

SAFETY DATA SHEET

FirePal Home

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

Date issued 28.09.2011

1.1. Product identifier

Product name FirePal Home

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

Use of the substance/preparation Foam extinguisher
To combat small fires in homes, offices, cottages

Uses advised against Not evaluated

1.3. Details of the supplier of the safety data sheet

Company name GPBM Norge AS
Postal address Postboks 87 Furuset
Postcode 1001
City Oslo
Country NORWAY
Tel + 47 22 88 30 40
Fax + 47 22 88 30 50
E-mail frank.ottesen@gpbatteries.no
Website <http://www.gpbatteries.no>
Contact person Frank Ottesen

1.4. Emergency telephone number

Emergency telephone Only emergency call number: 112 or 999

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP/GHS] Press. Gas; H280;

2.2. Label elements

Hazard Pictograms (CLP)



Signal word Warning
Hazard statements H280 Contains gas under pressure; may explode if heated.
Precautionary statements P410 + P403 Protect from sunlight. Store in a well-ventilated place.
P102 Keep out of reach of children.
Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even when empty.

2.3. Other hazards

Description of hazard Health: The product is not classified as hazardous to health.

| | |
|---------------|---|
| | Fire and explosion: The product is not classified as flammable. |
| | Environment: The product is not classified as harmful to the environment. |
| Other hazards | See sections 5, 11 and 12 for complementary information. PBT/vPvB assessment has not been performed. |

SECTION 3: Composition/information on ingredients

3.2. Mixtures

| Component name | Identification | Classification | Contents |
|-----------------------------------|---|------------------------------|----------|
| Ethanediol | CAS no.: 107-21-1 EC no.: 203-473-3 Index no.: 603-027-00-1 | Xn; R22 Acute tox. 4;H302 | < 5 % |
| Diethylene glycol monobutyl ether | CAS no.: 112-34-5 EC no.: 203-961-6 Index no.: 603-096-00-8 | Xi; R36 Eye Irrit. 2;H319 | < 5 % |
| Column headings | CAS no. = Chemical Abstracts Service; EU (Einecs or Elincs number) = European inventory of Existing Commercial Chemical Substances; Ingredient name = Name as specified in the substance list (substances that are not included in the substance list must be translated, if possible). Contents given in; %, %wt/wt, %vol/wt, %vol/vol, mg/m3, ppb, ppm, weight%, vol% | | |
| HH/HF/HE | T+ = Very toxic, T = Toxic, C = Corrosive, Xn = Harmful, Xi = Irritating, E = Explosive, O = Oxidizing, F+ = Extremely flammable, F = Very flammable, N = Environmental hazard | | |
| Description of the mixture | The propellant (nitrogen) will never come out through the nozzle of the aerosol can. | | |
| Component comments | The remaining ingredients up to 100 % consist of non-classified components or of components in concentrations below the limit to be included in the calculation of hazard class. See section 16 for explanation of H- and R-phrases listed above. | | |

SECTION 4: First aid measures

4.1. Description of first aid measures

| | |
|--------------|---|
| General | Get medical attention if any discomfort continues. Do not give victim anything to drink if he is unconscious. |
| Inhalation | Fresh air and rest. Consult a doctor if symptoms should occur. |
| Skin contact | Immediately remove contaminated clothing. Wash skin thoroughly with soap and water for several minutes. Get medical attention if any discomfort continues. Wash contaminated clothes before reuse. |
| Eye contact | Make sure to remove any contact lenses from the eyes before rinsing. Immediately rinse with water for several minutes. Contact a physician. |
| Ingestion | Rinse mouth thoroughly with water and give large amounts of milk or water to people not unconscious. Get medical attention if any discomfort continues. Contact physician if larger quantity has been consumed. |

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

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|----------------------------------|---|
| Information for health personnel | Ingestion of large amounts can cause kidney damage. |
| Acute symptoms and effects | Spray and vapour in the eyes may cause irritation and smarting. |

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

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|-------------------|------------------------|
| Other Information | Treat symptomatically. |
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SECTION 5: Firefighting measures

5.1. Extinguishing media

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| Suitable extinguishing media | The product is a fire extinguishant. |
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5.2. Special hazards arising from the substance or mixture

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| Fire and explosion hazards | The product is not classified as flammable. Aerosol containers can explode when heated, due to excessive pressure build-up. |
| Hazardous combustion products | Carbon monoxide (CO). Carbon dioxide (CO ₂). Oxides of nitrogen (NO _x) |

