

# FIRE EXTINGUISHING LIQUID



INTERNATIONAL  
**ARMOUR**<sup>TM</sup>

[www.armour.gr](http://www.armour.gr)



July 2024

[www.armour.gr/bonpet.php](http://www.armour.gr/bonpet.php)



## The Importance of BONPET for Extinguishing Lithium Battery Fires

### A Game-Changer in Fire Safety

As the world increasingly relies on lithium-ion batteries for everything from smartphones to electric vehicles, the risks associated with these powerful energy sources have also grown.

Lithium battery fires present unique challenges, making traditional fire suppression methods inadequate.

Among the innovative solutions, **BONPET emerges as a critical tool**, surpassing other extinguishing agents in addressing these high-risk fires.

Here's why BONPET is a game-changer in fire safety, particularly for lithium battery fires standards for fire safety.

### The Challenge of Lithium Battery Fires

Lithium-ion batteries are prone to **thermal runaway**, a chain reaction where excessive heat causes a rapid release of energy, often resulting in an intense fire or explosion. Key characteristics of lithium battery fires include:

- **High Temperatures:** They can burn at temperatures exceeding 1,000°C.
- **Self-Sustaining:** Even without an external oxygen supply, lithium battery fires can continue to burn due to the oxygen released internally during thermal breakdown.
- **Toxic Emissions:** These fires emit hazardous gases, posing risks to both humans and the environment.
- **Difficulty in Containment:** Traditional fire extinguishers, such as water-based systems or foam, are often ineffective or unsafe.

The complexity of these fires necessitates a specialized solution, and this is where BONPET stands out.





## Why BONPET Outperforms Other Extinguishing Agents

BONPET is a revolutionary fire suppression product designed to tackle a wide range of fires, including those caused by lithium-ion batteries. Its unique chemical formulation and mode of action make it the superior choice over traditional extinguishers like water, CO<sub>2</sub>, or dry powder. Here's how:

**1. Rapid Cooling Effect:** Lithium battery fires generate extreme heat, and controlling the temperature is crucial to halting thermal runaway.

BONPET effectively reduces the temperature of the burning battery, preventing further escalation.

**2. Chemical Neutralization:** Unlike water, which can react dangerously with lithium and worsen the fire, BONPET chemically neutralizes the reactions that sustain combustion.

Its proprietary chemical formulation ensures safe and efficient suppression.

**3. Non-Conductive:** Water and foam extinguishers pose the risk of electrical conductivity, making them unsafe for use with lithium batteries.

BONPET, however, is non-conductive, ensuring the safety of users and surrounding equipment.

**4. Eco-Friendly Solution:** Many extinguishing agents release harmful chemicals or contribute to environmental degradation.

BONPET is environmentally safe, minimizing ecological impact while ensuring high performance.

**5. Portability and Versatility:** BONPET extinguishers are compact and easy to deploy, making them suitable for use in various settings, from homes to industrial facilities.

This is particularly advantageous in environments where lithium-ion batteries are stored or used extensively.

## Comparison with Traditional Extinguishing Methods

Extinguishing Method	Effectiveness Against Lithium Fires	Safety	Environmental Impact	Portability
Water	Ineffective and unsafe	Conductive	High	Limited
CO <sub>2</sub>	Limited effectiveness	Safe but limited	Low	Moderate
Dry Powder	Partially effective	Residue issues	Moderate	Limited
Foam	Ineffective	Can react dangerously	Moderate	Limited
BONPET	Highly effective	Non-conductive and safe	Eco-friendly	High





## Applications of BONPET for Lithium Battery Fires

**Residential and Commercial Buildings:** Ideal for tackling fires in devices such as laptops, smartphones, and power banks.

**Industrial Settings:** Protects facilities storing or manufacturing lithium-ion batteries.

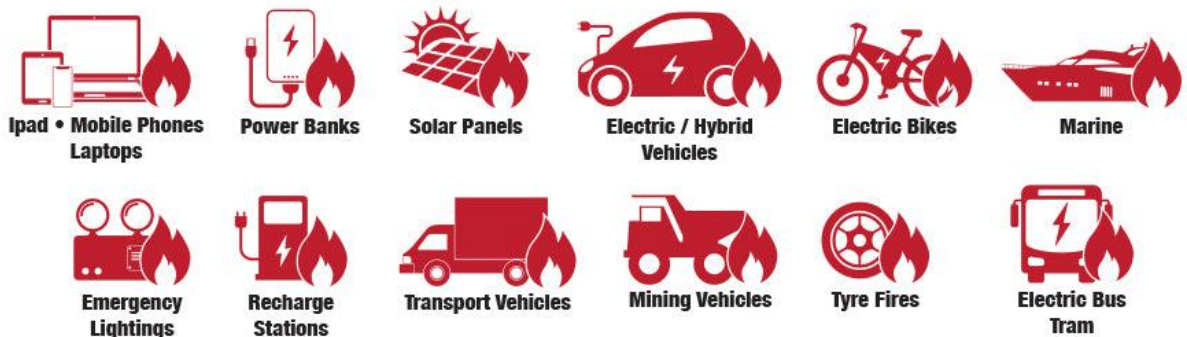
**Electric Vehicles:** Ensures safety for cars, bikes, and scooters powered by lithium batteries.

**Aviation and Maritime Use:** Offers a lightweight, portable solution for airplanes and ships, where space and weight are critical factors.

## A Future-Ready Solution

As industries continue to integrate lithium-ion technology, the importance of robust fire suppression systems will only grow. BONPET offers a **comprehensive, safe, and efficient solution** for mitigating the unique risks associated with lithium battery fires, ensuring safety in a world increasingly powered by portable energy.

Investing in BONPET is not just about fire suppression—it's about embracing a future-proof, reliable solution for one of the most critical challenges in modern fire safety.





## 50 compelling reasons to choose BONPET liquid fire extinguishers

### Performance Advantages:

- 01. **Automatic Activation:** BONPET activates itself when exposed to heat, requiring no human intervention.
- 02. **Fast Response Time:** Reacts almost instantly to suppress fire at its source.
- 03. **Effective on Multiple Classes:** Suitable for A (solid materials), B (flammable liquids), and F (cooking oils/fats) fires.
- 04. **Localized Suppression:** Targets the specific ignition point, ensuring minimal fire spread.
- 05. **Rapid Cooling Effect:** Cools down the fire source, reducing the risk of reignition.
- 06. **No Oxygen Depletion:** Unlike CO<sub>2</sub> extinguishers, BONPET does not lower oxygen levels, making it safe for enclosed spaces.
- 07. **Prevents Reignition:** Leaves a protective layer that inhibits re-ignition.
- 08. **No High Pressure:** Operates without pressurized systems, reducing the risk of accidental discharge.

### Ease of Use:

- 09. **User-Friendly:** Simple and intuitive to use, with no specialized training required.
- 10. **Maintenance-Free:** No need for regular servicing, unlike traditional extinguishers.
- 11. **Throw-and-Use Option:** Can be thrown directly into the fire for immediate action.
- 12. **Lightweight Design:** Easy to handle, even for non-professionals.

### Safety Benefits:

- 13. **Non-Toxic Formula:** Safe for humans, pets, and the environment.
- 14. **Non-Flammable Liquid:** The liquid itself is fire-resistant, ensuring additional safety.
- 15. **Child-Safe:** Can be installed safely in homes with children due to its automated nature.
- 16. **Low Residual Impact:** Leaves minimal residue, reducing cleanup time and property damage.

