



Material Safety Data Sheet

Section 1. Chemical Product and Company Identification	
Product Name/ Trade Name	ESP004 8B; ESP005 13B
Manufacturer	E.S.P. SRL - Strada per Chieri, 109 14019 VILLANOVA D'ASTI (AT), ITALY Tel. +39 0141 946258; fax +39 0141 946033
Synonym	
Chemical name	Not available.
Chemical Family	Not available.
Chemical Formula	Not applicable.
Material Uses	FLAME INHIBITOR
	Code ---
	CAS# ---
	In Case of Emergency Call ---

Section 2. Composition, Information on Ingredients	
Name	Classification
EXTINGUISHING CHARGE:	Potassium Nitrate, Organic Oxidizer, Plasticizing Resin
FLUID AEROSOL:	Potassium Carbonate, Ammonium Bicarbonate and Potassium Bicarbonate
For additional information regarding European classification see sections 15 & 16.	

Section 3. Hazards Identification	
Emergency Overview	Extinguishing charge: inflammable. 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: contact when the flame inhibitor is assembled and completed is impossible. Do not touch the tube of the dispenser during/after using the inhibitor. Medical attention is not necessary.
Skin/Eye Contact	FLUID AEROSOL: Skin: after contact, wash immediately with running water. Eye: Check for and remove any contact lenses. Flush with running water.
Inhalation	FLUID AEROSOL: Allow the victim to rest in a well ventilated area.
Ingestion	FLUID AEROSOL: Not applicable.

Continued on Next Page

Section 5. Fire and Explosion Data	
Flammability of the Product	Beginning of self-ignition phenomena over 300°C (over 572° F)
Autoignition Temperature	Beginning of self-ignition phenomena over 300°C (over 572° F)
Flash point	Beginning of self-ignition phenomena over 300°C (over 572° F)
Flammable Limits	Not available.
Products of Combustion	Fluid Aerosol
Explosion Hazards in Presence of Various Substances	Not applicable.
Fire Fighting Media and Instructions	Not applicable. Not applicable.
Special Remarks on Fire Hazards	Not applicable.
Special Remarks on Explosion Hazards	Non explosive.

Section 6. Accidental Release Measures	
Small Spill	Not applicable.
Large Spill	Not applicable.
	No particular action: the emission of the extinguishing charge when the inhibitor is assembled and completed is impossible.

Section 7. Handling and Storage	
Storage	Normal attention in handling, in case of a casual primer of the inhibitor wait for the complete aerosol discharge and carry on with air change. 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)
Handling Procedures and Equipment	Normal attention in handling. Packaging in cardboard boxes; do not pile the boxes higher than 2 meters

Section 8. Exposure Controls, Personal Protection	
Engineering Controls	FLUID AEROSOL: use process enclosures, local exhaust ventilation. -- --
Personal Precautions	No individual protection, stick to the instructions legible on the product and inside each packaging box. -- --

Continued on Next Page

Section 9. Physical and Chemical Properties

Extinguishing charge physical state:	from 20° solid, to 0° solid
Self ignition temperature:	About 350° C (about 662° F)
Conductivity:	Non conductor
Fluid Aerosol physical state:	gaseous
Conductivity:	Non conductor
Specific Gravity	Not available
Density	Extinguishing Charge: 1,6 gr./cbm
Vapor Pressure	Not applicable.
Vapor Density	Not applicable.
Volatility	Not applicable.
Odor	Odorless
Evaporation Rate	Not available.
Viscosity	Not available.
Water/Oil Dist. Coeff.	Not applicable.
Solubility	Extinguishing Charge: immediately insoluble. After 1 month: soluble.
Flash Point	Not available.

Section 10. Stability and Reactivity

Stability	This product is stable with regards to the temperature and environmental pressure
Instability Temperature	About 350° C (about 662° F)
Conditions of Instability	Do not expose to the contact with free flames; During use no dangerous decomposition products are produced.
Incompatibility with Various Substances	Not applicable.
Corrosivity	Non corrosive
Special Remarks on Reactivity	Not available.

