



МТС **Снабжение**



We offer a range of innovations products in fire fighting

Main advantages of all products:

- No maintenance within up to 5 years
- No current supply
- Safe for human
- Wide range of application from - 40° C to + 60° C
- Easy to install
- Easy to remove from the surface
- No damage to protected object if installed properly
- Non-ozone-depleting



**Self-sufficient system
of firefighting
«GRIB»**



AUPT GRIB is designed for fire extinguishing of electrical cabinets, electrical panels in residential and industrial premises

As you know, about half of all fires happen due to faults in the wiring. The source of increased danger is electrical panels and electrical cabinets in residential premises and in production.

GRIB has a magnet for easy and quick installation on a metal surface



**Self-sufficient system
of firefighting
«GIPERBOLA»**

GIPERBOLA system has the highest fire extinguishing capability amongst all the systems of volumetric firefighting

Advantages:

- Wide range of application from - 40° C to + 60° C
- Resistant to blast and mechanical load
- No stress relief required for electric plant extinguishing
- No extra equipment and communication lines required
- Minimal maintenance required
- Easy to remove from the surface
- No damage to protected object if installed properly
- Non-ozone-depleting.



We would like to bring to your attention the up-to-date Russian development in firefighting – **PiroStrel** - a system of remote extinguishing.

PiroStrel

PiroStrel is an automatic thrower with extinguishing fillers. Each filler contains extinguishing substance inside of the polymeric cover.

“**Dry water**” is used as a filler. This substance is completely safe for human and environment as well as it doesn't damage your property. Due to its non-conducting features it can be used for extinguishing objects under voltage up to 35kW.

The thrower shoots fillers on the distance up to 100 m.

It's particularly important since in most cases it's difficult to get closer to the seat of fire using a standard fire extinguisher.

PiroStrel's rate of fire is 300 shoots per minute.

In one minute, the thrower can provide the seat of fire with the amount of fire-extinguishing substance capable to cope with up to 100 m³ of fire surface.



Shortly about technology:

Microencapsulating of fire extinguishing substance

We have developed a unique technology of microencapsulation of different types of gas used for fire extinguishing.

Our microcapsules hold on for 5 years. Inside they contain the fire extinguishing substances, which is discharged automatically when needed (i.e. in case of fire).

Achieving its starting temperature, the microcapsule explodes letting out the extinguishing agents.

Such agents are aimed to extinguish A2, B, E fire classes as well as are designed for electrical equipment protection.

Until the starting temperature is not reached, the microcapsules remain entire within the range of operating temperature from -50 to + 80°C.

Generators and fire extinguishers of new generation with ecologically clean gas and aerosol composition.

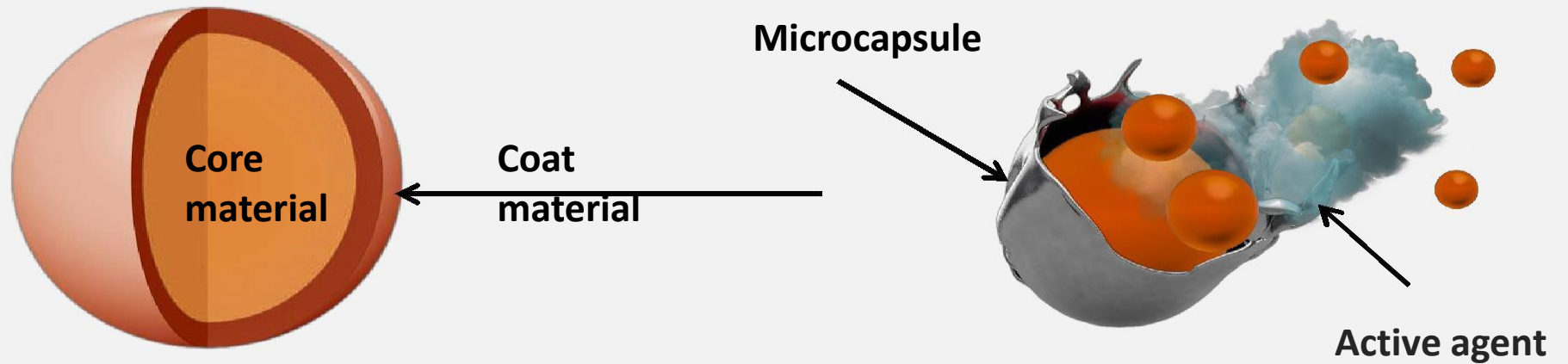
Operating principal of generator and fire extinguisher is based on generating of a extinguishing aerosol produced as a result of combustion of aerosol-forming charge placed inside of products.