### Versatility:

- 17. **Wide Temperature Range:** Operates effectively in extreme heat or cold environments.
- 18. **Marine-Grade Reliability:** Performs reliably on ships and in marine conditions.
- 19. **Works at Any Angle:** Functions whether mounted vertically or horizontally.
- 20. **Ideal for Vehicles:** Compact and effective for cars, trucks, and industrial equipment.
- 21. **Fits Confined Spaces:** Perfect for small areas like electrical cabinets or engine rooms.



## 50 compelling reasons to choose BONPET liquid fire extinguishers

### Environmental Advantages:

- 22. **Eco-Friendly:** Contains no harmful chemicals that damage the environment.
- 23. **Safe Disposal:** Easy to dispose of without environmental harm.
- 24. **Green Certifications:** Meets global eco-friendly standards for fire safety.

### Cost-Effectiveness:

- 25. **Long Shelf Life:** Remains effective for many years without replacement.
- 26. **No Maintenance Costs:** Saves on the regular servicing expenses of traditional extinguishers.
- 27. **Reduced Property Damage:** Its precision application minimizes collateral damage.
- 28. **Insurance Benefits:** May lower insurance premiums due to increased fire safety compliance.

### Industrial Applications:

- 29. **Trusted in Hazardous Areas:** Effective for chemical plants, fuel stations, and other high-risk environments.
- 30. **Critical Infrastructure Safety:** Widely used in data centers, power stations, and telecommunication hubs.
- 31. **Kitchen-Ready:** Designed for high-temperature environments, especially commercial kitchens.
- 32. **Suitable for Laboratories:** Neutralizes chemical fires safely.

### Design and Installation:

- 33. **Compact and Stylish:** Modern design fits seamlessly into any setting.
- 34. **Flexible Installation:** Can be wall-mounted, ceiling-mounted, or placed in critical areas.
- 35. **Customizable Sizes:** Available in sizes tailored to specific needs, from small residential units to industrial applications.

### Reliability:

- 36. **Durable Construction:** Built to last and withstand challenging conditions.
- 37. **Tested and Certified:** Meets rigorous international fire safety standards.
- 38. **Globally Trusted:** Used by professionals worldwide across various industries.

### Unique Features:

- 39. **Chemical Neutralization:** Effectively stops chemical reactions fueling the fire.
- 40. **Silent Activation:** Operates without loud noises, ensuring a calm environment during emergencies.
- 41. **Corrosion Protection:** Contains anti-corrosion properties, protecting surrounding surfaces.





## 50 compelling reasons to choose BONPET liquid fire extinguishers

### Specialized Environments:

- 42. **Electrical Safety:** Safe for use on electrical fires without risk of short-circuiting.
- 43. **Hospitals and Clean Rooms:** Minimal residue makes it ideal for sensitive environments.
- 44. **Public Spaces:** Compact design ensures unobtrusive placement in offices, schools, and theaters.

### Strategic Advantages:

- 45. **Peace of Mind:** Automatic activation eliminates worries about manual intervention.
- 46. **Proven Effectiveness:** Documented success in real-world fire emergencies.
- 47. **Reduces Panic:** Quick action minimizes the need for evacuation in small fires.
- 48. **Minimal Training Needed:** No need for employees or family members to learn complex firefighting techniques.

### Future-Proof:

- 49. **Innovative Technology:** Incorporates cutting-edge advancements in fire suppression.
- 50. **Versatile Solution:** Adapts to evolving fire safety needs across residential, commercial, and industrial sectors.





## WORLDWIDE USERS (2023)

RUSSIAN FIRE BRIGADE ACADEMY,  
GREECE FIRE BRIGADE,  
JAPAN FIRE BRIGADE,  
CANADA FIRE BRIGADE,  
SLOVENIA FIRE BRIGADE,  
AUSTRIA FIRE BRIGADE,  
CROATIA FIRE BRIGADE,  
CZECH REPUBLIC FIRE BRIGADE,  
NATO,  
NATIONAL SELF-DEFENCE FORCES (JAPAN),  
MINISTRY OF DEFENCE SLOVENIA,  
MOSCOW METROPOLITAN,  
GAZPROM RUSSIA,  
LOUKOIL RUSSIA,  
PRO BANK,  
AERODROM MARIBOR  
MOSCOW ENERGETIKA COMPANY,  
PETROL ENERGETIKA SLOVENIA,  
ALPHA OIL (LJUBLIANA),  
KAMAZ MOTORS,  
MERCEDES BENZ,  
NISSAN,  
BRIDGESTONE,  
MITSUBISHI,  
SIEMENS,  
HITACHI MATSUSHITA ELECTRIC INDUSTRIAL,

TOSHIBA,  
SANYO ELECTRIC,  
HEWLETT PACKARD,  
NESTLE,  
JAPAN TOBACCO,  
HAYATT,  
HENKEL,  
MOBITEL,  
TELEKOM,  
HYPO BANK,  
VOLKS BANK,  
CITIBANK GROUP,  
BNESTORGKMPANK (RUSSIA),  
VTB BANK (RUSSIA),  
ALPHA BANK (RUSSIA),  
SLOVEIJE BANK,  
KOPER BANK,  
A BANK,  
HYRO BANK,  
VOLKS BANK,  
SKB BANK,  
PRO BANK,  
JAPAN TOBACCO,  
HAYATT,  
AERODROM MARIBOR







# Bonpet<sup>®</sup>

systems

## USERS IN GREECE (2023)

GREEK FIRE DEPARTMENT  
OTE GROUP OF COMPANIES

ADMIE  
DEDDEE

H.P.A.  
EPA ATTICA

PETROGAZ  
NATO BASE SUDAH

PARADOX HELLAS  
G4S

NISSAN THEOCHARAKIS  
IKEA

HYGEIA S.A. (HEALTH GROUP)  
EUROBANK EFG

HSBC BANK  
BANK OF PIRAEUS

NATIONAL BANK OF GREECE  
ALPHA BANK

POST OFFICE  
GREEK POST OFFICE OF CRETE

S.P.A.P.  
LAUREOTIKI DEVELOPMENT ASSOCIATION

MUNICIPALITY OF NEAS PENDELIS  
MUNICIPALITY OF PALEIA PENDELIS

ATHINA PALLAS CRETE  
AFRODITI BEACH CRETE

SANTA MARINA BEACH HOTEL  
AMARILIA HOTEL

LAVRIS HOTEL  
CRETA FARM

GOODY'S

RUBY TUESDAYS (THE MALL ATHENS)  
DIJE VU (THE MALL ATHENS)

ANDREAS NIKAS SA  
BLUE YACHT CHARTERING

EPALINOS SA

MUNICIPALITY OF THRAKOMACEDONI

MUNICIPALITY OF ITHAKIS

MUNICIPALITY OF LOUTRAKI

COUNTY OF KASTORIA

COUNTY OF DRAMA

OASTH

ATTICA BUS

KTEL KASTORIA

EVIA BUS

NOKIA

ICAP

ANTENNA TV

STAR CHANNEL

ZOUGLA GR

COSMO RADIO THESSALONIKI

RHODES FM

ALPHA RADIO HERACLEIO

RADIO LINK

ALICO

CHURCHES OF GREECE

CLUB HOTEL CASINO LOUTRAKI

ALDEMAR HOTELS

MARMARAS GROUP

SUN CONSTANTINE RESORT

DAIKIN

MAROUDAS SA

KOPIDAKIS AEBE

TOOTA

VETORAKIS SA

ECOLOGICAL SA

EBIOP TEMPO SA

MANESSIS TRAVEL

SIGNAL ELECTRONICS SECURITY



**WHY?**



**Bonpet<sup>®</sup>**  
**systems**





# We Prevent

**Bonpet** is a renowned manufacturer of innovative fire extinguishing products designed to provide effective and reliable fire protection solutions.

Our products are suitable for various environments, including homes, offices, vehicles, and industrial settings.