5.3. Advice for firefighters

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| Fire fighting procedures | Use water to keep fire exposed containers cool and disperse vapours. |
| Personal protective equipment | Use fresh air equipment when the product is involved in fire. In case of evacuation, an approved protection mask should be used. See also section 8. |

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

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| General measures | Avoid inhalation. Provide adequate ventilation. Avoid contact with eyes and skin. |
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6.1.1. For non-emergency personnel

| | |
|----------------------|---|
| Protective equipment | Use protective equipment as referred to in section 8. |
|----------------------|---|

6.1.2. For emergency responders

| | |
|--------------------------|---|
| For emergency responders | Use protective equipment as referred to in section 8. |
|--------------------------|---|

6.2. Environmental precautions

| | |
|---------------------------|---|
| Environmental precautions | Do not allow to enter into sewer, water system or soil. |
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6.3. Methods and material for containment and cleaning up

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| Methods for cleaning | Pick up large amounts of spills with absorbent materials like sand, diatomaceous earth or sawdust. After cleaning, wipe the surface with water. Collect in a suitable container and dispose as hazardous waste according to section 13. |
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6.4. Reference to other sections

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| Other instructions | See also sections 8 and 13. |
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SECTION 7: Handling and storage

7.1. Precautions for safe handling

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| Handling | Avoid contact with eyes and skin. Provide good ventilation. Do not eat, drink or smoke when using the product. Container must be kept tightly closed. Wash hands before breaks and before smoking, eating or drinking. |
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7.2. Conditions for safe storage, including any incompatibilities

Protective Measures

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| Storage | Store at temperature below 50°C. Protect from frost. Store in original packaging. Protect from direct sunlight. Store in a tightly closed container in a cool, well-ventilated place, protected from heat source. Keep away from metals that react with water. Storage life 5 year(s). |
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7.3. Specific end use(s)

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| Specific use(s) | See section 1.2. |
|-----------------|------------------|

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

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| Other Information about threshold limit values | Explanation of the notations below: Sk = May be absorbed through skin |
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Exposure controls

Exposure limit values

| Component name | Identification | Value | Year |
|--------------------------|--|--------------------|------|
| ethane-1,2-diol (vapour) | CAS no.: 107-21-1 EC no.: 203-473-3 | 8 h.: 20 ppm Sk | 2009 |

| | | | |
|-------------------------------|--|---|------|
| | | 8 h.: 52 mg/m ³ 15 min.: 40 ppm Sk 15 min.: 104 mg/m ³ | |
| ethane-1,2-diol (particulate) | CAS no.: 107-21-1 EC no.: 203-473-3 | 8 h.: 10 mg/m ³ Sk | 2009 |
| 2-(2-butoxyethoxy)ethanol | CAS no.: 112-34-5 EC no.: 203-961-6 | 8 h.: 67,5 mg/m ³ 8 h.: 10 ppm | 2010 |

Exposure limits**Biological limits****DNEL / PNEC****8.2. Exposure controls****Appropriate environmental exposure control**

Occupational exposure controls Must not be handled in confined space without sufficient ventilation. The listed protective equipment is a recommendation. A risk assessment of the actual risk may lead to other requirements. Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment. Eyewash facilities should be available at the workplace.

Eye / face protection

Eye protection Wear safety goggles if there is a risk of splash.

Skin protection

Hand protection Use protective gloves that are suitable for the application, made of: Rubber (natural, latex). Butyl rubber. Neoprene. Nitrile. Polyvinyl chloride (PVC). teflon. or Viton rubber (fluor rubber).
Unsuitable glove material: Polyvinyl alcohol (PVA).
The most suitable glove must be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material.

Skin protection (other than of the hands) Wear appropriate protective clothing to protect against possible skin contact.

Respiratory protection

Respiratory protection Normally not required. At work in confined or poorly ventilated spaces, respiratory protection with air supply must be used.

Thermal hazards

Thermal hazards No known thermal hazard exists.

