Pea Soup Limited Tel: +44 (0)1642 769952 Fax +44 (0)20 7100 7526 Email: support@smokemachines.net

Dragon Smoke Fluid Type B (Quick Dispersing)

Health & Safety Data – MSDS – Reviewed May 2023

1. Identification of the substance/preparation and company/undertaking

Name:	Pea Soup Dragon Smoke Fluid B (Quick Dispersing)
Synonyms:	A mixture of Propylene glycol * propane – 1,2-diol and deionised water
Supplier:	Pea Soup Limited, Unit 3 Thornwood Ave, Ingleby TS17 0RS UK
Emergency Telephone:	+44 (0)1642 769952
E Mail:	support@smokemachines.net

2. Hazards Identification

Not a hazardous substance or mixture according to Regulation (EC) No 1272/2008
This substance is not classified as dangerous according to Directive 67/548/EEC
Low toxicity under normal conditions of handling and use
Label Elements: This product does not need to be labelled in accordance with EC Directives or respective national laws

3. Composition/information on ingredients

Chemical	Mono Propylene Glycol ≥50% / Deionised water ≤ 50%
CAS	57-55-6 / 7732-18-15

4. First Aid measures

Exposure Route	Symptom	Treatment
Inhalation	Irritation of Breathing Passages	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 a large area of the skin is 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 gastrointestinal tract.	Wash out mouth with water. Do not induce vomiting. Give water to drink. If patient feels unwell, seek medical attention.

Immediate treatment/Antidote: Symptomatic treatment.

5. Fire Fighting Measures

Suitable Extinguishers – water spray, alcohol resistant foam, dry chemical, CO_2
Hazardous Combustion Products – Oxides of carbon
Special Equipment for Fire Fighting – Self contained breathing apparatus

6. Accidental Release Measures

Safety Precautions – Wear appropriate PPE – see section 7
Environmental Precautions – Prevent entry into drains and water courses.
Clean up Procedure – Bind 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.

7. Handling & Storage

Handling

Ventilation:	General Ventilation
Recommended procedures & equipment:	Avoid prolonged skin contact. Avoid contact with eyes. Avoid inhalation of high concentrations of mists.

Storage

Temperature Range:	Ambient
Humidity range:	Dry.
Keep away from:	See section 10
Suitable storage media:	Mild steel, aluminium, stainless steel

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8. Exposure Controls/Personal Protection

Exposure Limits:	10 mg.m³, particulates; 150ppm (470mg/m³), Total, ShTWA Type:OES
Monitoring Method:	As propane-1,2-diolProtective Measures
Respiratory:	Type approved RPE for organic vapours and mists if reqd.
Hand:	Gloves
Eye:	Goggles
Skin:	Impervious Overalls and boots
Hygiene Measures:	Always wash thoroughly after handling chemicals.

The smoke produced by Pea Soup smoke generators has been rigorously tested to ensure that in normal conditions it is non toxic. Independent health and safety reports indicate that dense smoke concentrations can be entered without any serious health risk for short periods of time. Copies available on request. We do nevertheless recommend the following;

- persons who are asthmatic or suffer from a respiratory complaint are not subjected to dense smoke concentrations
- the use of suitable PPE in the event of extended exposure or repeated exposure to such environments (Pea Soup recommend the 3m 6000 facemask with 2 x 2135 p3 particulate filters, or similar)
- if used in conjunction with live fires, where, by definition there is the potential for products of combustion to be formed, along with other hazards (unburnt propane etc), self contained breathing apparatus (SCBA) should always be worn.

9. Physical & Chemical Properties

Appearance	Colourless liquid
Boiling Point/range	188°C
Melting Point/range	< - 57°C, tends to supercool.
Flash Point	103ºC (closed cup)
Explosive Limits	2.6 – 12.5 %v/v
Autoignition temperature	371ºC
Vapour Pressure	30Pa @ 25ºC
Relative density	1.04 @ 20/20°C
Solubility in water	Miscible
Solubility in solvent	Miscible with chloroform and acetone
Partition coefficient	-2.6

10. Stability & Reactivity

Stability: Stable in normal conditions, material is hygroscopic.
Material to avoid: Strong oxidisers
Hazardous decomposition products: Oxides of carbon, including propionaldehyde.

11. Toxicological Information

Effects: Extremely low oral toxicity, large doses may produce effects on liver, kidneys and central nervous system. Unlikely to be hazardous by inhalation because of the low vapour pressure, however large concentration of mist may irritate the respiratory tract. Prolonged or repeated skin contact may cause irritation. Causes slight eye irritation but permanent damage is unlikely.
LD_{50} Oral – rat 20,000 mg/kg
LD_{50} Dermal – rabbit 20,800 mg/kg

12. Ecological Information

Environmental Effects
Mobility: Liquid with low volatility, soluble in water. Predicted to have high mobility in soil.
Toxicity to fish: Mortality NOEC Pimephales promelas 52390mg/l – 96h
Toxicity to daphnia / aquatic invertebrates: Mortality NOED Daphnia 13.020mg/l – 48h
EC50 Daphnia magna >10000mg/l -48h
Degradability: BOD_5 = 1.08 gO_2/g; ThOD = 1.68 gO_2/g; COD = 1.63 gO_2/g; BOD_{20}/ThOD = 86% The substance is substantially biodegradable.
Bioaccumulative potential: Low

13. Disposal Considerations

Substance: Via an authorised waste disposal contractor to an approved waste disposal site, observing all local and national regulations.
Container: As substance. Used containers must not be cut up or punctured until completely purged of product residues.

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14. Transport Information

This product is not regulated as hazardous in bulk form.

15. Regulatory Information

Supply label details:

Label name:	Smoke Fluid B / Mono Propylene Glycol
Symbol:	No risk or safety phrases stipulated
Risk phrases	No risk or safety phrases stipulated
Safety phrases	No risk or safety phrases stipulated

Users are advised to consult these regulations for further information. The information contained in this data sheet does not constitute an assessment of workplace risks

16. Other Information

Further details may be available upon request from Pea Soup.

Legal Disclaimer The above information is based on the present state of our knowledge of the product at the time of publication. It is given in good faith, no warranty is implied with respect to the quality or the specification of the product. The user must satisfy themselves that the product is entirely suitable for their purpose.

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