We offer a range of products including ampoules, grenades, sprays, automatic extinguishers, classic extinguishers, trailers, and stable systems.

## Product Range

1. **Bonpet Ampoule:** An automatic fire extinguisher that activates when exposed to heat. Ideal for small enclosed spaces.

- Easy to install
- Automatic activation
- Minimal maintenance

2. **Bonpet Grenade:** A throwable fire extinguisher designed for quick response to fires.

- Simple and effective
- Instant activation upon impact
- Suitable for various types of fires

3. **Bonpet Spray:** A portable fire extinguisher for immediate use.

- Lightweight and easy to use
- Effective against small fires
- Ideal for homes and vehicles

4. **Bonpet Automatic Extinguisher:** A fixed fire extinguisher that activates automatically in case of fire.

- Continuous protection
- Automatic activation
- Suitable for critical areas

5. **Bonpet Classic Extinguisher:** A traditional fire extinguisher, especially effective against oil and fat fires.

- Manual operation
- Versatile use
- High effectiveness



**6. Bonpet Trailer:** A mobile fire extinguishing unit.

- High mobility
- Suitable for large fires
- Comprehensive fire-fighting capabilities

**7. Mini Stable System:** A compact fixed-fire safety system for small spaces like kitchens.

- Continuous protection
- Automatic activation
- Space-efficient design

**8. Fixed-Fire Safety System:** A robust fire safety system for larger spaces.

- Comprehensive coverage
- Automatic detection and activation
- High reliability



## Innovative Fire Extinguishing Solutions for Electrical Panels and Li-Ion Batteries

Bonpet, a leader in innovative fire extinguishing technologies, offers unique solutions for combating fires involving **electrical panels** and **lithium-ion** (Li-ion) **batteries**.

Traditional fire extinguishers often fall short in these scenarios due to the risk of electric shock and the intense heat generated by Li-ion battery fires.

Bonpet's advanced fire suppression products address these challenges effectively, ensuring safety and reliability.



## **BONPET Fire Extinguish Liquid: A Comprehensive Solution for Modern Fire Safety**

Fire safety is an essential consideration in any environment, whether residential, commercial, or industrial. The BONPET Fire Extinguish Liquid has emerged as a revolutionary product in this field, offering a unique and effective solution for extinguishing various types of fires, including those involving lithium batteries and electrical boards. This article explores the features, benefits, and different models of the BONPET Fire Extinguish Liquid, demonstrating why it has become a trusted choice for fire safety.

### **What is BONPET Fire Extinguish Liquid?**

The BONPET Fire Extinguish Liquid is a specialized fire extinguishing agent designed to combat fires quickly and efficiently. Unlike traditional fire extinguishers, BONPET uses a liquid-based solution housed in a compact container. This liquid is formulated to react rapidly with the heat and flames of a fire, creating a cooling and smothering effect that effectively extinguishes the fire.

### **How Does BONPET Work?**

The working mechanism of BONPET is based on a unique chemical reaction.

When exposed to fire, the BONPET liquid undergoes a rapid endothermic reaction, absorbing a significant amount of heat from the flames.

This not only cools the fire but also produces gases that help to smother the fire by displacing oxygen, which is essential for combustion. The result is a swift and efficient extinguishing of the fire, preventing it from spreading further.

### **Benefits of BONPET Fire Extinguish Liquid**

1. **Fast and Effective:** BONPET is known for its rapid response to fires, extinguishing them in a matter of seconds.
2. **User-Friendly:** The simplicity of using BONPET makes it accessible to everyone, even those without prior fire safety training.
3. **Minimal Residue:** Unlike traditional fire extinguishers that leave behind significant residue, BONPET leaves minimal cleanup, preserving the integrity of the area affected by the fire.
4. **Versatility:** BONPET can be used on various types of fires, including Class A (ordinary combustibles), Class B (flammable liquids), and Class C (electrical fires).
5. **Eco-Friendly:** The liquid used in BONPET is environmentally friendly, posing no harm to the environment or to human health. to users worldwide.





## **Effectiveness for Lithium Battery Fires**

### **Understanding Lithium Battery Fires**

Lithium batteries are common in many devices, from smartphones and laptops to electric vehicles and energy storage systems. However, they are prone to thermal runaway, a chain reaction that leads to extremely high temperatures and potential explosion.

### **Effectiveness of BONPET**

The BONPET Fire Extinguish Liquid is particularly effective against lithium battery fires due to its rapid cooling and oxygen displacement properties.

The liquid absorbs a substantial amount of heat, stopping the thermal runaway process, and produces gases that displace oxygen, essential for combustion.

Additionally, BONPET leaves minimal residue, reducing the risk of damage to surrounding electronic components.

## **Effectiveness for Electrical Board Fires**

### **Understanding Electrical Board Fires**

Electrical boards, or control panels, are essential components of various electrical systems. Fires in these boards can result from short circuits, overloaded circuits, or faulty components, leading to significant damage and potential system failures.

### **Effectiveness of BONPET**

For electrical board fires, the BONPET Fire Extinguish Liquid offers several advantages. Its non-conductive nature makes it safe to use on live electrical equipment, and its rapid extinguishing action ensures that fires are put out swiftly, minimizing downtime and preventing extensive damage to critical systems.





## **Models of BONPET Fire Extinguish Liquid**

### **1. BONPET AMPOULE**

Designed for residential and small commercial settings, the BONPET AMPOL model is compact and easy to use. It is ideal for kitchens, living rooms, and small offices, providing rapid response and minimal residue for fires in confined spaces.

### **2. BONPET SPRINKLER**

Integrating BONPET liquid into a sprinkler system, the BONPET SPRINKLER model is perfect for larger commercial and industrial environments. It offers automated fire suppression, providing continuous protection in warehouses, manufacturing plants, and large office buildings.

### **3. BONPET AEROSOL**

The BONPET AEROSOL model is a portable solution useful in various settings, including vehicles, boats, and outdoor activities. Its ease of storage and quick deployment make it a versatile and convenient option.

### **4. BONPET WALL-MOUNTED**

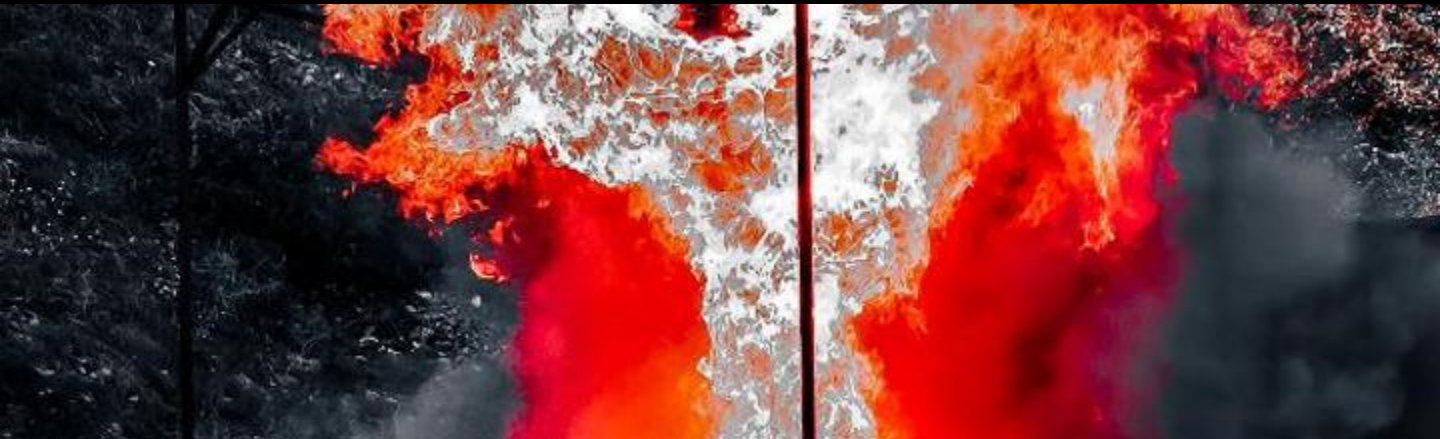
The BONPET WALL-MOUNTED model is designed for fixed fire suppression solutions in areas that require continuous protection. It automatically releases BONPET liquid when a fire is detected, making it suitable for corridors, stairwells, and other high-risk areas.