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

| | |
|---|--|
| Physical state | Aerosol. |
| Odour | Organic solvents. |
| Colour | Light yellow. Clear |
| pH (as supplied) | Value: 7,0-8,5 |
| Comments, pH (as supplied) | (value for the liquid part) |
| Comments, Melting point / melting range | Not relevant. |
| Boiling point / boiling range | Value: 100 °C |
| Comments, Boiling point / boiling range | (value for the liquid part at 760 mm Hg) |
| Flash point | Value: > 98 °C |
| Comments, Evaporation rate | Not determined. |

| | |
|--|---|
| Flammability (solid, gas) | The propellant is not combustible. |
| Vapour pressure | Value: > 3 bar (50 °C) |
| Comments, Vapour pressure | (value for the propellant) |
| Specific gravity | Value: 1,03-1,05 |
| Comments, Specific gravity | (value for the liquid part); ref: water = 1 (20 °C) |
| Solubility in water | Soluble (value for the liquid part). |
| Comments, Partition coefficient: n-octanol / water | Not determined, not relevant for mixtures. |
| Comments, Spontaneous combustability | Not determined. |
| Comments, Decomposition temperature | Not determined. |
| Viscosity | Value: < 30 mN/m |
| Comments, Viscosity | (value for the liquid part) |
| Comments, Explosion limit | Not determined. |

9.2. Other information

| | |
|------------------------|-----------------|
| 9.2. Other information | Not determined. |
| Odour limit | Not determined. |

Other physical and chemical properties

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|----------------------------------|---|
| Physical and chemical properties | Critical temperature (nitrogen): -147 °C |
| Comments | No further relevant information is available. |

SECTION 10: Stability and reactivity

10.1. Reactivity

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|------------|-------------------------|
| Reactivity | No test data available. |
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10.2. Chemical stability

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|-----------|--|
| Stability | The product is stable at the given use and storing conditions. |
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10.3. Possibility of hazardous reactions

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|------------------------------------|-------------------------------|
| Possibility of hazardous reactions | No hazardous reactions known. |
|------------------------------------|-------------------------------|

10.4. Conditions to avoid

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|---------------------|---|
| Conditions to avoid | Avoid frost. Do not expose to temperatures above 50 °C. |
|---------------------|---|

10.5. Incompatible materials

| | |
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| Materials to avoid | Keep away from metals that react with water. |
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10.6. Hazardous decomposition products

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|----------------------------------|---|
| Hazardous decomposition products | None under normal conditions. Fire or high temperatures create: Carbon monoxide (CO). Carbon dioxide (CO ₂). Nitrous gases (NO _x). |
|----------------------------------|---|

SECTION 11: Toxicological information

Toxicological Information:

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|--------------------------|-----------------------------------|
| Other toxicological data | 2-(2-Butoxyethoxy)ethanol: |
| | LD50 oral, rat > 5660 mg/kg |
| | LD50 dermal, rabbit: > 2700 mg/kg |
| | 1,2-Ethanediol: |
| | LD50 oral, rat: > 4,7 mg/kg |
| | LD50 dermal, rabbit: > 9530 mg/kg |

Other information regarding health hazards

| | |
|--------------|--|
| Inhalation | Unlikely to be hazardous by inhalation because of the low vapour pressure of the substance at ambient temperature. |
| Skin contact | May cause slight irritation. |
| Eye contact | Moderately irritating. |

| | |
|-----------------------|---|
| Ingestion | Ingestion of large amounts can cause kidney damage. |
| Sensitisation | Based on available data, the classification criteria are not met. |
| Carcinogenicity | Based on available data, the classification criteria are not met. |
| Reproductive toxicity | Based on available data, the classification criteria are not met. |
| Mutagenicity | Based on available data, the classification criteria are not met. |
| Other Information | The product itself has not been tested. The classification is based on information about the ingredients. The product does not meet the criteria for classification as hazardous or irritant. |

SECTION 12: Ecological information

12.1. Toxicity

Other ecological information

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|-------------|---|
| Ecotoxicity | <p>2-(2-Butoxyethoxy)ethanol: LC50 96h (fish): 1300 mg/l (Lepomis macrochirus) IC50 72h (algae): 53 mg/l (Anacystis aeruginos) EC50 48h (daphnia): >100 mg/l (D. magna) BCF: 2,9 log Pow: 0,68 (no bioaccumulation) Biodegradability: 89% (28 days OECD 301C) BOD5/COD: <0,05</p> <p>1,2-Ethanediol: LC50 96h (fish): 18500 mg/l (Oncorhynchus mykiss) IC50 72h (algae): 2000 mg/l EC50 48h (daphnia): 51000 mg/l (D. magna) BCF: 10 log Pow: 1,31 (no bioaccumulation) Biodegradability: 56% (28 days OECD 301C) BOD5/COD: < 0,47</p> |
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12.2. Persistence and degradability

