

FSS100





FSS100

The FSS100 is the latest innovation in the fire protection industry and is significantly lighter than conventional fire protection equipment such as fire extinguishers. It is cost efficient for small to large businesses, households, offices as well as all types of vehicles, and can be safely stored easily for easy access in an emergency.

The FSS100 is designed to be very lightweight at only 365g which makes it a suitable alternative to fire extinguishers. It is not pressurised which means it does not require any form of servicing, maintenance or refills compared to other conventional fire protection equipment such as fire extinguishers. This eliminates the danger of pressurised containers from exploding or malfunctioning.

With the FSS100, there is no residue left behind after use which reduces the cost of 'salvage and recovery' once the fire has been put out.

LIGHTEST & MOST ADVANCED FIRE SUPPRESION SYSTEM -LIGHTWEIGHT-PORTABLE-EASY TO USE-

100 SECONDS OF FIRE SUPPRESION
PUTS OUT FIRE CLASS A.B.C.E.F
LIGHT. COMPACT. PORTABLE. EFFICIENT. SAFE. ECONOMICAL.
NON-PRESSURISED - NO SERVICING/MAINTENANCE/REFILL NEEDED
NON-CORROSIVE. NON-TOXIC. ENVIRONMENTALLY FRIENDLY
NO RESIDUE LEFT AFTER USE
8-YEAR SHELF LIFE

Tested in accordance with AS/NZS 1850:2009 for Class 2B-1C-1F Fires
 Complies with relevant Clauses EN3-7 for Class: A & E Fires
 Verified by BSI with BSI Verification Certificate No.: VC727986

FSS100 Rev 1 16.09.2021





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PUTS OUT CLASS FIRE: A,B,C,E,F.



· Class A Fires: Solid combustible materials



· Class B Fires: Liquid combustible materials



· Class C Fires: Gaseous combustible materials



· Class F Fires: Cooking & oil fats



E · Electrical Equipment Fires: Up to 100V

MATERIALS & COMPONENTS

· Weight: 365g

· Length: 32.8cm

· Diameter: 3.3cm

· Inner Component: Metal Tube

· Outer Component: Plastic Cover

TESTING & QUALITY CONTROL

- Tested in accordance with AS/NZS 1850:2009 for Class 2B-1C-1F Fires
- · Complies with relevant Clauses EN3-7 for Class: A & E Fires
- Verified by BSI with BSI Verification Certificate No: VC727986
- · 100% visual inspection
- · Saferight is an ISO 9001 Certified Quality Assurance System









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SIMPLE STEPS TO USE:



Remove the cover



Take out the striker cap at the bottom



Strike the igniter



Point at base of flames







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For product customisation or more information, Email: saleswa@saferight.com.au | Contact No. 1800-352-335 42 Belmont Avenue, Belmont, WA 6104, Australia

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MATERIAL SAFETY DATA SHEET

Conform to Regulation (EC) No. 1272/2008 (CLP)

amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006

SECTION 1: Identification of the substance/mixture and of the Company /Undertaking

1.1. Product name/Trade name FSS - FIRE SUPPRESSION SYSTEMS

1.2. Material uses Fire suppressants

1.3. Details of the supplier of the safety data sheet

ESP International Srl

Via IV Novembre 132 - 29122 Piacenza (PC) – Italy

Manufacturing Plant:

 Strada per Chieri, no. 109 - 14019 Villanova d'Asti, AT – Italy

 Phone +39/0141- 945628
 Fax +39/0141- 946671

 Email: info@fss-esp.com
 Website: www.fss-esp.com

POC: Mr. Enzo Perna telephone +39 0141 – 945628 Email e.perna@fss-esp.com

1.4. Emergency telephone number

SECTION 2: Hazard Identification

2.1. Classification of the substances or mixture

Index	Component	CAS	EC	CLP Classification Regulation	DSD Classification		
#		NUMBER	NUMBER	EEC no. 1272/2008	67/548/EEC		
//	Potassium Nitrate	7757-79-1	231-818-8	2.14/3	0;		
				Ox. Sol.3 H272	Oxidizer		
//	DCDA	461-58-5	207-312-8	//	//		
//	Organic resin	9003-35-4	500-005-2	//	//		

Adverse physiochemical, human health and environmental effects: No other hazards

2.2. Label elements



Hazard Class and Category: Oxidizing solid, hazard category 3

Signal Word: Warning

Hazard Statement: H272: may intensify fire; oxidizer

General Statements:

P102 Keep out of the reach of children P103 Read label instructions before use

Precautionary Statement Prevention:

P210 Keep away from heat/sparks/open flames/hot surfaces. — Do not smoke.

P221 Take any precaution and keep away from combustible material

P243 Avoid electrostatic loads

P250 Avoid crash and strike

P273 Do not waste the product and/or the casing

Precautionary Statement Response: Fluid Aerosol

P302+P350+P313 In case of skin contact: may cause redness or irritation. Rinse cautiously with running water.