## **Conclusion**

The BONPET Fire Extinguish Liquid represents a significant advancement in fire safety technology. Its innovative design, rapid response, and versatility make it an essential tool for preventing and combating fires in various environments, including those involving lithium batteries and electrical boards.

With multiple models available, BONPET caters to a wide range of needs, from residential and small commercial spaces to large industrial facilities.

As fire safety continues to be a paramount concern, the BONPET Fire Extinguish Liquid stands out as a reliable and effective solution, offering peace of mind and robust protection to users worldwide.



## Why BONPET?

**Bonpet Liquid :** A water-based extinguishing solution that cools and prevents reignition.

**Unique Formula:** Ensures rapid fire suppression and safety.

**Applications:** Bonpet products are versatile and suitable for various settings:

- Residential: Homes and apartments
- Commercial: Offices, shops, and warehouses
- Industrial: Factories and manufacturing units
- Automotive: Vehicles and public transport
- Shipping: Yachts and Vessels

**Certifications and References:** Bonpet is committed to quality and safety, demonstrated by numerous international certificates and successful fire extinguishing records across various industries.

Bonpet offers a comprehensive range of fire extinguishing products that ensure safety and peace of mind.

Our innovative solutions are designed to meet the highest standards of fire protection, providing reliable and efficient fire safety for all environments.

**Probably the only  
product in the world  
that can extinguish  
lithium batteries**



# #1 WORLDWIDE



**Introducing the ultimate solution for combating Forest, Urban, and High Voltage Lithium Battery fires:** our advanced aqueous extinguishing solution.

This innovative material effectively cools fires and ensures re-ignition is impossible.

Certified according to European Standards EN2 and EN3-7:2004+A1:2007, our solution is ideal for fire categories A (solid materials), B (liquid fuels), and F (oils & fats).

It is the only European extinguishing material that simultaneously holds a UL Certificate of Compliance (No: E§16371) in accordance with the American Standard NFPA 18 for Wetting Agents, designed for mixing with water.

This certification applies to fire categories A and B, making it perfect for both Forest and Urban fires.





## **AUTOMATIC FIRE EXTINGUISHING AMPOULE**

Bonpet automatic fire extinguishing ampoule is the most effective product for extinguishing fire in a small and indoor areas without being constantly present and a fire extinguishing product with an aesthetic appearance.

Indispensable everywhere you assume that the temperature will rise rapidly, when the fire starts (ceiling or closed wall to the potential location for a fire).

The best effect for extinguishing fires of class A is when ampoule covers up to 16 m<sup>3</sup> closed space per unit, depending of fire protection demands. Suitable for extinguishing fires of classes A, B, C and F, including electrical panels and lithium-ion (Li-ion) batteries.

### **Advantages**

#### **Automatic operation without human presence.**

- Indoor use.
- It is easy to assemble and disassemble.
- 10 years life expectancy.
- 10 years warranty.
- Maintenance is not required.
- Effective on all types of Class A, B and F fires.
- Contains human and environmentally friendly extinguishing agent (halon-free).
- It can be thrown into the source of the fire.

#### **4 more advantages highlighted by our users:**

- There are no false alarms, it is activated only when the temperature rises.
- When extinguishing, it does not cause additional damage, the remaining liquid can be wiped off.
- It has an aesthetic appearance.
- Additional discounts on facility insurance with certain insurance companies.

### **The only fire extinguisher that puts out the fire without your presence**

When you install it in your kitchen, boiler room, boat or elsewhere, it becomes part of you. Namely, it monitors whether a fire has started in the room 24 hours a day. In case of temperature rise, it activates automatically and extinguishes the initial fire.



## Function

When a fire breaks out in a small enclosed area and the temperature rises, the 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 the endothermic process begins.

It takes the energy from the fire and starts to cool the area. As a side product of this endothermic reaction, small quantities of nitrogen and carbon dioxide are released.

Their function is to prevent the entrance of oxygen to the burning area.

Remaining components that do not decay, form a protective layer over the surface of the extinguishing liquid, which prevents re-ignition..

**Three ways to use:** (1) Automatically, (2) By throwing into the wall or ceiling (above the fire) so that the liquid is dispersed over the burning place (3) As a mixture for extinguishing (the contents of the ampoule mixed in a bucket of water)

**Maintenance:** Not needed.

**Composition:** set of Bonpet ampoules consist:

- specially made and shaped glass ampoule
- Bonpet liquid (400 ml)
- plastic spacers,
- metal bearing rosettes (painted or chrome-plated),
- holder.

**Extra offer:** - protective net.  
- for better stabilization of the ampoule at installation sites where vibrations occur, special stabilizing washers can also be used to reduce vibrations (vessels, work machines, etc.).

Technical characteristics

**Dimensions:** 300 × 60 mm

**Weight:** 1200 g

**Volume:** enclosed glass ampoule

**Content:** 600 ml of Bonpet liquid

**Operation:** automatic

**Warranty:** 10 years

**Extinguishing effect (volume enclosure):** 8m<sup>3</sup> surface





## **How can ampoule prevent a fire? How can it work automatically?**

In the event of a fire in a closed space, as the temperature in the room increases, the extinguishing liquid, which expands in the glass ampoule, also heats up.

At a temperature of the extinguishing liquid of approx. 85 C +/- 5 C, its expansion causes the glass to shatter, and the liquid falls into the space, where the endothermic process begins.

**This causes energy to be taken from the fire or current cooling in the room.**

**As a byproduct of the endothermic reaction, small amounts of nitrogen and carbon dioxide are released, which prevent oxygen from reaching the burning surface.**

**On the surface of the extinguishing liquid, the undissolved substances of the liquid form a film that prevents re-ignition.**

In the event that you are present in the room when the fire breaks out, you can also use the Bonpet ampoule manually by throwing it against the burning surface.

The Bonpet ampoule will shatter and instantly smother the fire.

## **Most fires start in the kitchen...**

In the case of kitchen fires Bonpet automatic fire extinguishing ampoules have proven to be a very effective means.

Even a minor inattention is enough when, due to an unexpected phone call, a visit from a neighbor or postman, or a crying child, we momentarily forget that food is cooking on the stove.

A fire can also be caused by a few drops of water falling into a heated pan. The water evaporates in an instant, and this causes an explosion, due to which the oil, dispersed in a mist, spills over the edge of the pan and causes a very violent burning.

Bonpet ampoule is used in apartments and houses:

- above the oven
- above the stove
- over an induction or glass-ceramic plate
- where there are potential sources of fire (dryer, air conditioner, boiler, control station, electrical panel etc.

Bonpet ampoule is available in several color combinations and aesthetically adapts to both classic and modern kitchens.





## BONPLET GRENADE

Bonpet grenades are used for extinguishing fires of classes A, B and F, in smaller concealed places, where with throwing the grenade we can actually extinguish the fire from a distance.

Grenade is the most practical fire extinguishing product, which can be attached to an accessible and frequent enough place.

It can be used by security guards on longer security patrol.

