

SELF-ACTIVATED FIRE EXTINGUISHING AMPOULE

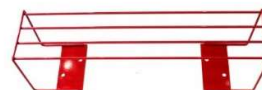
TECHNICAL DATA SHEET

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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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.