If skin irritation occurs get medical advice/attention.

P304+P340+P313 In case of inhalation: remove to fresh air and keep at rest in a position comfortable for

breathing. Get medical attention for any breathing difficulty.

P305+P351+P313 In case of eye contact: may cause redness or irritation. Rinse cautiously with running water for





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several minutes. If eye irritation persists get medical advice/attention.

P314 Seek medical attention for further treatment, observation, and support if necessary.

P370+P380 In the event of a fire, evacuate the area and inform emergency services.

Ignition of FSS Fire Suppression Systems produces a fire suppression aerosol.

P370+P378 Water may be used as an additional suppression agent, as well as powder extinguisher and/or CO2 extinguisher.

Precautionary Statement Disposal:

P501 Disposal should be in accordance with applicable national, state and local environmental control regulations.

2.3. Other Hazards No other hazards

SECTION 3: Composition, Information on Ingredients						
3.1. Identification	CAS#	EC#	CLP Classification Regulation EEC no. 1272/2008	DSD Classification 67/548/EEC	%	Comments
Potassium Nitrate	7757-79-1	231-818-8	GHS03 Wng 2.14/3 Ox. Sol.3 H272 EUH 210	O; Oxidizer	≥43	Components are blended and pressed into a highly stable, molded form. Molded composition is contained within a stainless steel housing.
DCDA	461-58-5	207-312-8	//	//	≥32	No environmental exposure
Organic resin	9003-35-4	500-005-2	//	//	≥25	
Discharge time: Fluid Aerosol: PBT vPvB 3.2. Other denomina	ation:		Composition of the extinguishing charge is contained within a sealed aluminum casing. Polymerized mixture of Organic and Inorganic Salts From 50sec to 100sec (± 10% tolerance) Particulates of Potassium Salts, Nitrogen and Water Vapor N/A N/A Portable Condensed extinguishing device			
4.1. Description of first aid measures Body Skin Contact / Eye Contact 4.2. Most important symptoms and effects, both			Extinguishing charge: None. Contact is impossible when the flame inhibitor is assembled. Do not touch the tube of the dispenser during/after use. Medical attention is unnecessary. Fluid Aerosol: after contact, wash/flush immediately with running water. Medical attention is necessary in case of direct contact burns No information available.			
acute and delayed 4.3. Indication of any immediate medical attention and special treatment needed			Seek medical atte	ention for furthe	r treatm	ent, observation and support, if

SECTION 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media:

Water.





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Carbon dioxide (CO2)				
O2 or Dry chemical fire extinguishers.				
5.2.				
Special hazards arising from the substance or	Do not inhale combustion gases.			
mixture				
Flammability of the product	Beginning of self-ignition phenomena over 300°C (over 572°F).			
	Medical attention is unnecessary.			
	In the event of a fire, evacuate the area and inform emergency services. Ignition of			
	FSS - Fire Suppression Systems produces a fire suppression aerosol.			
5.3 Advice for fire-fighters	No specific measures are required as the product itself is a fire fighting agent. Use			
	breathing apparatus if required			

SECTION 6: Accidental Release Measures

- 6.1. Personal precautions, protective equipment and emergency procedures
- 6.2. Environmental precautions. No particular action: the emission of the extinguishing charge when the fire suppressant is assembled is impossible, as it is inert material. See protective measures under point 7 and 8.
- 6.3. Methods and material for containment and cleaning up

If the devices come out from packaging they can be safely recovered by hand and should be inspected for damage prior to repacking. Suspect or damaged articles should be labelled and consigned for correct disposal.

6.4. Reference to other sections. See also section 8 and 13

SECTION 7: Handling and Storage

7.1. Precautions for safe handling

Normal attention in handling.

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

Avoid the direct contact of the product with open flames.

7.2. Conditions for safe storage, including any incompatibilities

Store in an environment between -10°C and +50°C, not exposed to sunlight.

Avoid: shock, electric currents, static discharge, excessive heat and extended periods of storage at temperature greater than 50°C exposure to sunlight.

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

Medical attention is unnecessary.

7.3 Specific end use(s). None in particular

SECTION 8: Exposure Controls, Personal Protection					
8.1 Control parameters	Potassium nitrate - Index: N/A, CAS: 7757-79-1, EC No: 231-818-8				
	DCDA - Index: N/A, CAS: 461-58-5, EC No: 207-312-8				
	Organic Resin - Index: N/A, CAS: 9003-35-4, EC No: 500-005-2				
	TLV TWA: N.A.				
8.2 Exposure controls					
Respiratory protection	Ventilate area completely after discharge. Do not enter the area prior to				
	complete venting of enclosures. Use filter mask as necessary during clean-up				
Hand protection	Wear gloves if necessary				
Eye protection	Safety glasses are advisable if necessary				
Skin protection	N/A				
Personal protection:	No individual protection.				
	Stick to the instructions legible on the product and inside each packaging box.				
Occupational exposure limits:	No specific occupational exposure limit.				
Environmental exposure controls:	No information available.				





