



SAFETY DATA SHEET

according to 1907/2006/EC, Article 31

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CO2 SIM

Revision 1

Revision date 24/06/2025

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name CO2 SIM

1.2. Relevant identified uses of the substance or mixture and uses advised against

Description Special effects fluid.

1.3. Details of the supplier of the safety data sheet

| | |
|---------------------------------------|--|
| Company | Distrubuted by: BACK STAGE TECHNOLOGIES EUROPE LTD |
| Address | 6 Redman Road, Porte Marsh Industrial Estate, Calne, Wiltshire, SN11 9RA, UK. |
| Web | www.fxfluid.com |
| Telephone | +44 (0) 1249 818601 |
| Fax | +44 (0) 1249 819444 |
| Email | info@fxfluid.com |
| Email address of the competent person | info@fxfluid.com |

1.4. Emergency telephone number

Emergency telephone number +44 (0) 1249 818601
9.00am - 5.00pm Mon - Fri

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Main hazards No Significant Hazard

2.3. Other hazards

Other hazards No information is available that indicates that the ingredients meet the criteria for classification as PBT or vPVB in accordance with Annex XIII of Regulation 1907/2006 (REACH).

SECTION 3: Composition/information on ingredients

3.2. Mixtures

67/548/EEC / 1999/45/EC

| Chemical Name | Index No. | CAS No. | EC No. | REACH Registration Number | Conc. (%w/w) | Classification |
|---|-----------|---------|-----------|---------------------------|--------------|----------------|
| Mono propylene glycol (Propane-1,2-diol total vapour and particulates) | | 57-55-6 | 200-338-0 | | 10-40% | |

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3.2. Mixtures

EC 1272/2008

| Chemical Name | Index No. | CAS No. | EC No. | REACH Registration Number | Conc. (%w/w) | Classification |
|---|-----------|---------|-----------|---------------------------|--------------|----------------|
| Mono propylene glycol (Propane-1,2-diol total vapour and particulates) | | 57-55-6 | 200-338-0 | | 10-40% | |

SECTION 4: First aid measures

4.1. Description of first aid measures

| | |
|--------------------------|---|
| Inhalation of liquid | Move the exposed person to fresh air. |
| Eye contact with liquid | Rinse immediately with plenty of water for 15 minutes holding the eyelids open. |
| Skin contact with liquid | Wash off immediately with plenty of soap and water. Remove contaminated clothing. |
| Ingestion of liquid | Rinse mouth thoroughly. Drink 1 to 2 glasses of water. DO NOT INDUCE VOMITING. |

4.2. Most important symptoms and effects, both acute and delayed

| | |
|--------------------------|---|
| Inhalation of liquid | May cause minor irritation to respiratory system. |
| Eye contact with liquid | May cause minor irritation to eyes. |
| Skin contact with liquid | May cause minor irritation to skin. |
| Ingestion of liquid | May cause minor irritation to mucous membranes. |

4.3. Indication of any immediate medical attention and special treatment needed

| | |
|--------------------------|---|
| Inhalation of liquid | Seek medical attention if irritation or symptoms persist. |
| Eye contact with liquid | Seek medical attention if irritation or symptoms persist. |
| Skin contact with liquid | Seek medical attention if irritation or symptoms persist. |
| Ingestion of liquid | Seek medical attention if irritation or symptoms persist. |

SECTION 5: Firefighting measures

5.1. Extinguishing media

| | |
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| | Use extinguishing media appropriate to the surrounding fire conditions. |
|--|---|

5.2. Special hazards arising from the substance or mixture

| | |
|--|---|
| | Burning produces irritating, toxic and obnoxious fumes. |
|--|---|

5.3. Advice for firefighters

| | |
|--|---|
| | Wear suitable respiratory equipment when necessary. |
|--|---|

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

| | |
|--|--|
| | Ensure adequate ventilation of the working area. |
|--|--|

6.2. Environmental precautions

| | |
|--|---|
| | Do not allow product to enter drains. Prevent further spillage if safe. |
|--|---|

6.3. Methods and material for containment and cleaning up

| | |
|--|---|
| | Absorb with inert, absorbent material. Sweep up. Transfer to suitable, labelled containers for disposal. Clean spillage area thoroughly with plenty of water. |
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6.4. Reference to other sections

| | |
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| | See section 2, 3, 8, 13 for further information. |
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SECTION 7: Handling and storage

7.1. Precautions for safe handling

| | |
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| | Avoid contact with eyes and skin. Ensure adequate ventilation of the working area. Adopt best Manual Handling considerations when handling, carrying and dispensing. |
|--|--|

7.2. Conditions for safe storage, including any incompatibilities

| | |
|--|--|
| | Keep in a cool, dry, well ventilated area. Keep containers tightly closed. Store in correctly labelled |
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7.2. Conditions for safe storage, including any incompatibilities

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|--|---|
| | containers. Store at temperatures between 5 °C and 20 °C. |
|--|---|

7.3. Specific end use(s)

| | |
|--|--|
| | Special effects fluid for creation of smoke effects. |
|--|--|

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

| | |
|--|--|
| | See section 8.2 for further information. |
|--|--|

8.1.1. Exposure Limit Values

| | | |
|--|-------------------------|---------------------------|
| Mono propylene glycol (Propane-1,2-diol particulates) | WEL 8-hr limit ppm: - | WEL 8-hr limit mg/m3: 10 |
| | WEL 15 min limit ppm: - | WEL 15 min limit mg/m3: - |
| Mono propylene glycol (Propane-1,2-diol total vapour and particulates) | WEL 8-hr limit ppm: 150 | WEL 8-hr limit mg/m3: 474 |
| | WEL 15 min limit ppm: - | WEL 15 min limit mg/m3: - |