Section 11. Toxicological Information

Routes of Entry	No toxicity
Toxicity to Animals	No toxicity
Special Remarks on Toxicity to Animals	Not applicable
Acute Effects	
Eye Contact	Extinguishing charge: Not applicable. Fluid Aerosol: mildly irritating to the eyes.
Skin Contact	Fluid aerosol: slightly hot.
Sensitization	Not available
Ingestion	

Continued on Next Page


Inhalation	Not available.
Remarks	Not available.
Chronic Effects on Humans	Not available. Not available. Not available. Not available.
Remarks	Not available.

Section 12. Ecological Information	
Ecotoxicity	Non toxic.
BOD5 and COD	Not available.
Products of Biodegradation	Not available.
Biodegradability	
Special Remarks	No ecological risks

Section 13. Disposal Considerations	
Waste Information	----- Waste must be disposed of in accordance with federal, state and local environmental control regulations.
Waste Stream	Not available.

Section 14. Transport Information	
ADR Classification	ADR CLASS 41.
PIN	UN Code #3178 Packing Group III
IMDG Classification.	ADR CLASS 4.1. ; UN 3178 Packing Group III
IATA Classification	ICAO/IATA CLASS 4.1; UN 3178; Packing Group III

Continued on Next Page

Section 15. Other Regulatory Information and Pictograms									
Regulatory Lists	EC directives								
Remark	Not available.								
EC Classification / Labelling	Do not touch metal cylinder during and after use. Risk of burning (>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.								
Hazardous Material Information System (U.S.A.)	<table border="1"> <tr> <td>Health Hazard</td> <td>-</td> </tr> <tr> <td>Fire Hazard</td> <td>-</td> </tr> <tr> <td>Physical Hazard</td> <td>-</td> </tr> <tr> <td>Personal Protection</td> <td>-</td> </tr> </table> <p style="text-align: center;">National Fire Protection Association (U.S.A.)</p> <p style="text-align: center;">NOT APPLICABLE</p> <div style="display: flex; align-items: center; justify-content: center;"> <div style="text-align: center;"> <p>Health</p>  </div> <div style="margin-left: 20px;"> <p>Flammability</p> <p>Reactivity</p> <p>Specific hazard</p> </div> </div>	Health Hazard	-	Fire Hazard	-	Physical Hazard	-	Personal Protection	-
Health Hazard	-								
Fire Hazard	-								
Physical Hazard	-								
Personal Protection	-								
Other Regulations	---								
Protective Clothing (Pictograms)									

Section 16. Other Information			
Relevant R phrases:	--		
References	Not available.		
Other Special Considerations	Documentation: analysis & test report of the Polytechnic of Turin - Science of Material & Chemical Engineering Department		
Validated by: Mr. Giuseppe Lavesi	<table border="1"> <tr> <td>Verified by: Mr. Giuseppe Lavesi</td> </tr> <tr> <td>Printed ----</td> </tr> </table>	Verified by: Mr. Giuseppe Lavesi	Printed ----
Verified by: Mr. Giuseppe Lavesi			
Printed ----			
Information Contact	E.S.P. SRL - Strada per Chieri, 109 - 14019 VILLANOVA D'ASTI (AT), ITALY Tel. +39 0141 946258; fax +39 0141 946033		
<p>Notice to Reader</p> <p><i>Information presented herein has been compiled from sources considered to be dependable and is accurate and reliable to the best of our knowledge and belief but is not guaranteed to be so. Nothing herein is to be construed as recommending any practice or any product in violation of any patent or in violation of any law or regulation. It is the user's responsibility to determine for himself the suitability of any material for a specific purpose and to adopt such safety precautions as may be necessary. We make no warranty as to the results to be obtained in using any material and, since conditions of use are not under our control, we must necessarily disclaim all liability with respect to the use of any material supplied by us.</i></p>			