### Advantages

- Easy and safe to use.
- 2 years life expectancy.
- 1 year warranty.
- No maintenance costs.
- Effective against all types of fires (A, B and F).
- Human and enviromentaly friendly (without halons)..
- For multiple use, until empty.
- Aesthetic look.
- Suitable for extinguishing Li-Ion batteries up to 1.5kWh

**Way of extinguishing:** Manually.

We remove the safety switch, and we point a sprayer to the way of a fire, while pressing on the handle to extinguish a fire, with the distance of at least 1 meter. Electrical devices must be extinguished from a distance of at least 2 meters! For repeated use until completely empty.

Technical characteristics

**Dimensions:** 330 × 65 mm

**Bruto weight:** 740 g

**Volume:** 500 ml Bonpet liquid





## BONPLET SPRAY

Fire extinguishing spray Bonpet is a innovative and universal product, reusable and meant for safety purposes.

It is an effective side product for extinguishing fires of classes A, B and F in your home, in the garden, when camping, in the car, etc.

### Advantages

- Easy and safe to use.
- 2 years life expectancy.
- 1 year warranty.
- No maintenance costs.
- Effective against all types of fires (A, B and F).
- Human and environmentally friendly (without halons)..
- For multiple use, until empty.
- Aesthetic look.
- Suitable for extinguishing Li-Ion batteries up to 1.5kWh

**Way of extinguishing:** Manually.

We remove the safety switch, and we point a sprayer to the way of a fire, while pressing on the handle to extinguish a fire, with the distance of at least 1 meter. Electrical devices must be extinguished from a distance of at least 2 meters! For repeated use until completely empty.

Technical characteristics

**Dimensions:** 330 × 65 mm

**Bruto weight:** 740 g

**Volume:** 500 ml Bonpet liquid





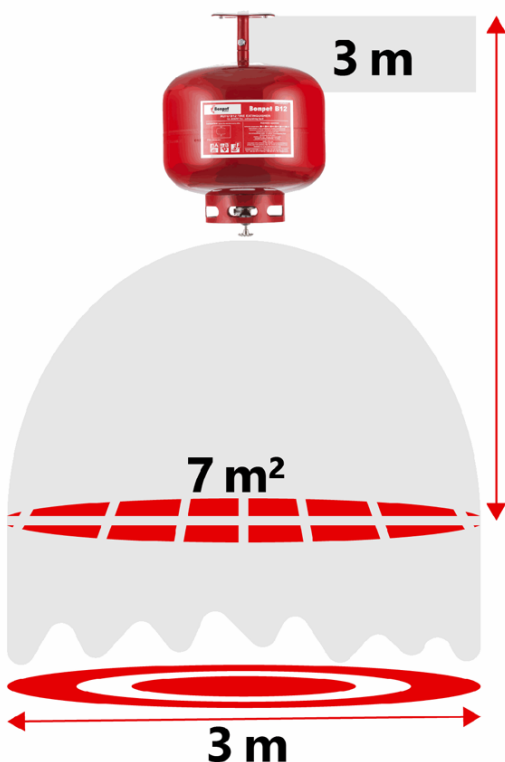
## AUTOMATIC FIRE PROTECTION

Automatic fire extinguisher is used in indoor areas for extinguishing initial fires types A, B and F.

It is suitable for installation in boiler rooms, workshops, for protection of certain sets of machines as well as other areas exposed by burning fats, oils or oil.

### Advantages

- Automatic usage.
- Usage in closed spaces.
- Easy to assemble or dismantle.
- 2 years warranty
- 20 years life expectancy, if properly maintained.
- Effective against all types of fires (A, B and F).
- Human and environmentally friendly (without halons).
- No false alarms. activates only when the temperature rises.
- Adjustable activation temperature.
- When extinguishing, it does not cause additional damage, the remaining liquid can be wiped off.



**Activation:** When the fire breaks out comes to a rapid increase of temperature.

The ampoule on the sprinkler nozzle falls apart and pressure in tank through nozzles steadily begins to spread out the extinguishing liquid on the fire.

The place of installation of automatic fire extinguisher must be available for maintenance and control pressure gauge.

**Different activation temperatures:** Our automatic fire extinguishers are available in different volumes (2,4,6 or 12L) and with different activation temperatures (from 57° to 182°C), depending on your requirements.

**Installation and extinguishing:** All variants of automatic extinguishers use the same type of nozzles. When the extinguisher activates, the nozzle spray is shaped like a parabola.

To achieve maximum coverage of **7 m²**, the extinguisher must be placed at a height of **3 meters** or more. In case of lower installation, the coverage area reduce



## CLASSIC FIRE EXTINGUISHER

- Manual use.
- Indoor and outdoor usage.
- Specially effective against oils and fats (class F).
- 2 years warranty.
- 20 years life expectancy, if properly maintained.
- Effective against all types of fires (A, B and F).
- Human and environmentally friendly (without halons).

**Function:** Preparations for extinguishing with the Bonpet extinguisher: we release the hose, extract the fuse, press on the release lever, press on lever of the handle, we point the stream of liquid on the source of the fire and move the handle right to left.

Bonpet 2l fire extinguishers are under constant pressure and come without a handle.

When the fuse is removed the handle only needs to be pressed for the extinguisher to be activated. It can be clearly seen on the pressure gauge.

Each extinguisher has instructions for use, but reading them immediately before use is impossible. **Read them now so it's not too late!**