8.2. Exposure controls

8.2.1. Appropriate engineering controls

| | |
|--|--|
| | Ensure adequate ventilation of the working area. |
|--|--|

8.2.2. Individual protection measures

| | |
|--|--|
| | Wear protective gloves if decanting product. |
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Eye / face protection

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|--|---|
| | If decanting and in case of splashing, wear: Approved safety goggles. |
|--|---|

Skin protection - Handprotection

| | |
|--|----------------------------------|
| | Chemical resistant gloves (PVC). |
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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

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9.1. Information on basic physical and chemical properties

| | |
|--------------------------|-----------------------------|
| State | Liquid |
| Colour | Clear |
| Odour | Odourless |
| Odour Threshold | No data available |
| pH | Neutral |
| Melting point | <-20C |
| Freezing point | No data available |
| Boiling point | +100C |
| Flash point | >76C |
| Evaporation rate | 0.003 |
| Flammability limits | No data available |
| Vapour pressure | 2.7kPa @20C |
| Vapour density | 3.7 |
| Relative density | 1.1 @ 20C |
| Fat Solubility | No data available |
| Partition coefficient | No data available |
| Autoignition temperature | No data available |
| Viscosity | 1.05 |
| Explosive | No data available |
| Oxidising | No data available |
| Solubility | Completely soluble in water |

9.2. Other information

| | |
|----------------------------------|-------------------|
| Conductivity | No data available |
| Surface tension | No data available |
| Gas group | Not applicable. |
| Benzene Content | Not applicable. |
| Lead content | Not applicable. |
| VOC (Volatile organic compounds) | Not applicable. |

SECTION 10: Stability and reactivity

10.1. Reactivity

| | |
|--|--------------------|
| | No data available. |
|--|--------------------|

10.2. Chemical stability

| | |
|--|---------------------------------|
| | Stable under normal conditions. |
|--|---------------------------------|

10.3. Possibility of hazardous reactions

| | |
|--|--------------------|
| | No data available. |
|--|--------------------|

10.4. Conditions to avoid

| | |
|--|--------------------|
| | High temperatures. |
|--|--------------------|

10.5. Incompatible materials

| | |
|--|-----------------------------|
| | Strong oxidisers and acids. |
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10.6. Hazardous decomposition products

| | |
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| | Burning produces irritating, toxic carbon based products. |
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SECTION 11: Toxicological information

11.1. Information on toxicological effects

| | |
|---------------------------|---|
| Acute toxicity | LD 50 for monopropylene Glycol 21000-33700 mg/Kg oral - Rat |
| Skin corrosion/irritation | May cause minor irritation to skin. |

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11.1. Information on toxicological effects

| | |
|-----------------------------------|-------------------------------------|
| Serious eye damage/irritation | May cause minor irritation to eyes. |
| Respiratory or skin sensitisation | No sensitisation effects reported. |

11.1.4. Toxicological Information

| | |
|--|--------------------------------------|
| | No evidence of toxicological effects |
|--|--------------------------------------|

SECTION 12: Ecological information

12.1. Toxicity

| | |
|--|-------------------|
| | No data available |
|--|-------------------|

12.2. Persistence and degradability

| | |
|--|----------------|
| | Biodegradable. |
|--|----------------|

12.3. Bioaccumulative potential

| | |
|--|-----------|
| | Very low. |
|--|-----------|

12.4. Mobility in soil

| | |
|--|-------------------------|
| | High. Soluble in water. |
|--|-------------------------|

12.5. Results of PBT and vPvB assessment

| | |
|--|--|
| | No information is available that indicates that the ingredients meet the criteria for classification as PBT or vPVB in accordance with Annex XIII of Regulation 1907/2006 (REACH). |
|--|--|

12.6. Other adverse effects

| | |
|--|-------------|
| | None known. |
|--|-------------|

SECTION 13: Disposal considerations

13.1. Waste treatment methods

| | |
|--|--|
| | Contact a licensed waste disposal company. |
|--|--|

Disposal of packaging

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| | Do NOT reuse empty containers. Empty containers can be sent for disposal or recycling. |
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SECTION 14: Transport information

ADR/RID

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| | The product is not classified as dangerous for carriage. |
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IMDG

| | |
|--|--|
| | The product is not classified as dangerous for carriage. |
|--|--|

IATA

| | |
|--|--|
| | The product is not classified as dangerous for carriage. |
|--|--|

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

| | |
|-------------|--|
| Regulations | <p>COMMISSION REGULATION (EU) No 453/2010 of 20 May 2010 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC.</p> <p>REGULATION (EC) No 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC.</p> |
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15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

| | | |
|-------------|-----------------|--------------------------------------|
| Regulations | Symbol: | No risk or safety symbols stipulated |
| | Risk phrases: | No risk phrases stipulated |
| | Safety phrases: | No safety phrases stipulated |
| | | |

15.2. Chemical safety assessment

| | |
|--|------------------------------|
| | Considered safe for purpose. |
|--|------------------------------|

SECTION 16: Other information

Further information

| | |
|--|--|
| | The information supplied in this Safety Data Sheet is designed only as guidance for the safe use, storage and handling of the product. This information is correct to the best of our knowledge and belief at the date of publication however no guarantee is made to its accuracy. This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any other process. |
|--|--|