



## MATERIAL SAFETY DATA SHEET

SECTION 1: Chemical product and company Identification	
Product name/Trade name	ESP004; ESP 005
Material uses	Flame inhibitor
Manufacturer	E.S.P. S.r.l. C.so Traiano, no. 159 10127 Torino - Italy
Manufacturing Plant:	Strada per Chieri, no. 109 14019 Villanova d'Asti Asti - Italy Phone +39/0141-94 62 58 Fax +39/0141-94 60 33 Email: <a href="mailto:info@espmangiafuoco.it">info@espmangiafuoco.it</a> Website: <a href="http://www.espflameinhibitor.com">www.espflameinhibitor.com</a>

SECTION 2: Compositions, Information on Ingredients	
Extinguishing Charge	Polymerized mixture of Organic and Inorganic Salts
Fluid Aerosol	Particulates of Potassium Salts, Nitrogen and Water Vapor

SECTION 3: Hazards Identification	
European Directive 67/548/CE - 99/45/CE	
Emergency overview:	
Extinguishing charge	Exothermic reaction during functioning
Fluid Aerosol	High temperature at a limited distance from dispenser. May cause eye and skin irritation. May be harmful if inhaled.

SECTION 4: First Aid Measures	
Body	Extinguishing charge: None, contact when the flame inhibitor is assembled is impossible. Do not touch the tube of the dispenser during/after use.
Skin / Eye Contact	Fluid Aerosol: after contact, wash/flush immediately with running water. Medical attention is necessary in case of direct contact burns

SECTION 5: Fire and Explosion Data	
Flammability of the product	Beginning of self ignition phenomena over 300°C (over 572°F).

SECTION 6: Accidental Release Measures	
No particular action: the emission of the extinguishing charge when the flame inhibitor is assembled is impossible, as it is inert material.	



**SECTION 7: Handling and Storage**

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 mt  
 Transportation in conformance with ADR Class 4.1  
 Medical attention is unnecessary.

**SECTION 8: Exposure Controls, Personal Protection**

No individual protection, stick to the instructions legible on the product and inside each packaging box.

**SECTION 9: Physical and Chemical Properties**

Extinguishing charge physical state	from 20°C solid to 0°C solid (from 62°F solid to 32°F)
Self Ignition Temperature	about 350°C (about 662°F)
Conductivity	Non conductor
Fluid Aerosol physical state	Gaseous
Exit temperature	high, safety distance from supply source 1mt
Conductivity	Non conductor up to 100.000 Volt

**SECTION 10: Stability and Reactivity**

The product is stable with regards to the temperature and environmental pressure.  
 Do not expose to the contact with free flames.  
 During use no dangerous decomposition products are produced.

**SECTION 11: Toxicological Information**

No toxicity

**SECTION 12: Ecological Information**

Non toxic; no ecological risks

**SECTION 13: Disposal Considerations**

Waste must be disposed of in accordance with national, state and local environmental control regulations.

**SECTION 14: Transport Information**

ADR classification (RID/ADR) PIN	ADR 4.1 UN CODE 3178 PACKING GROUP III
IMDG classification (MDD) PIN	ADR 4.1 UN CODE 3178 PACKING GROUP III
IATA classification (ICAO-IATA) PIN	ADR 4.1 UN CODE 3178 PACKING GROUP III



<b>SECTION 15: Other Regulatory Information</b>	
No restrictions to commercialization	
EC Classification/Labeling	Do not touch metal cylinder during and after use. Risk of burning > 90°C (>194°F) Keep out of the reach of children Do not point the aerosol jet at people The product does not extinguish live coal Do not disassemble

<b>SECTION 16: Other Information</b>	
Carefully read instructions before use.	
Documentation: analysis and test report by the Polytechnic of Turin, Science of Material & Chemical Engineering Department	
Validated and verified by	Mr. Giuseppe Lavesi
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