

Portable Water-Based (Foam) Fire Extinguisher Safety Data Sheet (SDS)

According to EU Regulation 2020/878 - Dangerous Goods

DANGEROUS GOODS - UN1044, Class 2.2

SAFETY DATA SHEET

1. IDENTIFICATION

1.1 Product identifier: Portable Water-Based Fire Extinguisher (Foam)

1.2 Relevant identified uses: Fire extinguishing agent for Class A (combustibles) and Class B (flammable liquids) fires.

1.3 Details of the supplier: CID Trading LTD, Friden House, Unit 1 Clayton Wood Bank, Horsforth, Leeds, LS16 6QZ. Tel: 0113 201 1340
Email: sales@cidgroup.co.uk

1.4 Unique Formula Identifier (UFI)/

2. HAZARDS IDENTIFICATION

2.1 Classification: According to Regulation (EC) No 1272/2008 (CLP) and ADR/RID/IMDG/IATA regulations for transport.

H280 H315 H319 H335 H412

2.2 Label elements:**Nitrogen (as propellant):** Compressed gas; may cause asphyxiation.

◆ The fire extinguisher is at 14 bars super pressure. If subjected to high temperatures (over 60°C) the safety device might release (23 bar).

◆ Warning: Contains surfactants which may cause skin and eye irritation upon direct contact. Pressurized container – may burst if heated.

◆ Hazard statements:H280 – Contains gas under pressure; may explode if heated. H315 – Causes skin irritation. H319 – Causes serious eye irritation. H335 – May cause respiratory irritation. H412 – Harmful to aquatic life with long lasting effects.

◆ Precautionary statements:P210 – Keep away from heat/sparks. P251 – Do not pierce or burn. P261 – Avoid breathing mist. P280 – Wear protective gloves/eye protection. P305+P351+P338 – IF IN EYES: rinse cautiously. P410+P403 – Protect from sunlight. Store in well-ventilated place.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical characterization: Aqueous solution of hydrocarbon-based, non-fluorinated surfactants (non-ionic & anionic) with corrosion inhibitors and stabilizers.

Component	CAS Number	Concentration (%)
Water	7732-18-5	92%
Surfactant blend (non-ionic & anionic, hydrocarbon-based)	Proprietary blend	3%
Nitrogen (compressed propellant)	7727-37-9	5%

⚠ Exact surfactant composition is proprietary. **No fluorinated surfactants (PFAS)** intentionally added. All substances are REACH registered.

TRANSPORT CLASSIFICATION

UN Number	UN 1044
Proper Shipping Name	FIRE EXTINGUISHERS
Hazard Class	2.2 (Non-flammable, non-toxic gas)
Packing Group	Not applicable
Environmental hazards	Not applicable

Transport in bulk: Not applicable

4. FIRST AID MEASURES

- Inhalation: Remove to fresh air. If breathing is difficult, administer oxygen.
- Skin contact: Wash thoroughly with soap and water. Remove contaminated clothing.
- Eye contact: Rinse cautiously with water for at least 10-15 minutes. Remove contact lenses. Continue rinsing.
- Ingestion: Rinse mouth. Do NOT induce vomiting.

5. FIRE-FIGHTING MEASURES

- Extinguishing media: This product is itself an extinguishing agent. For surrounding fire, use water spray, foam, dry powder, or CO₂.
- Special hazards: Pressurized containers may explode if exposed to extreme heat. Decomposition may produce hazardous gases (CO, CO₂, irritating fumes).
- Protection for firefighters: Wear self-contained breathing apparatus (SCBA) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

- Personal precautions: Avoid generating mist. Use personal protective equipment as outlined in Section 8.
- Environmental precautions: Prevent product from entering drains, watercourses, or soil. Harmful to aquatic life with long-lasting effects.
- Methods and material for containment and cleaning up: Contain spills with inert absorbent (sand, earth). Sweep up or vacuum. Place in suitable container for disposal.

7. HANDLING AND STORAGE

- Precautions for safe handling: Handle in a well-ventilated area. Minimize mist generation. Use appropriate technical controls. Do not puncture or incinerate the container.
- Conditions for safe storage: Store in a cool, dry, well-ventilated place. Keep container tightly closed. Protect from direct sunlight, heat sources, and freezing. Do not expose to temperatures exceeding 50°C. Incompatible with strong acids and strong oxidizers.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

- Control parameters: Follow applicable Occupational Exposure Limit (OEL) for dust/mist and nitrogen.
- Appropriate engineering controls: Use local exhaust ventilation to control mist levels.
- Personal protective equipment: Respiratory protection: Use dust/mist respirator if ventilation is insufficient. Hand protection: Protective gloves (nitrile). Eye protection: Safety glasses or goggles. Skin and body protection: Wear protective work clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance Clear to slightly opalescent liquid in a pressurized cylinder

Odor Mild, characteristic

pH 6.0 – 8.5 (20°C)

Melting point/freezing point ~0°C

Flammability Non-flammable

Vapor pressure~23 hPa at 20°C (water)

Relative density~1.00 – 1.13 g/cm³ (20°C)

SolubilityFully miscible in water

Decomposition temperature> 150°C (varies)

Other safety characteristicsPressurized container: Risk of bursting under heat.

