

Appendix E – Health and Safety Data

Smoke Simulant Fluid – Colt 4 / Spirit A/ E Series

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

Name: Colt 4 / Comet 4 aerosol liquid contents Smoke Fluid A

Supplied by: Concept Engineering Limited
7 Woodlands Business Park
Woodlands Park Avenue
Maidenhead, Berkshire SL6 3UA

Telephone: 01628 825555 Facsimile: 01628 826261

Emergency Number: As above

2. Composition/information on ingredients

Chemical - Glycerine

Exposure - 10 mg/m³

CAS - 56-81-5

EINECS - 200-289-5

3. Hazards Identification

Not generally regarded as hazardous in normal conditions of handling and use.

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 if swallowed in large doses	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 mist, alcohol resistant foam, dry powder, CO₂.

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 8

Environmental Precautions – Prevent entry of large spillages 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. Wash spill site with plenty of water after material has been taken up.

7. Handling & Storage

Handling Ventilation: General Ventilation
 Storage Temperature Range: Ambient
 Humidity range: Dry.
 Keep away from: See section 10
 Suitable storage media: Store in original containers

8. Exposure Controls/personal protection

Exposure Limits: 10 mg.m³, 8h TWA Type: OES
 Monitoring Method: As mist

Protective Measures

Respiratory: Type approved RPE for organic vapours and mists if required.
 Hand: Gloves
 Eye: Goggles
 Skin: Overalls and boots

Hygiene Measures - Always wash thoroughly after handling chemicals.

9. Physical & Chemical Properties

Appearance	Colourless liquid
PH	Neutral
Boiling Point/range	Ca. 290°C
Melting Point/range	Ca. 18°C, solidifies at a much lower temperature.
Flash Point	177°C
Autoignition temperature	400°C
Vapour Pressure	<0.01 mbar @ 20°C; <1 mbar @ 100°C
Relative density	1262 Kg/m ³ @ 20°C
Solubility in water	Miscible
Solubility in solvent	Miscible with ethanol, slightly soluble in acetone, insoluble in ether and in chloroform.
Partition coefficient	-2.6
Viscosity	Ca. 1300 mPa.s @ 20°C

10. Stability & Reactivity

Stability: Stable in normal conditions

Known Hazardous reactions: Violent or explosive reactions with some oxidising agents

Conditions to avoid: Moisture, extremes of temperature

Materials to avoid: Strong oxidising agents

Hazardous decomposition products: Thermal decomposition may release acrolein.

11. Toxicological Information

Effects: Low oral toxicity. Slightly irritating to rabbit skin and eyes; unlikely to cause irritation in humans.

12. Ecological Information

Environmental Effects

Mobility: Soluble in Water

Degradability: Biodegradable. BOD₅ / COD : 0.87 / 1.16 gO₂/g

Aquatic Toxicity: LC₅₀, fish > 5000 mg/1; IC₅₀, algae > 2900 mg/1; EC₅₀, bacteria > 10000mg/1

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

14. Transport Information

This product is not regulated as hazardous in bulk form.

When packaged in aerosol format the goods are classified as hazardous because of the nature of the pressurised container. The propellant within the canister is inert nitrogen

Aerosols are classified as UN1950, Hazard Class 2.2 Air (Aerosols-20), 2.1 Aerosols by sea)

15. Regulatory Information

Supply label details: Ref. CHIP 2

Label name: Glycerine

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 Concept Engineering.

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 himself that the product is entirely suitable for this purpose.