The stream discharged from aerosol represent a “white fog”.

The extinguishing of the source of combustion is carried out via discharging the powerful aerosol stream directed on flame, chilling the object on fire and inhibiting the combustion process

Shortly about technology

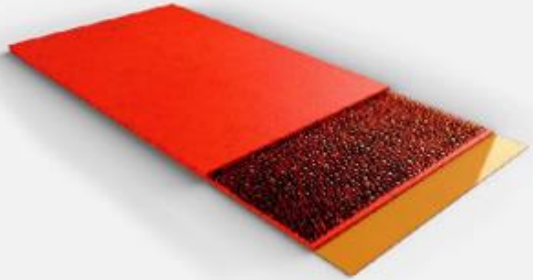
Microencapsulation



Fire-extinguishing agent with liquid and solid polymer types

Products based on Microencapsulation technology

plate-shaped fire extinguisher
PiroSticker



Our products are based on microencapsulation technology.

All our products contain inside dozens of thousands microcapsules filled with fire extinguishing agent which enables if reached the determinate temperature and fire occurrence takes place.

In case of fire, the microcapsule explodes discharging the extinguishing gas, which displace oxygen, chill the surface and suppress fire.

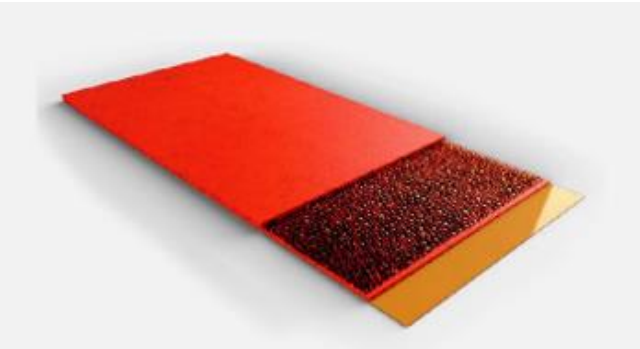
Fire extinguishing agent is ecologically safe, doesn't cause harm to human's health and doesn't damage equipment

cord-shaped fire extinguisher
Fipron - CORD



plate-shaped fire extinguisher
PiroSticker

PiroSticker — ultra-compact, independent, local fire extinguishing mean intended to protect from fire electrical outlets, distribution boards, electricity closets and other electrical equipment with space limits from 0,2 to 60 L.



Application area:

- electrical outlets
- distribution board
- electrical equipment with limited application area (from 0,2 L to 60

cord-shaped fire extinguisher
Fipron-CORD



Fipron-Cord— innovative independent fire extinguishing mean compound of composite materials. It represents a mix of microcapsules with an inner heating agent.

When exposed to fire, a heating agent in a cord enables followed by a chemical reaction through the whole length of cord.

Such reaction comes with heat impact that leads to explosion of all microcapsules and release fire heating substance

Application area

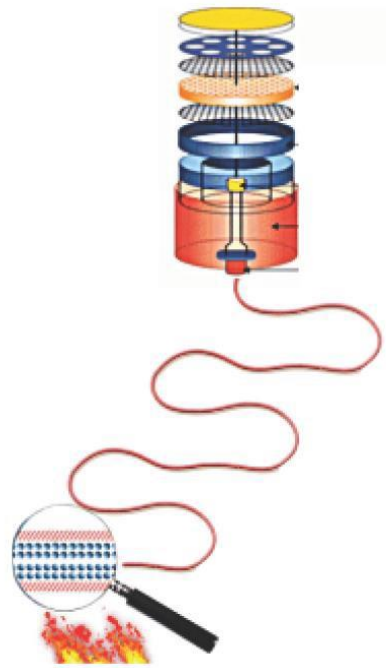
- Electricity closet up to 4000 L
- Cable raceway
- Server room up to 4000 L

Advantages of PiroSticker and Fipron-Cord

- High extinguishing efficiency (at the proper seat of fire)
 - High level protection of electrical equipment
 - Ultra-compact
 - No maintenance within up to 5 years
 - No current supply
 - Safe for human; don't damage equipment
 - Easy to install
 - Wide range of application
- (environmental conditions: temperature range from -50 C° to +80 C°)



Aerosol generator “MAG”



Aerosol generator “MAG”

is intended to extinguish fire of A,B,C and E classes in enclosed spaces.

The extinguishing agent is safe for human and doesn't require people evacuation.