Surface tension (3%): < 25 mN/m.

10. STABILITY AND REACTIVITY

- Reactivity:Stable under recommended storage and handling conditions.
- Chemical stability:Stable.
- Possibility of hazardous reactions:Under normal conditions of use, hazardous reactions will not occur.
- Conditions to avoid:Moisture (not applicable), high temperatures, strong acids, strong oxidizers.
- Incompatible materials:Strong acids, strong oxidizing agents.
- Hazardous decomposition products:Carbon monoxide (CO), carbon dioxide (CO₂), irritating fumes, and trace sulfur oxides (SO_x) under thermal decomposition or fire conditions.

11. TOXICOLOGICAL INFORMATION

- Acute toxicity:Based on available data, not acutely toxic. LD50 (rat) > 2000 mg/kg.
- Skin corrosion/irritation:May cause irritation (H315).
- Serious eye damage/irritation:May cause serious eye irritation (H319).
- Respiratory or skin sensitization:Not expected.
- Germ cell mutagenicity:Not expected (negative Ames test).
- Carcinogenicity:Not classified.
- Reproductive toxicity:Not expected.
- Specific target organ toxicity – single exposure:May cause respiratory irritation (H335).
- Specific target organ toxicity – repeated exposure:Prolonged and repeated inhalation of mist may cause respiratory tract irritation.
- Aspiration hazard:Not expected.

12. ECOLOGICAL INFORMATION

- Toxicity: Expected to have low acute toxicity to aquatic organisms (LC50 > 100 mg/L).
- Persistence and degradability: Readily biodegradable (>60% in 28 days).
- Bioaccumulative potential: Low potential for bioaccumulation (Log Kow < 3).
- Mobility in soil: May be mobile if dissolved.
- Results of PBT and vPvB assessment: Not classified as PBT or vPvB.
- Endocrine disrupting properties: No known endocrine disrupting properties.
- Other adverse effects: Harmful to aquatic life with long-lasting effects (H412).
Do not discharge into water bodies.

13. DISPOSAL CONSIDERATIONS

- Waste treatment methods – Product: Dispose of in accordance with all applicable local, regional, national, and international regulations. Reuse or recycling is preferred. For used extinguishers, contact specialized waste management companies. Release nitrogen in a safe, well-ventilated area before disposal.
- Containers: Dispose of as for product. Do not reuse containers unless properly cleaned and tested for pressure applications.

14. TRANSPORT INFORMATION (DETAILED)

- 14.1 UN number: UN 1044
- 14.2 UN proper shipping name: FIRE EXTINGUISHERS
- 14.3 Transport hazard class(es): 2.2 – Non-flammable, non-toxic gas
- 14.4 Packing group: Not applicable
- 14.5 Environmental hazards: Not applicable
- 14.6 Special precautions for user: Protect from sunlight and heat. Do not drop or damage the cylinder. Securely stow during transport to prevent movement. Do not transport with incompatible materials.
- 14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code: Not applicable
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REGULATORY INFORMATION

In the United States, fire extinguishers that comply with 49 CFR § 173.309 must be described as "UN 1044, Fire extinguishers containing compressed or liquefied

gas, 2.2" and are excepted from certain shipping paper, labeling, and placarding requirements.

Fire extinguishers assigned UN1044 that qualify as Limited Quantity surface material are available when properly packaged.

16. OTHER INFORMATION

Abbreviations: UN – United Nations, CFR – Code of Federal Regulations, DOT – Department of Transportation, CLP – Classification, Labelling and Packaging, ADR – European Agreement concerning the International Carriage of Dangerous Goods by Road, IMDG – International Maritime Dangerous Goods, IATA – International Air Transport Association, PBT – Persistent, Bioaccumulative, Toxic, vPvB – Very Persistent, Very Bioaccumulative, SVHC – Substance of Very High Concern, PFAS – Per- and Polyfluoroalkyl Substances.

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Revision statement: Updated with dangerous goods transport information and EU REACH/CLP compliance.

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Disclaimer: The information contained herein is provided in good faith and believed to be accurate as of the date hereof. However, no warranty, express or implied, is given. It is the user's responsibility to determine the suitability of this information for the adoption of necessary safety and health measures.

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