C)	NA
Melting point/range (C)	NA
Flash point (C)	NA
Autoignition temperature (C)	> 250 C
Explosion properties	Self propelled rocket with red illuminating flare.
Boil point/range (C)	NA
Relative density (kg/m³)	NA
Solubility in water	NA
Solubility in other solvents	NA
Other data	NA

10 Stability and reactivity

Conditions to avoid	High temperatures, over +100 C.
Materials to avoid	NA
Hazardous decomposition products	NA
Other information	NA

11 Toxicological information

LD₅₀ oral rat	NA
Hazardous ingredients	NA
Immediate health effects	NA
Delayed health effects	NA
Acute toxicity	NA
Chronic toxicity (long-term)	NA
Carcinogenicity	NA
Mutagenicity	NA
Reproductive toxicity	NA
Inhalation	NA
Skin	NA
Eye	NA

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Ingestion NA.

12 Ecological information

Microtox (mg/l, LC₅₀)/(mg/l, EC₅₀) NA
Mobility NA
Persistence degradability NA
Bioaccumulative potential NA
Aquatic toxicity and other data NA
Marine pollutant (IMDG Code) NA

13 Disposal considerations

Disposal of waste materials Waste should be kept in separate container, destruction by experts
 Used product may be disposed as ordinary plastic/metallic waste.
DO NOT TRY TO DISMANTLE THE PRODUCT!

Contaminated packing May burn rapidly

14 Transport information

Hazard label	In Cardboard Box	In Steel Drum
ADR/RID	1.3G	1.4G
IMDG (DGD)	1.3G	1.4G
Shippers Declaration (DGR)	1.3G	1.4G
Proper shipping name	Signals, distress	Articles, Pyrotechnic, for technical purposes
ADR/ADR-S, RID/RID-S		
UN number	0195	0431
Packing group		
IMO-IMDG code		
EMS number		
ICAO-TI, IATA-DGR		
Packing group		
EINECS number	NA	NA
CAS number	NA	NA
EX-number (DOT/USA)	EX-9904087	EX-9904094

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15 Regulatory information

Health hazard product	Yes
Environmentally hazardous product	NA
EC directive (67/548/EEC)	NA
Symbols	E, Explosive
Risk phrases	R2; Risk of explosion by shock, friction, fire or other sources of ignition R22; Harmful if swallowed
Safety phrases	S15; Keep away from heat. S16; Keep away from sources of ignition -No smoking. S17; Keep away from combustible material S35; This material and its container must be disposed of in a safe way. S43; In case of fire, use water S45; In case of accident or if you feel unwell, seek medical advise immediately. S46; If swallowed, seek medical advice immediately and show this container or label

16 Other information

The current Safety Data Sheet was defined by Nammo LIAB AB on the basis of knowledge of the product at the date of the issue.

Therefore, data provided in this form can not be considered as exhaustive.

It is the duty of the operator

to develop under his own responsibility, the safety dispositions regarding the operation of the product taking into account the data from this form

to pass to all users and operators the appropriate safety data and warning regarding the risks mentioned in the documentation relative to the utilisation of the product

to be cautious of possible risks faced when the product is used for other utilisation than those for which it has been designed