

TECHNICAL SHEET STATIONARY (ELECTRICAL)

PRODUCT DESCRIPTION AND DATA SHEET

ESP FIRE STRYKER is an automatic, fixed aerosol inhibitor with remarkable extinguishing capability. It is non-toxic and environmentally safe. The extinguishing compound is encapsulated in a stainless steel casing of various sizes, according to each model of ESP FIRE STRYKER (see specifications section). The external metallic casing is equipped with mounting brackets suitable to be wall or floor mounted and with two electrical cables to serve as connections for the electric igniter to the remote temperature/smoke sensors (both to be activated either in the automatic or manual modes).

The use of a potassium powder jet - a unique method among fire extinguishers - involves the vaporization of the powder in the environment followed by the condensation of its extinguishing substance. The product works by interrupting a fire's chain of reaction (the "auto-catalyst" of the fire). The device is composed of stable, solid minerals; it does not contain gas and is not pressurized. The aerosol-like jet is only produced when the charger is stricken with its base. The produced aerosol jet is essentially an inert salt that emits gas already present in the atmosphere.



This process allows ESP FIRE STRYKER to extinguish all types of fires through saturation. Its slow biodegradation in the environment furthers the prevention of subsequent fires.

The extinguishing process involves two different reactions: one is physical and the other, chemical. **The physical reaction** relates to potassium's tendency to oxidize rapidly in air. When in contact with air, alkaline salts consume great quantities of oxygen, thus depriving fires of oxygen. **The chemical reaction** is created through the stable link between potassium particles and the fire's combustion particles.

Through the two reactions, a quick oxidation process takes place, immediately transforming the jet from a solid state into a gaseous state which frees the potassium particles. These atoms are able to intercept and interrupt any other free particles produced by the fire's chain reaction combustion process. Potassium has strong inhibitor qualities, due to its weak ionization energies.



FEATURES

ESP FIRE STRYKER potential impact on the environment and on users:

- ODP Ozone Depletion Potential = zero
- ATL Atmospheric Life Time = zero
- Activation time: Immediate
- Usability temperature: from -140° F to +320° F
- Granulometry: from 2 to 4 microns
- Steam: none
- Residue after use: negligible
- Does not produce any "organic accumulation"
- Environmentally safe
- The device is not pressurized
- The device is not considered hazardous material
- GWP Global Warming Potential = zero
- Electric conductivity: none
- Electrostatic discharge: none
- Usability humidity: up to 98% U.R.
- Corrosiveness: none
- Thermal shock: none
- Not dangerous to human health
- Non-toxic
- Unlimited shelf life
- The device does not need to be tested
- The device does not need maintenance

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APPLICATIONS

Due to its fast activation and response time, ESP FIRE STRYKER is suitable for use in indoor applications such as:

- WORKSHOPS
- GENERAL INDUSTRIAL HAZARDS
- SMALL BOATS
- TELECOMMUNICATION AND PROCESS CONTROL ROOMS
- DATA PROCESSING FACILITIES
- GENERATOR ENCLOSURES

ESP FIRE STRYKER is capable of extinguishing fires in different classes:

- Class A: Solid material, ordinary combustibles, such as wood, paper, fabric, plastics etc.
- Class B: Flammable liquids, such as gasoline, oil based paints, solvents, alcohol, acetone, etc.
- Class C: Gaseous category: GLP, methane, acetylene, etc.
- Class E: electrical equipment fires subject to voltages up to 100.000v at a distance of 1m; Cable galleries, distribution cabinets, electronic devices

ESP SRL (MANUFACTURER) EXISTING CERTIFICATIONS AND TEST REPORTS

- ISO 9001:2008 (Standards for quality management systems)
- Declaration of CE Conformity
(Certifies that product has met EU consumer safety, health or environmental requirements.)

Full certifications and test reports available upon request

SPECIFICATIONS

Parameter	100G1E	200G2E	500G5E	1000G10E	2000G20E	3500G35E	5000G50E
Extinguishing Mass (Kg.)	0.10	0.20	0.50	1.00	2.00	3.50	5.00
Weight (Kg.)	0.25	0.35	3.5	6	14	21	30
Width (mm.)			70	70	120	140	200
Length (mm.)	205	250	220	320	350	400	440
Height (mm.)			200	250	300	340	400
Diameter (mm.)	35	35					
Discharge Time (Sec.)	50	90	60	90	100	105	130
Minimum ignition current in A	0.37	0.37	0.37	0.37	0.37	0.37	0.37
Suggested ignition in A	≥ 0,9	≥ 0,9	≥ 0,9	≥ 0,9	≥ 0,9	≥ 0,9	≥ 0,9
Minimum current time to ignite	2 ms at 1,0 A	2 ms at 1,0 A	2 ms at 1,0 A	2 ms at 1,0 A	2 ms at 1,0 A	2 ms at 1,0 A	2 ms at 1,0 A



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COVERAGE PARAMETERS

PART NUMBER	MODEL	MAX VOLUME COVERAGE CUBIC METERS
100G1E	100E	1.5
200G2E	200E	3
500G5E	500E	7.5
1000G10E	1000E	15
2000G20E	2000E	30
3500G35E	3500E	52.5
5000G50E	5000E	75

HANDLING / STORAGE PARAMETERS

Normal attention in handling.

In case of unintentional activation of the flame inhibitor, wait for the complete aerosol discharge and ventilate the area.

Avoid the direct contact of the product with open flames.

Store in an environment between -10°C and +50°C (+14°F and +122°F).

Packaging in cardboard boxes; do not pile the boxes higher than 2 meters

TRANSPORTATION CLASSIFICATION CODES

Transport by railway (RID/ADR)	ADR 4.1
Transport by sea (MDD rule)	4.1
Transport by plane (ICAO-IATA rule)	Class 5.1, Packing Group III
UN Identification Code number	UN 3178

DISCLAIMER

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