**Maintenance:** Every year after the expiry of two years from the date of purchase.

**Volume:** Available in 2 variants, 2L and 6L

### Technical Characteristics

Fire fighting capability 2L: 8A, 55B, 25F

Fire fighting capability 6L: 27A, 144B, 75F

## Technical Characteristics


Fire fighting capability 2L: 8A, 55B, 25F

Fire fighting capability 6L: 27A, 144B, 75F




ΚΑΤΑΛΛΗΛΟΣ ΓΙΑ ΜΠΑΤΑΡΙΕΣ ΛΙΘΙΟΥ  
SUITABLE FOR LITHIUM BATTERIES






### ΠΥΡΟΣΒΕΣΤΗΡΑΣ | FIRE EXTINGUISHER


2L BONPET FIRE EXTINGUISHING LIQUID  
8A 55B 25F






1. ΑΦΑΙΡΕΣΤΕ ΤΗΝ ΑΣΦΑΛΕΙΑ  
REMOVE THE SAFETY PIN



2. ΣΤΟΧΕΥΣΤΕ ΣΤΗ ΒΑΣΗ ΤΗΣ ΦΩΤΙΑΣ  
AIM AT THE BASE OF FIRE



3. ΠΙΕΣΤΕ ΤΗΝ ΛΑΒΗ  
SQUEEZE VALVE LEVER

ΚΑΤΑΛΛΗΛΟΣ ΓΙΑ ΧΡΗΣΗ ΠΑΡΟΥΣΙΑ ΗΛΕΚΤΡΙΚΟΥ  
ΡΕΥΜΑΤΟΣ ΕΩΣ 1000V ΑΠΟ ΑΠΟΣΤΑΣΗ 1 ΜΕΤΡΟ  
ΑΕΡΙΣΤΕ ΤΟ ΧΩΡΟ ΜΕΤΑ ΑΠΟ ΤΗ ΧΡΗΣΗ

SUITABLE ON FIRES INVOLVING ELECTRICAL  
VOLTAGE UP TO 1000 V AT A DISTANCE OF 1m  
VENTILATE THE ROOM AFTER USE

- ΑΝΑΓΩΜΙΣΤΕ ΤΟΝ ΠΥΡΟΣΒΕΣΤΗΡΑ ΜΕΤΑ ΑΠΟ ΚΑΘΕ ΧΡΗΣΗ
- ΕΛΕΓΧΕΤΕ ΠΕΡΙΟΔΙΚΑ
- ΧΡΗΣΙΜΟΠΟΙΕΙΤΕ ΜΟΝΟ ΕΞΟΧΡΩΜΕΝΑ ΑΝΤΑΛΛΑΚΤΙΚΑ & ΥΛΙΚΑ ΓΙΑ ΤΟΝ ΣΥΓΚΕΡΙΜΕΝΟ ΤΥΠΟ ΠΥΡΟΣΒΕΣΤΗΡΑ
- ΠΡΟΣΤΑΤΕΥΣΤΕ ΤΟΝ ΠΥΡΟΣΒΕΣΤΗΡΑ ΑΠΟ ΠΑΤΕΤΟ ΧΡΗΣΙΜΟΠΟΙΕΙΤΑΙ ΤΟΝ ΠΥΡΟΣΒΕΣΤΗΡΑ ΜΟΝΟ ΕΝΤΟΣ ΤΗΣ ΘΕΡΜΟΚΡΑΣΙΑΣ ΚΑΙ ΠΕΡΙΟΧΗΣ ΛΕΙΤΟΥΡΓΙΑΣ ΤΟΥ
- ΚΑΤΑΣΒΕΒΤΙΚΟ ΥΛΙΚΟ: BONPET 2L
- ΕΚΔΕΣΗ ΔΟΚΙΜΗΣ: MPA Dresden No KB 185/14
- ΠΡΟΣΩΡΙΝΟ ΑΕΡΙΟ-ΑΙΣΤΟ (m2) 15 BAR, 20 °C
- ΜΕΓΙΣΤΗ ΠΙΕΣΗ ΛΕΙΤΟΥΡΓΙΑΣ: PS 18 BAR
- ΟΡΙΑ ΘΕΡΜΟΚΡΑΣΙΑΣ: Tbank 0°C, Tmax 49°C
- ΜΟΝΤΕΛΟ ΤΥΠΟΥ: BFE2
- ΚΑΤΑΣΚΕΥΑΣΜΕΝΟΣ ΣΥΜΦΩΝΑ ΜΕ ΤΟ EN 3-7
- ΡΟΠΗ ΣΥΣΦΟΓΗΣ ΚΑΙΣΤΡΟΥ: 45Nm
- ΠΙΣΤΟΠΟΙΗΤΙΚΟ ΑΝΔΑΛΟΧΗΣ: MIRTECH-01-2987CER33.2082401223

- REFILL AFTER ANY USE
- CHECK PERIODICALLY
- USE ONLY PRODUCTS AND SPARE PARTS IN CONFORMITY WITH THE AGREED MODEL
- PROTECT FROM FROST
- DO NOT USE OUTSIDE
- TEMPERATURE RANGE
- EXTINGUISHING MEDIA: BONPET 2L
- TEST REPORT: MPA Dresden No KB 185/14
- PROPRIANT GAS: NITROGEN (m2) 15 BAR AT 20°C
- MAXIMUM WORKING PRESSURE: PS 18 BAR
- TEMPERATURE RANGE: Tbank 0°C, Tmax 49°C
- MODEL TYPE: BFE2
- MANUFACTURED ACCORDING TO EN 3-7
- VALVE TIGHTENING TORQUE: 45Nm
- TYPE APPROVAL: MIRTECH-01-2987CER33.2082401223

Κατασκευαστής:  
**BONPET SYSTEMS d.o.o.**  
Cestmika cesta 30, 1420 TRBOVLJE, SLOVENIA  
Tel.: +386 3 56 14 720, Web: www.bonpet.si

Διανομέας:  
**LIFE SOLUTIONS A.E.**  
25ης ΜΑΪΟΥ 25, ΝΕΑ ΞΕΝΙΑ/ΑΤΤΙΚΗ, Τ.Κ.: 15239  
Τηλ.: +30 7550759 • Web: www.life-solutions.gr

**€ 1155**

PED 2014/68/EU  
MED 2014/90/EU



0437/2024

THE MANUFACTURER BONPET SYSTEMS d.o.o.  
TYPE  
80EU - SGS  
J - MIRTEC S.A.

THE MANUFACTURER BONPET SYSTEMS d.o.o.  
TYPE  
80EU - SGS  
J - MIRTEC S.A.

Batter  
4k  
Test fi  
25.0

ΚΑΤΑΛΛΗΛΟΣ ΓΙΑ ΜΠΑΤΑΡΙΕΣ ΛΙΘΙΟΥ  
SUITABLE FOR LITHIUM BATTERIES





### ΠΥΡΟΣΒΕΣΤΗΡΑΣ | FIRE EXTINGUISHER

6L BONPET FIRE EXTINGUISHING LIQUID  
27A 144B 75F



1. ΑΦΑΙΡΕΣΤΕ ΤΗΝ ΑΣΦΑΛΕΙΑ  
REMOVE THE SAFETY PIN



2. ΣΤΟΧΕΥΣΤΕ ΣΤΗ ΒΑΣΗ ΤΗΣ ΦΩΤΙΑΣ  
AIM AT THE BASE OF FIRE



3. ΠΙΕΣΤΕ ΤΗΝ ΛΑΒΗ  
SQUEEZE VALVE LEVER





ΚΑΤΑΛΛΗΛΟΣ ΓΙΑ ΧΡΗΣΗ ΠΑΡΟΥΣΙΑ ΗΛΕΚΤΡΙΚΟΥ  
ΡΕΥΜΑΤΟΣ ΕΩΣ 1000V ΑΠΟ ΑΠΟΣΤΑΣΗ 1 ΜΕΤΡΟ  
ΑΕΡΙΣΤΕ ΤΟ ΧΩΡΟ ΜΕΤΑ ΑΠΟ ΤΗ ΧΡΗΣΗ

SUITABLE ON FIRES INVOLVING ELECTRICAL  
VOLTAGE UP TO 1000 V AT A DISTANCE OF 1m  
VENTILATE THE ROOM AFTER USE

- ΑΝΑΓΩΜΙΣΤΕ ΤΟΝ ΠΥΡΟΣΒΕΣΤΗΡΑ ΜΕΤΑ ΑΠΟ ΚΑΘΕ ΧΡΗΣΗ
- ΕΛΕΓΧΕΤΕ ΠΕΡΙΟΔΙΚΑ
- ΧΡΗΣΙΜΟΠΟΙΕΙΤΕ ΜΟΝΟ ΕΞΟΧΡΩΜΕΝΑ ΑΝΤΑΛΛΑΚΤΙΚΑ & ΥΛΙΚΑ ΓΙΑ ΤΟΝ ΣΥΓΚΕΡΙΜΕΝΟ ΤΥΠΟ ΠΥΡΟΣΒΕΣΤΗΡΑ
- ΠΡΟΣΤΑΤΕΥΣΤΕ ΤΟΝ ΠΥΡΟΣΒΕΣΤΗΡΑ ΑΠΟ ΠΑΤΕΤΟ ΧΡΗΣΙΜΟΠΟΙΕΙΤΑΙ ΤΟΝ ΠΥΡΟΣΒΕΣΤΗΡΑ ΜΟΝΟ ΕΝΤΟΣ ΤΗΣ ΘΕΡΜΟΚΡΑΣΙΑΣ ΚΑΙ ΠΕΡΙΟΧΗΣ ΛΕΙΤΟΥΡΓΙΑΣ ΤΟΥ
- ΚΑΤΑΣΒΕΒΤΙΚΟ ΥΛΙΚΟ: BONPET 6L
- ΕΚΔΕΣΗ ΔΟΚΙΜΗΣ: MPA Dresden No KB 185/14
- ΠΡΟΣΩΡΙΝΟ ΑΕΡΙΟ-ΑΙΣΤΟ (m2) 15 BAR, 20 °C
- ΜΕΓΙΣΤΗ ΠΙΕΣΗ ΛΕΙΤΟΥΡΓΙΑΣ: PS 18 BAR
- ΟΡΙΑ ΘΕΡΜΟΚΡΑΣΙΑΣ: Tbank 0°C, Tmax 49°C
- ΜΟΝΤΕΛΟ ΤΥΠΟΥ: BFE2
- ΚΑΤΑΣΚΕΥΑΣΜΕΝΟΣ ΣΥΜΦΩΝΑ ΜΕ ΤΟ EN 3-7
- ΡΟΠΗ ΣΥΣΦΟΓΗΣ ΚΑΙΣΤΡΟΥ: 45Nm
- ΠΙΣΤΟΠΟΙΗΤΙΚΟ ΑΝΔΑΛΟΧΗΣ: MIRTECH-01-2987CER33.2082401224

