TECHNICAL SHEET PORTABLE FIRESTRYKER

PRODUCT DESCRIPTION AND SPECIFICATIONS

FIRESTRYKER flame suppressant 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 FIRESTRYKER to extinguish fires through saturation. Its slow bio-degradation 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 tendencyto 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 can 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.

FIRESTRYKER 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 1000v at a distance of 1m; Cablegalleries, distribution cabinets, electronic devices

FEATURES

FIRESTRYKER potential impact on the environment and on users:

- Residue after use: negligible
- Steam: none
- Activation time: Immediate
- Environmentally safe
- Not pressurized
- Not considered hazardous material
- Not dangerous to human health
- GWP Global Warming Potential = zero
- Electric conductibility: none
- Electrostatic discharge: none
- Usability humidity: up to 98% U.R.
- Thermal shock: none
- No testing needed
- No maintenance needed
- Non-toxic
- Corrosiveness: none
- Does not produce any “organic accumulation”
- ODP Ozone Depletion Potential = zero
- ATL Atmospheric Lifetime = zero
- Usability temperature: from -140° F to +320° F
- Granulometry: from 2 to 4 microns

PORTABLE MODELS AND APPLICATIONS

DIMENSIONS:

Length:	32.8cm
Diameter:	3.3cm
Weight:	365g
Jet Emission Time:	100 seconds

Due to its fast activation and response time, FIRESTRYKER is suitable for use in indoor and outdoorapplications such as:

- HOMES
- PEOPLE MOVERS
- MOTORBIKES
- JET SKI'S
- SMALL BOATS
- HIKING
- TELECOMMUNICATION AND PROCESS CONTROL ROOMS
- CARS
- RVs
- CAMPER TRAILERS & CARAVANS
- CAMPSITES
- TRUCKS
- FLEET VEHICLES
- SMALL BOATS
- WORKSHOPS
- OFFICES
- SCHOOLS

HANDLING / STORAGE PARAMETERS

Normal attention in handling, in case of a casual primer of the inhibitor wait for the complete aerosol discharge and carry on with the air change in the environment. Avoid the direct contact of the product with free flames.

Store at a temperature between -10°C and +50°C (-50 degree F and + 122 degree F)
Packaging in cardboard boxes; do not pile the boxes higher than 2 meters

ESP SRL (MANUFACTURER) EXISTING CERTIFICATIONS AND TEST REPORTS

- ISO 9001:2000 (Standards for quality management systems)
- Declaration of CE Conformity
  (Certifies that product has met EU consumer safety, health or environmental requirements.)

PRODUCT CERTIFICATION:

- BSI Australia – Product Verification AS/NZS 1850:2009
- 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 (Rusia)

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)
- Science of Materials Department of Chemical Engineering (Italy)
- Ministero delle Infrastrutture e dei Trasporti, Ministry of Transportation (Italy)
- Ministero degli Interni, Homeland Security (Italy)

Full reports available upon request

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