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|-------------------------------|--|
| Persistence and degradability | The product is expected to be biodegradable. |
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12.3. Bioaccumulative potential

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|---------------------------|--------------------------------|
| Bioaccumulative potential | Not expected to bioaccumulate. |
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12.4. Mobility in soil

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| Mobility | The product is water soluble and may spread in water systems. |
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12.5. Results of PBT and vPvB assessment

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|------------------------|--|
| PBT assessment results | PBT / vPvB assessment not available as chemical safety assessment not is required / not is conducted for the substances in this product. |
|------------------------|--|

12.6. Other adverse effects

| | |
|-----------------------------------|--|
| Other adverse effects / Remarks | Do not allow to enter into sewer, water system or soil. |
| Environmental details, conclusion | The product is not classified as harmful to the environment. |

SECTION 13: Disposal considerations

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|---------------------------------------|---|
| EWC waste code | <p>EWC: 160505 gases in pressure containers other than those mentioned in 16 05 04</p> <p>EWC: 150111 metallic packaging containing a dangerous solid porous matrix (for example asbestos), including empty pressure containers</p> |
| Product classified as hazardous waste | Yes |

13.1. Waste treatment methods

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|---|--|
| Specify the appropriate methods of disposal | Dispose of waste in local landfill. The waste code (EWC-Code) is intended as a guide. The user must select a code if the use differs from the one mentioned above. |
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SECTION 14: Transport information

Land transport (ADR/RID/GGVSE)

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|---------------------|---|
| Dangerous goods ADR | UN no.: 1950 Class: 2.2 Proper shipping name: AEROSOLS Other applicable information.: Classification code 5A |
|---------------------|---|

Land transport (RID / GGVSE)

| | |
|---------------------|--|
| Dangerous goods RID | UN no.: 1950 Class: 2.2 Proper shipping name: AEROSOLS |
|---------------------|--|

Sea transport (IMDG-Code/GGVSee)

| | |
|----------------------|---|
| Dangerous goods IMDG | UN no.: 1950 Class: 2.2 EmS: F-D, S-U Proper shipping name: AEROSOLS |
|----------------------|---|

Air transport (ICAO-IATA/DGR)

| | |
|---------------------------|---|
| Dangerous goods ICAO/IATA | UN no.: 1950 Class: 2.2 Proper shipping name: AEROSOLS, NON-FLAMMABLE |
|---------------------------|---|

14.6. Special precautions for user

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|------------------------------|------------|
| Special precautions for user | Not known. |
|------------------------------|------------|

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

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| Other applicable information. | Not relevant. |
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SECTION 15: Regulatory information

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

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|-------------------------------|--|
| References (laws/regulations) | CHIP Regulations. The Chemicals (Hazard Information and Packaging for Supply) Regulation. Aerosol dispenser directive 75/324/EEC. Regulation (EC) No 1907/2006 (REACH) Annex II: Safety data sheets. The Hazardous Waste (England and Wales) Regulations 2005 with amendments. EH40/2005, Workplace exposure limits 2005, with amendments. Dangerous Goods regulations The Safety Data Sheet is based on information provided by the producer. |
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15.2. Chemical safety assessment

| | |
|---|----|
| chemical safety assessment has been carried out | No |
| CSR required | No |

SECTION 16: Other information

| | |
|--|---|
| Classification according to Regulation (EC) No 1272/2008 [CLP/GHS] | Press. Gas; H280; |
| List of relevant R phrases (under headings 2 and 3). | R22 Harmful if swallowed. R36 Irritating to eyes. |
| List of relevant H-phrases (Section 2 and 3). | H280 Contains gas under pressure; may explode if heated. H302 Harmful if swallowed. H319 Causes Serious eye irritation. |

| | |
|---|---|
| List of relevant S-phrases (in section 3). | S2 Keep out of the reach of children. S24 Avoid contact with skin. S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. |
| Further information | Acronyms: PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative |
| Sources of key data used to compile the safety data sheet | Suppliers Safety data sheet dated: 21.10.2010 |
| Supplier's notes | The information contained in this SDS must be made available to all those who handle the product. |
| Checking quality of information | This SDS is quality controlled by National Institute of Technology in Norway, certified according to the Quality Management System requirements specified in ISO 9001:2008. |
| Responsible for safety data sheet | GPBM Norge AS |
| Prepared by | Teknologisk Lab AB, Göteborg / Milvi Rohla |