- REFILL AFTER ANY USE
- CHECK PERIODICALLY
- USE ONLY PRODUCTS AND SPARE PARTS IN CONFORMITY WITH THE AGREED MODEL
- PROTECT FROM FROST
- DO NOT USE OUTSIDE
- TEMPERATURE RANGE
- EXTINGUISHING MEDIA: BONPET 6L
- TEST REPORT: MPA Dresden No KB 185/14
- PROPRIANT GAS: NITROGEN (m2) 15 BAR AT 20°C
- MAXIMUM WORKING PRESSURE: PS 18 BAR
- TEMPERATURE RANGE: Tbank 0°C, Tmax 49°C
- MODEL TYPE: BFE2
- MANUFACTURED ACCORDING TO EN 3-7
- VALVE TIGHTENING TORQUE: 45Nm
- TYPE APPROVAL: MIRTECH-01-2987CER33.2082401224

Κατασκευαστής:  
**BONPET SYSTEMS d.o.o.**  
Cestmika cesta 30, 1420 TRBOVLJE, SLOVENIA  
Tel.: +386 3 56 14 720, Web: www.bonpet.si

Διανομέας:  
**LIFE SOLUTIONS A.E.**  
25ης ΜΑΪΟΥ 25, ΝΕΑ ΞΕΝΙΑ/ΑΤΤΙΚΗ, Τ.Κ.: 15239  
Τηλ.: +30 7550759 • Web: www.life-solutions.gr

**€ 1155**

PED 2014/68/EU  
MED 2014/90/EU



0437/2024

THE MANUFACTURER BONPET SYSTEMS d.o.o.  
TYPE  
80EU - SGS  
J - MIRTEC S.A.

Batteries Li  
20kWh  
Test Report:  
Zina University  
22.21 a 25.34 2023





## TRAILER

### Advantages

- At least 10 years product life expectancy.
- 2 years warranty.
- Human and environment friendly (without halons).
- Maintenance is only bound on replacing Bonpet liquid.

Fire extinguishing trailer is because of its size and mobility ideal for extinguishing fires of classes A, B and F, outdoor or indoor, in industry (chemical, automobile, oil), docks, airports (extinguishing aircraft tires), all kinds of warehouses, varnishing chambers, electrical substation, gas stations and for extinguishing all means of transport, plastics, cellulose, tires, etc.

Bonpet trailer is available in 2 variants, Bonpet 500 and Bonpet 1000.

### BONPET 500

**Dimensions:** 3760 x 1760 x 1080 mm

**Weight:** 1300 kg

**Bonpet liquid volume:** 500 L

**Hose length:** 25-30 m

**Spurt length:** 30 m

**Powertrain:** gas

### BONPET 1000

**Dimensions:** double axel

**Weight:** 2200 kg

**Volume of Bonpet liquid:** 1000 L

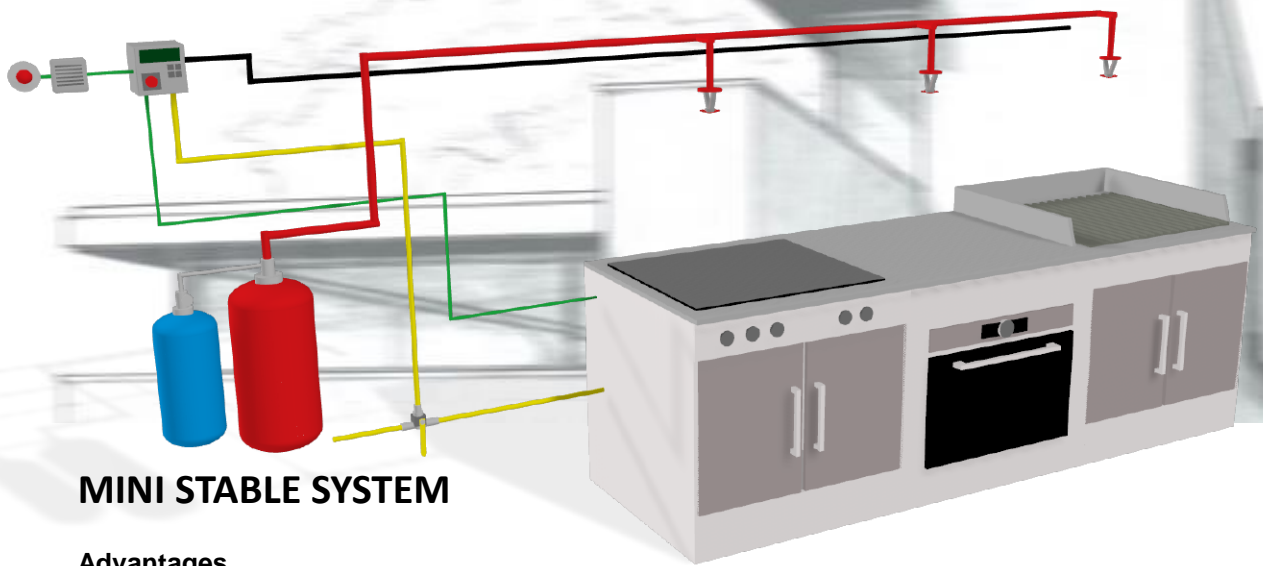
**Hose lenght:** 25-30 m

**Spurt lenght:** 30 m

**Powertrain:** diesel

Ensure the safety of your marinas, airports and other areas with the Bonpet trailer.





## MINI STABLE SYSTEM

### Advantages

- System only activates when the temperature rises.
- No false alarms.
- Bonpet liquid is environmentally and human friendly.
- 20 years lifespan with regular maintenance.
- 1 year warranty.
- Maintenance is bounded only on switching the liquid Bonpet while is not technically difficult
- Extinguishing without sealing a premises (in comparison with CO<sub>2</sub>).
- No additional damage during extinguishing and easy to clean after..
- It creates a layer on surface to prevent another ignition.
- Unlimited options for detecting and consequently extinguishing a fire in the early stages..
- Easy to install the flexible pipes for detecting the fire; the fire can be detected on all the locations with high stage of fire hazard, like on inaccessible locations.
- No outside factor can trigger the detector (like vibration, shock, high concentration of oil, fat or dust).
- Source and voltage cannot trigger the detector.

**Function:** It functions as a special pipe that acts like a heat detector. The pipe is flexible and elastic and it can be installed everywhere. On one end the pipe is connected to a special valve with a trap, on the other end to a manual trigger. The pipe is under the pressure of 18 bars, diameter is 6 mm. The pipe transforms and activates at the temperature of 160-180°C. In case of a fire high temperature and flames cause the explosion of the pipe which leads to a drop of a pressure in the pipe causing self- activation and extinguishing a fire.

