SAFETY DATA SHEET SMOKE MATCHES



1. IDENTIFICATION OF THE SUBSTANCE PREPARATION AND THE COMPANY:

PRODUCT NAME:	Smoke Matches
APPLICATIONS:	Matches for the marking of air flows, or ignition of fuses.
PRODUCT CODE:	PH009, PH00925, PH00950, PH00975, R009
SUPPLIER:	Arctic Products Ltd, Nina Works, Gelderd Road, Leeds, LS12 6NA
	Tel: 0844 871 8461 Fax: 0844 871 8462

2. COMPOSITION/INFORMATION ON INGREDIENTS

HAZARDOUS INGREDIENT(S) Potassium Chlorate Potassium Nitrate	CAS No 003811-04-9	%(w/w) 20	Symbol O,Xn	R Phases R9 R20/22
Manganese Dioxide Smoking Agent	001313-13-9	30	Xn Xn	R20/22 R10/R22

3. HAZARDS IDENTIFICATION

FLAMMABLE SOLID

Ignites readily, burns without flaming, giving dense white smoke. The combustion of large quantities of the product gives rise to significant quantities of smoke with flames. Harmful if swallowed.

4. FIRST AID MEASURES

SKIN

Wash skin with water, followed by soap and water. If irritation arises seek medical attention.

INHALATION

In severe cases, remove patient from combustion exposure. If recovery is not rapid or complete seek medical attention.

INGESTION

If swallowed, rinse mouth and drink immediately two or more glasses of water or milk. Seek medical attention and show this Data sheet, if possible.

5. FIRE FIGHTING MEASURES

Ignites readily.

Oxidising agent will assist combustion. Keep fire exposed containers cool by spraying with water.

EXTINGUISHING MEDIA

Use large volumes of water as a spray or fog, avoid use of water jet. Contain run off water with for example temporary earth barriers.

FIRE FIGHTING PROTECTIVE EQUIPS

A self contained breathing apparatus and full protective clothing must be worn in fire conditions

6. ACCIDENTAL RELEASE MEASURES

No naked lights. No smoking.

Ensure suitable personal protection during removal of spillages. This means wearing eye protection, chemically resistant gloves, boots and coveralls. Transfer to a container for disposal. Wash the spillage area with water. Due to the potassium chlorate content, washings must be prevented from entering surface water or drains. When spillages or uncontrolled discharges into watercourses occur, the National Rivers Authority must be alerted.

7. HANDLING AND STORAGE

STORAGE PRECAUTIONS

Keep away from food, drink and animal feeding stuffs, keep out of reach of children, and keep in original container, tightly closed in a safe place, keep away from heat and sources of ignition.

Store in a dry place

Storage life: Physically and chemically stable for at least 2 years when stored in the original unopened sales container at ambient temperatures.

HANDLING PRECAUTIONS

Read the instructions before use.

Do not breathe smoke. Avoid contact with skin. Wash hands before meals and after use. When using do not eat, drink or smoke.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

When using this product refer to the instructions for details.

Should it be necessary to enter a heavily smoke laden area, protective respiratory equipment and eye protection must be used (see HSE Guidance Book (HS) G 53:"Respiratory Protective Equipment- a practical guide for users")

Occupational Exposure Limits

	LTEL	8hr TWA		
STEL HAZARDOUS INGREDIENT(S) Smoking agent	ppm -	mg/m3 10	ppm -	mg3 20

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE:	A match comprises of the main burning composition dipped onto the mate
	splint, and then tipped with a red striker tip to facilitate ignition.
ODOUR:	Odourless.
PH:	Not applicable.
BOILING POINT:	Not applicable.
MELTING POINT:	Not applicable.
FLASH POINT:	Does not flash.
AUTOFLAMMABILITY:	>100°C.
EXPLOSIVE PROPERTIES:	Not applicable.
OXIDISING PROPERTIES:	Oxidising agent will assist combustion.
VAPOUR PRESSURE:	Not available.
RELATIVE DENSITY:	Not available.
SOLUBILTY (Water):	Soluble.
PARTITION COEFFICIENT:	Not applicable.
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10. STABILITY AND REACTIVITY

STABILITY

Stable under normal conditions.

HAZARDOUS REACTIONS

Ignites readily.

HAZARDOUS DECOMPOSITION PRODUCTS

Combustion or thermal decomposition may involve irritant vapours.

11. TOXICOLOGICAL INFORMATION

INHALATION

Smoke irritation to respiratory tract.

SKIN

Possible risk of skin irritation.

EYES

Composition and combustion product may cause eye irritation.

INGESTION

Harmful if swallowed.

Lowest LD50 of chemical constituents of composition 283mg/kg (Oral Rat).

12. ECOLOGICAL INFORMATION

TOXICITY

This ecological assessment is calculated from data available on the components of the formulation. Harmful to aquatic organisms. Un-burned composition is non-selectively toxic to plants.

Not readily biodegradable.

13. DISPOSAL CONSIDERATIONS

Applies to unburned product.

Do not contaminate ponds, waterways or ditches with chemical. Dispose of product according to the requirements of the "Environmental Protection Act 1990". Empty containers should not be used for other purposes.

Disposal should be in accordance with local, state or national legislation.

14. TRANSPORT INFORMATION

UN No: UN PACK No:	1944 111
AIR: ICAO/IATA CLASS. -primary:	4.1 Flammable solid
SEA: IMDG CLASS. -primary: MARINE POLLUTANT: PROPER SHIPPING NAME:	4.1 Flammable solid N/A Matches, Safety
ROAD/RAIL ADR/RID CLASS:	4.1

15. REGULATORY INFORMATION

Users should ensure that they comply with any relevant local, state or national legislation.

EU CLASSIFICATION: Not subject to the CHIP regulations

However Arctic Products Ltd does give the following safety advice

SAFETY PHRASES:	 S-2 Keep out of reach of children. S-13 Keep away from food, drink and animal feeding stuffs. S-16 Keep away from sources of ignition- No smoking. S-28 After contact with skin, wash immediately with plenty of water. 	
UK REGULATORY: INFORMATION	Health & Safety at Work act 1974, The Control of Substances Hazardous to Health Regulations 1994, may apply to this product.	

16. OTHER INFORMATION

This data sheet was prepared in accordance with Directive 91/155/EEC

DISCLAIMER

The information on this sheet is not a specification. It does not guarantee specific properties. The information is intended to provide general guidance to health and safety based upon our knowledge of the handling, storage and use of the product. It is not applicable to unusual or non-standard uses of the product nor where instructions and recommendations are not followed.