

### 1. Identification of the Substance/Preparation & Company/Undertaking

### 1. Identification of the substance or preparation:

Name: K1 Haze Fluid

Synonyms: K1 Haze Fluid

### 2. Use of the substance/preparation:

Fluid for use in the creation of smoke effects using a dedicated smoke machine.

### 3. Company/undertaking identification:

Martin Manufacturing (UK) Plc. Tel: +44 (0) 1507 604399 Belvoir Way, Fax: +44 (0) 1507 601956

Fairfield Industrial Estate.

Louth,

Lincolnshire, LN11 0LQ

UK

### 2. Composition/Information on Ingredients

Contains:

Food grade glycols

Polyglycols CAS Registry Number: 57-55-6

De-mineralised water.

Contains no substances in Part 1 of the Approved Supply List, or with a maximum exposure limit (MEL) specified in Schedule 1 of COSHH.

Contains monopropylene glycol, for which an occupational exposure standard has been set

#### 3. Hazardous Information:

No significant hazard to man or environment under normal conditions of handling and use.

Ingestion: low toxicity.

Eye/skin: low toxicity

Inhalation: low concentration of hazardous substances in vapour. Undiluted vapour should not be inhaled. (**Note:** The concentration of smoke components in the final product is below the OES under normal operating conditions)

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4.	First Aid Measures			
Exposure Route		Symptom	Treatment	
	Inhalation	Mild irritation of nose & throat	Remove from exposure, rest and keep warm. In severe cases, or if recovery is not rapid or complete, seek medical attention	
	Skin Contact	Mild irritation	Drench the skin with plenty of water. Remove contaminated clothing and wash before re-use. If large areas of the skin are damaged or if irritation persists seek medical attention	
	Eye Contact	Mild irritation	Irrigate thoroughly with water for at least 10 minutes.  Obtain medical attention	
	Ingestion	Mild irritation of gastro-intestinal tract	Wash out mouth with water. Do not induce vomiting. If patient is conscious, give water to drink. If patient feels unwell seek medical attention.	
5.	Fire Fighting Measures			
	Suitable Extinguishers		Alcohol-resistant or all-purpose-type foam. Use carbon dioxide or dry powder for small fires only	
	Unsuitable Extinguishers		Do not direct a solid stream of water or foam into hot burning pools; as this may cause frothing and increase the intensity of a fire	
	Hazardous Combustion Products		Oxides of carbon including aldehydes	
	Special Equiporal Fighting	ment for fire	Self contained breathing apparatus	
6.	Accidental Release Measures			
	Safety Precautions		Wear appropriate PPE when handling - see section 8	
	Environmental Precautions		Prevent entry into drains and water courses	
	Clean up Procedure		Bund or absorb material with sand, earth or other suitable absorbent material. If possible, transfer to a salvage tank, otherwise absorb residues and place in suitable labelled containers and hold for waste disposal - see section 13	
7.	Handling and	Handling and Storage		
	Safe Handling		Avoid prolonged skin contact. Avoid contact with eyes. Ensure good general ventilation of area. Avoid creating spray. Do not breathe undiluted vapour	
	Storage		Store in original closed containers	
			Store at ambient temperature	
			Store away from materials listed in section 10	
	Specific Use(s)		Only for use in designated smoke machine for the production of smoke as a special effect	

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8. **Exposure Controls and Personal Protection** 

> Does not exceed 10mg/m³ for particulate suspension and **Exposure Limit Values**

> > 474mg/m³ for total vapour plus particulates.

**Exposure Controls:** 

Respiratory Type approved RPE for organic vapours and mists, if

required

Hand PVC coated or rubber gloves

Eye Goggles or face shield Skin Overalls and boots

Hygiene Measures Always wash thoroughly after handling chemicals

9. **Physical and Chemical Properties** 

> Colourless Liquid Appearance:

Odour: Mild

pН Neutral

101.6 - 201.6 °C Boiling Point/Range:

< -20  $^{\circ}$ C Melting Point/Range:

> 78 °C (test flame extinguished at 78 °C) Flash Point:

2.9 - 18.1 v/v (estimated) Flammability Limits:

2.67 kPa at 20°C Vapour Pressure:

1.050 at 20 °C/20 °C Relative density: Completely miscible

Solubility in water:

10. **Stability and Reactivity** 

> Stability Stable in normal conditions

Possibility of explosive decomposition if combined with Known hazardous reactions

strong acids or bases at elevated temperatures

Conditions to avoid Elevated temperatures

Materials to avoid Strong acids and bases; strong oxidisers

Hazardous decomposition products Oxides of carbon, including aldehydes

11. **Toxicological Information** 

> OES for monopropylene glycol set at 150 ppm (total vapour and particulates) for 8-hour TWA, and 10 mg/m<sup>3</sup> (particulates) for 15-minute STEL.

LD<sub>50</sub> for monopropylene glycol:

21000 - 33700 mg/kg oral - rat, >10000 mg/kg skin - rabbit.

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May cause slight irritation to skin, eyes and mucous membranes. Large doses may produce adverse effects on liver, kidneys and central nervous system.

No evidence in developmental toxicity studies for either embryotoxic or teratogenic effects.

12. Ecological Information

Mobility Liquid with low volatility, soluble in water, predicted to have high mobility in

soil

Low

Persistence and The preparation is largely biodegradable:

Degradability  $BOD_5 = 1.08 \text{ gO}_2/\text{g}$ ;  $ThOD = 1.68 \text{ gO}_2/\text{g}$ ;  $COD = 1.63 \text{ gO}_2/\text{g}$ 

 $BOD_{20}/ThOD = 86\%$ 

Bio accumulative

Potential

Short and longterm effects  $LC_{50}$ , fathead minnow = 4600 - 54900 mg/l $EC_{50}$ , Daphnia magna = 4850 - 34400 mg/l

Other

13. Disposal Considerations

Substance Via an authorised waste disposal contractor to an approved

waste disposal site, observing all local and national regulations

Container As for substance. Used containers must not be cut up or

punctured until completely purged of product residues

14. Transport Information

No special precautions for transport

15. Regulatory Information

Supply label details In accordance with CHIP 2, Regulation 9.

Label Name K1 Haze

Symbol

Risk phrases No risk or safety phrases stipulated

Safety phrases

E.E.C. Number

Use of this material may be governed by the following regulations:

COSHH, HSWA, MHSW

Users are advised to consult these regulations for further information. The information contained in this data sheet does not constitute an assessment of workplace risk as required by other health and safety legislation.

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#### 16. Other Information

No special training is required for handling this preparation other than normal precautions for safe handling of chemicals

This material is usually used for the production of synthetic smoke in an appropriate Martin smoke- machine. The concentration of smoke components is below the OES under normal operating conditions.

It must not be used for any other purpose, or in any other equipment

Further details may be available on request from the supplier, whose address and telephone number are given in section 1.

### This datasheet updated to meet Commission Directive 2001/58/EC

#### **Sources of information:**

Suppliers' Safety Data Sheets for substances used as raw materials in the preparation.

EH 40/97

NFPA 325M

#### **Legal Disclaimer:**

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If you have purchased the product for supply to a third party, it is your duty to take all necessary steps to ensure that any person handling and using the product is provided with the information in this sheet. If you are an employer it is your duty to tell your employees and others who may be affected by any hazard described in this sheet and of any precautions that should be taken. We disclaim liability for any injury, damage, direct or indirect loss, consequential or economic loss or any other loss occasioned by you by any non-compliance with this instruction

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