**Option of manual activation:** It can be triggered by pressing on an activation button at the end of the flexible pipe. A component of the activation button is a manometer that measures the pressure in the pipe.

**Pipeline:** Behind the tank is a vent DN15 and behind of that vent, is a pipeline made of copper or galvanized iron or stainless steel, depending if it is installed indoor or outdoor. Pipes must be tested with a pressure test of 20 bars.

**Different applications:** Mini stable system can be adapted to the needs of the customer so that, machines, spaces with engines or other working surfaces are protected.

### Technical characteristics

Fire extinguishing media capacity: from 6 to 12 L

Push gas capacity: from 1 to 4 L

Working pressure: max 16 bar

Duration of dispersion: from 20 to 30 sek (depends on the system)

Surface area for ideal extinguishing effect: termo block 8m<sup>2</sup> or surface 10m<sup>2</sup>

Number of nozzles: max 9

## SIMPLE AND EFFECTIVE EXTINGUISHING SOLUTION

### Advantages

- Automatic activation
- Bonpet liquid causes NO damage during extinguishing.
- Bonpet liquid is enviromental and human friendly.
- With proper maintenance the life expectancy is at least 20 years.
- Costs of maintenance are signed with a contract..
- Free consulting.

### Function

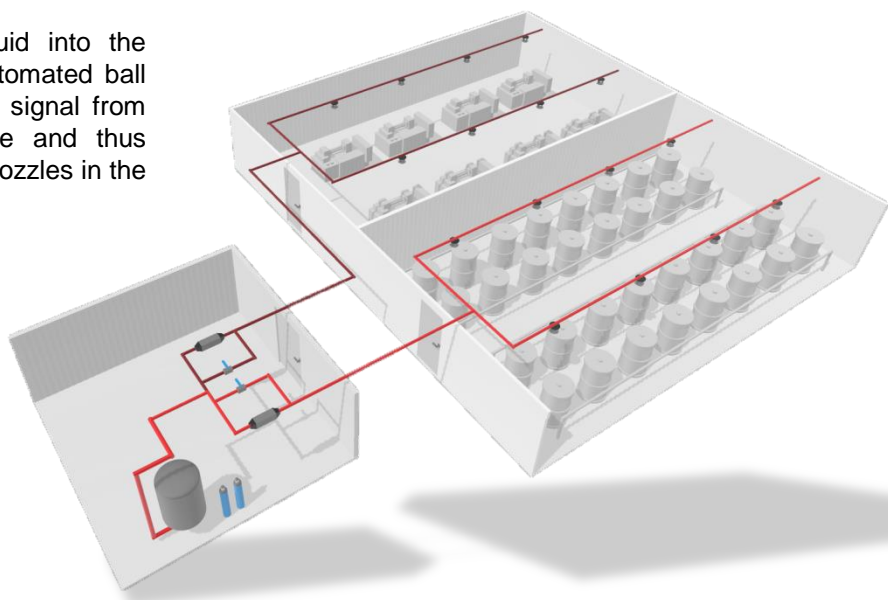
It works by spraying the fire extinguishing liquid. The installation of pipelines and jets is similar to the ones for water spraying system, the only difference is the quantity of extinguishing.

The main purpose when using water spraying system is, that the spraying water enables intervention of firefighters and that is why it has to spray longer.

The main purpose of fire extinguishing liquid Bonpet, is to extinguish a fire and because of its effect, the spraying time is shorter (around 20 seconds) and it does not need an irrigation. Because of this extraordinary feature the tank contains relatively small amount of liquid Bonpet (calculated according to an area of extinguishing).

Nitrogen creates pressure in the container with the extinguishing liquid Bonpet.

Flow of the extinguishing liquid into the pipeline is suppressed with automated ball valves which are opened by a signal from the fire fighting control centre and thus enable the flow of liquid to the nozzles in the fire extinguishing zones..





**Made by a unique formula**

## **BONPET LIQUID**

**Aqueous solution that extinguishes, cools and makes repeated ignition impossible.**

**Bonpet liquid** is a water solution of inorganic salts and organic compounds. Contact of a water solution and a fire causes, that the energy from a fire is used to heat and evaporate water and for endothermic decomposition of chemicals added in fire extinguisher.

Endothermic reaction and the release of gasses, suppressing fire on its surface.

The components of Bonpet liquid causes 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<sub>2</sub>, N<sub>2</sub>) 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.

Bonpet liquid prevents the fire to re-ignite.

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.

### Tests have shown:

After conducting standard fire extinguishing tests our results have shown, that only a small amount of Bonpet liquid is necessary to extinguish a fire.

The only thing that needs to be done is to coordinate appropriate input of fluid dynamics, which depends on the intensity and the class of the fire.

Experiments were carried out on our own and based on our own findings on the effectiveness of extinguishing and according to the requirements of the examiners.



**Made by a unique formula**

## BONPET LIQUID

### Compared to a gas extinguisher

By its effectiveness of extinguishing can be compared to extinguishing with gas. The difference is that with Bonpet liquid you do not have to fill up the whole room, just a thin layer of few millimeters above the surface of a fire is enough.

While decomposing endothermically, Bonpet liquid takes some 10 times more energy from a burning surface, than gas would. Extinguishing a fire with gas can cause re-ignition, if the gas runs off too quickly. However, that cannot happen while using Bonpet liquid.

### Compared to a water extinguisher

The amount of water for the same extinguishing effect, is higher when extinguishing with only water, especially because it is really hard to extinguish a fire on a vertical surface. After conducting a series of tests on an A standard fire with 6% of Bonpet liquid solution, our results have shown, that we have used 20-times smaller consumption of wet chemicals than extinguishing with water. This also means, that the collateral damage caused by a fire extinguishing product is smaller when extinguishing with Bonpet liquid.

### Comparison chart of different extinguishing media

	BONPET	CO2	Dust	Foam	Water
A – Regular Fire (Solid Burning Material)	Green	Red	Green	Green	Green
B – Fire of Inflammable liquids (Oil)	Green	Green	Green	Green	Red
F – Fire of organic fats and oil	Green	Green	Red	Red	Red
Efficiency	Green	Red	Red	Red	Red
Cooling effect	Green	Blue	Red	Green	Green
Mixture with water	Green	Red	Red	Green	Blue
Self-activated function	Green	Green	Blue	Blue	Blue
Usable in fixed fire-safety systems	Green	Green	Blue	Blue	Green
Human and environment friendly	Green	Blue	Blue	Blue	Green
Collateral damage	Green	Green	Red	Red	Red
Li-Ion Batteries	Green	Red	Red	Red	Red

**LEGEND: YES, PARTLY, CONDITIONAL, NO**

*Bonpet liquid can, if not cleaned off for longer time, cause corrosion on non-ferrous metals (copper, brass)..*



## LIVE DEMONSTRATION OF OUR PRODUCTS

The purpose of demo center is to show Bonpet way of firefighting, mostly to our partners, but also to everyone interested in demonstration of various types of media and different situations such as, for example:

Extinguishing with automatic fire extinguishing ampoule.

Extinguishing by throwing a grenade or ampoule.

Extinguishing with a mixture of Bonpet liquid from the ampoule with water (all four demonstrations are shown in Bonpet house size 8 m3).

Extinguishing flammable liquids with fire extinguisher, automatic fire Extinguisher with a sprinkler nozzle and with a stable system.

Extinguishing car tires.

Extinguishing waste with a fire extinguisher.

Extinguishing in an electric box with an automatic fire extinguisher ampoule.

Extinguishing cooking oil with spray.

Extinguishing gas cylinder with UNP (propane - butane).

Extinguishing various materials after pre-arranged agreement.

Contact us for more information at **[contact@armour.gr](mailto:contact@armour.gr)**

