

TECHNICAL SHEET PORTABLE

PRODUCT DESCRIPTION AND SPECIFICATIONS

ESP FIRE STRYKER is a manual, portable aerosol inhibitor with remarkable extinguishing capability. It is non-toxic and environmentally safe. The device is a small, compact, lightweight cylinder: the upper part of the device is a metal tube containing the extinguishing charge. The lower part of the device is composed of plastic and serves as a support handle.

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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PORTABLE MODELS AND APPLICATIONS

MODEL	DIMENSIONS	JET EMISSION TIME
5B Household Model	approximately 10 inches long x 1.3 inches diameter Weight: approximately 0.5 pounds	Jet emission time: approx. 25 seconds active
8B Professional Model	approximately 10.2 inches long x 1.3 inches diameter; Weight: approximately 0.6 pounds	Jet emission time: approx. 50 seconds active
13B Nautical Model	approximately 12.9 inches long x 1.3 inches diameter; Weight: approximately 1.2 pounds	Jet emission time: approx. 100 seconds active

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

- HOMES
- OFFICES
- TELECOMMUNICATION AND PROCESS CONTROL ROOMS
- CARS
- RVs
- CAMPSITES
- TRUCKS
- SMALL BOATS
- WORKSHOPS

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 5B-8B-13B: 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.)

PRODUCT CERTIFICATION:

- RINA, Registro Italiano Navale, Italian Naval Register (Italy)
- BAM - Bundesanstalt für Materialforschung und - prüfung: Zulassungszeichen, Federal Institute for Materials Research and Testing (Germany)
- Zertificat Swiss TÜV (Switzerland)
- POZHTEST certification body in GOST R system and CFS system (Russia)
- India - Mumbai Fire Brigade (Electric Panels, Commercial, Retail, Government, Residential, Public and Private Enterprises)
- India - Delhi Fire Services (Government of National Capital Territory of Delhi Headquarters)
- Oman - Royal Oman Police (Directorate General of Civil Defense, Department of Prevention of Fire Hazards)
- South Africa - SAMSA - South African Marine Safety Association (Pleasure Vessels up to 100 GT)
- Zambia - Lusaka City Council (Engineering Services Department), Lusaka Fire Brigade
- Turkey - Turkish Standard Institute (TSE)
- Non-explosive certificate

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TEST REPORTS:

- AFITI, Association for the Promotion of Fire Research and Safety Technology (Spain)
- SABS ESP 004, South African Bureau of Standards (South Africa)
- SABS ESP 005, South African Bureau of Standards (South Africa)
- SABS ESP 100KV, South African Bureau of Standards (South Africa)
- Swiss TS Technical Service AG, Safety and Environmental Technology (Switzerland)
- Science of Materials Department of Chemical Engineering (Italy)
- Ministero delle Infrastrutture e dei Trasporti, Ministry of Transportation (Italy)

Full reports available upon request

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

NATO CLASSIFICATION CODES

13-digit NATO STOCK NUMBER NSN for the ESP FIRE STRYKER :

Model 5B-8B NSN 4210151935049

Model 13B NSN 4210151935050

NIN - National Item Identification Number A23900

Manufacturer NCAGE number AJ344

DISCLAIMER

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