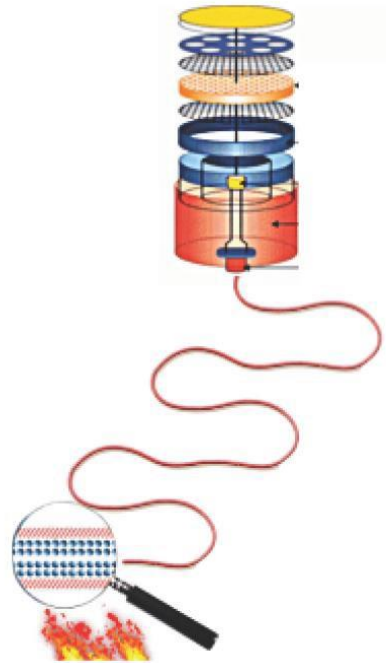
The fire extinguishing occurs due to a chemical reaction therefore interfering in combustion process with no oxygen isolation.

The actuation of the generator occurs by means of linear heat detection under given temperature (short circuit of electric battery takes place) or by means of PiroKord when placed in the seat of fire.

<i>MTS-MAG</i>	<i>50 MTS-MAG</i>	<i>100 MTS-MAG 200</i>
50 L	100 L	200 L

Advantages of Aerosol generator “MAG”:

- High efficiency of fire extinguishing
- Specifically for equipment protection
- Extinguish A,B,C,E fire classes
- No maintenance required within up to 5 years
- Easy to install
- Safe for human; don't damage equipment
- No pressure excess inside the generator
- Extinguish by means of fire suppression with no oxygen isolation



Generator of fire extinguishing aerosol «MAG»

Aerosol fire extinguishers Mag hereinafter jointly referred to as “Fire Extinguishers” are designed to suppress A2, B and C as per GOST standard 27331-87.

Fire Extinguishers “MAG” ensure effective fire extinguishing of liquid, solid and gaseous substances particularly ones of hydrocarbonic origin (e.g. petrol, petroleum derivate, natural gas, combustive and lubricating materials, etc.), as well as heavy electrically powered equipment up to 35000 V (fire type E).

Generator of fire extinguishing aerosol isn't intended to suppress fires that involve metals and other substances, which burn without air contact or are subject to smoldering combustion.

Operating temperature of Generator of fire extinguishing aerosol ranges from - 50° C to + 60° C.

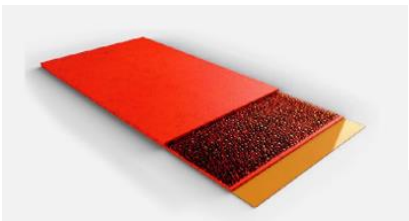
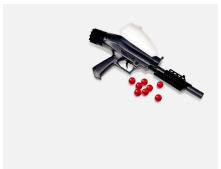
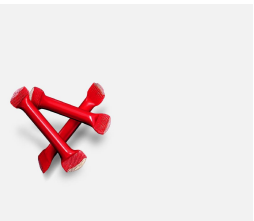
Segments of the Market:

Our products can be used to protect from fire in wide range of the market segments:

- Transport (auto, train, underground)
- Government structures
- Household
- Factories
- Construction
- Mines
- Oil, Gaz industry
- Etc.

Products characteristics and segmentation by area of using:

Name of the product	Extinguishing volume	Maximum supply voltage of electrical equipment	Segments of the market	Area of using
Grib	From 0,03 м3 up to 0.1 м3	Up to 35 κW	Domestic and industrial applications	Electrical panels and electrical cabinets in residential premises and in production.
Giperbola	From 0,03 м3 Up to 2,2 м3	Up to 35 κW	Domestic and industrial applications	At checkpoints, dispatch machines, power plants, railway transport, electric transport, etc. In television and radio equipment and computer technology. Electrical cabinets.
PiroStrel	From 0,01 м3 up to 30 м3	Up to 35 κW	Domestic and industrial applications	Electrical cabinets.
PiroSticker	From 0,04 Up to 65 liters	Up to 35 κW	Domestic and industrial applications	At checkpoints, dispatch machines, power plants, cable mines, railways, electric vehicles, etc. Effectively use as a consumer product in sockets, television and radio equipment, computer equipment
Fipron-Cord	From 50 up to 500 liters	Up to 35 κW	Domestic and industrial applications	At checkpoints, dispatch machines, power plants, railway transport, electric transport, etc. In television and radio equipment and computer technology.





МТС Снабжение

Thank you for attention!
We are for cooperation!