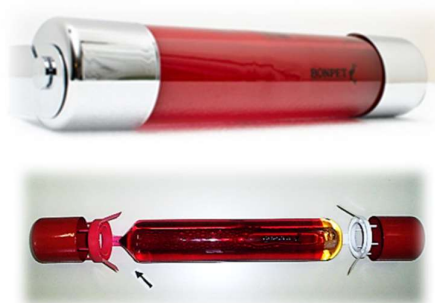


SELF-ACTIVATED FIRE EXTINGUISHING AMPOULE

TECHNICAL DATA SHEET

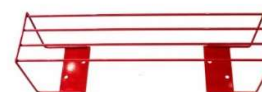
1. Composition

- Specially designed and shaped glass ampoules,
- Bonpet extinguishing liquid (600ml),
- Plastic spacers,
- Metal bearing rosettes (Painted or chrome-plated),
- Carrier.



Additional & options:

- Safety net,
- For better stabilization of the ampoule, in places of installation, where flickering occurs, we can offer special stabilizing washers, which mitigate the vibrations (flickering).



2. Function

When a fire breaks out in a small enclosed area and temperature rises, extinguishing liquid simultaneously begins to heat and as a result, the liquid starts to extend in the glass ampoule. When the temperature of the extinguishing liquid is approximately $85^{\circ}\text{C} \pm 5^{\circ}\text{C}$ the glass breaks into pieces which allows the liquid to drop into the area, where endothermic process begins.

The components of Bonpet liquid cause a fast transport of the heat on a chemical part, using water when they get in contact with hot surface. Wet chemicals decompose into gasses (CO_2 , N_2) which suffocate fire directly on burning surface, by preventing fire to get to the oxygen. The gasses suffocate fire directly on burning surface (intensive cooling and approximately 60-times bigger volume comparing to the size of a drop) due to this relatively small quantity of chemicals is needed to effectively put out a fire.

Non-decomposed components of Bonpet liquid that remain on the surface after the fire has been extinguished, have the ability to disintegrate and cool the surface, if there is a slight increase of temperature.

Bonpet liquid is suitable for fire class A, B in F and the consequences from the fire class C.

Ampoule can be used in a way throwing the ampoule directly into the source of a fire or a mixture of the liquid Bonpet and water (6%).



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Reviewed and approved:
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3. Technical characteristics

Automatic extinguishing ampoule Bonpet

| | |
|---|--|
| Weight | 1200 g |
| Volume | 600 ml |
| Length | 300 mm |
| Diameter | 60 mm |
| Extinguishing effect (volume enclosure) | 8 m ³ |
| Field of use | from -20°C to 60°C |
| Extinguishing effect when activated | radius about. 2m |
| Activation temperature | Liquid temperature 85 °C, deviation +/- 5 °C Surrounding temperature > 150 °C |
| Activation time | Depends on the type of fire |

Bonpet Liquid

| | |
|-----------------------------------|-----------------------------|
| Physical state | Liquid |
| Colour | Slightly coloured liquid |
| Smell | Slight ammonia smell |
| pH | 8,5 – 9,1 |
| Density | 1,1000 – 1,1500 g/ml |
| Flammability | Not flammable |
| Solubility in water at 20oC v g/l | Completely soluble in water |
| Freezing point | -14,5°C |
| Boiling point | 103°C |
| Flashpoint | Non-existent |
| Explosion point | Non-existent |
| Ignition temperature | Non-existent |
| Decomposition temperature | Nad 300oC |
| Decomposition products | N2, CO2, H2O |

4. Bonpet Liquid classification (MPA Dresden)

| | |
|----------------------------------|--|
| Standard EN 3-7 : 2007 + A1:2007 | 27A, 144B, 75F (for 6 lit. Fire extinguisher Bonpet) |
| Freezing point | -14,5°C |

5. How to use Bonpet ampoule



6. Label on Bonpet ampoule

On each ampoule, there is a label with the following information:

- The manufacturer's name and product name,
- Use of the product,
- Fire class,
- The amount of liquid,
- The year and month of manufacture,
- Production number (serial number),
- No. technical Approval,
- Shelf life.



7. Guarantee and Life expectancy

| | |
|-----------------|-------------------------------|
| Guarantee | 10 years, without maintenance |
| Life expectancy | 10 years, without maintenance |

8. Additional reference documents and certificates

- STS (Slovenian technical approval),
- Certificate MPA Dresden, certificate of conformity KB 185/14 of extinguishing water-based liquid – Bonpet,
- Declaration of Conformity (Declaration of conformity CE),
- Certificates for certain markets and for the intended use (for example: Croatian Ships Registry),
- Safety Data Sheet for extinguishing liquid (based on Hygiene Institute report, Germany),
- Instructions and installation for ampule,
- Instructions for cleaning the ampule.

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|--------------------------|------------------------|----------------------|---|
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