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SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance and odor of aerosol: Beige to white in color.

Odorless.

Auto-ignition temperature: about 350°C (about 662°F)

Solubility in water: Slightly soluble

Appearance of device: steel cylinder High up to 330 mm in length and of mm 33 diameter

Extinguishing charge physical state: from 20°C solid to 0°C solid (from 62°F solid to 32°F)

Usability Temperature: -140°F to +320°F Granulometry: From 2 to 4 microns

Steam: None

Conductivity: Non conductor Fluid Aerosol physical state: Gaseous

Exit temperature: high, safety distance from supply source 1mt

9.2. Other information

Conductivity Nonconductor up to 100,000 Volt

Electrostatic Discharge None

Usability Humidity up to 98 % U.R.

Corrosiveness None
Thermal Shock None
Residue after use Negligible

SECTION 10: Stability and Reactivity

- 10.1 Reactivity. No specific test data related to reactivity available for this product or its ingredients.
- 10.2 Chemical stability. The product is stable under normal storage and temperature conditions.
- 10.3 Possibility of hazardous reactions. None identified. During use no dangerous decomposition products are produced.
- 10.4 Conditions to avoid. No specific data
- 10.5 Incompatible materials
- 10.6 Hazardous decomposition products: None

Note: These devices are extremely stable below 125°C. They should be protected from fire, sources of electrical power, shock and high temperatures.

SECTION 11: Toxicological Information

11.1. Information on toxicological effects

Toxic by-products of combustion are extremely low.

Main by-products are listed below with 15 minute TWA values for a concentration of 50gr/m3:

Gas 15 minute Time Weighted Average in parts per million

CO (carbon monoxide) 57 ppm NOx (nitrogen dioxide) <5 ppm Aerosol (particulates) 8,5 mg/m3

General: No known significant effects or critical hazards.

Carcinogenicity: No known significant effects or critical hazards.

Mutagenicity: No known significant effects or critical hazards.

Teratogenicity: No known significant effects or critical hazards.

Carcinogenicity: No known significant effects or critical hazards.

Reproductive toxicity: No known significant effects or critical hazards.

Developmental effects: No known significant effects or critical hazards.

Fertility effects: No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact No specific data





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Skin contact No specific data.

Ingestion No specific data

Inhalation No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure: N/A

SECTION 12: Ecological Information

12.1 Toxicity

These devices present no ecological hazards.

12.1.1. The aerosol produced after ignition has the following characteristics:

ODP Ozone Depletion Potential = 0 GWP Global Warming Potential = 0

ATL Atmospheric Life Time = negligible

12.2. Persistence and degradability No information available. No information available 12.3. Bio accumulative potential

No information available 12.4. Mobility in soil

12.5. Results of PBT and vPvB assessment No PBT information available. No vPvB information available

No information available. 12.6. Other adverse effects

SECTION 13: Disposal Considerations

13.1. Waste treatment methods

Disposal should be in accordance with applicable national, state and local environmental control regulations.

SECTION 14: Transport Information

14.1. UN Code Number ADR-RID-AND-IMDG-IATA

14.2. Name of UN ADR-RID-AND-IMDG-IATA

14.3. Hazard Class ADR-RID-AND-IMDG-IATA

14.4 Packing Group ADR-RID-AND-IMDG- IATA

UN 3178

Flammable solid, inorganic, n.o.s.

Classification 4.1

Passenger aircraft rail: 25kg

Cargo aircraft: 100kg

NONE

NO

Marine pollutant 14.6. Special precautions for user

14.5. Environmental hazards

Environment

The goods should be transported in the original packaging and in any case in packaging made of material resistant to their content and not

likely to generate reactions.

Not applicable

14.7. Transport in bulk according to Annex II of MARPOL

73/78 and the IBC Code

SECTION 15: Other Regulatory Information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Dir. 67/548/EEC (Classification, packaging and labelling of dangerous substances).

Dir. 99/45/EEC, (Classification, packaging and labelling of dangerous preparations).

Dir. 98/24/EC (Risks related to chemical agents at work). Dir. 2000/39/EC (Occupational exposure limit values):

Dir. 2006/8/CE.

Regulation (CE) n. 1272/2008 (CLP)

15.2. Chemical Safety Assessment

Information N/A.

SECTION 16: Other Information





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- Customs Tariff Number 84241000
- HS CODE # 292990

Main bibliographic sources:

- ECDIN Environmental Chemicals Data and Information Network Joint Research Centre, Commission of the European Communities
- Analysis and test report by the Polytechnic of Turin, Science of Material & Chemical Engineering Department

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

ATL: Atmospheric Life Time

CAS: Chemical Abstracts Service (division of the American Chemical Society).

CLP: Classification, Labeling, Packaging, Regulation No. 1272/2008.

DCDA: Dicyandiamide DSD: Directive 67/548/EEC.

EINECS: European Inventory of Existing Commercial Chemical Substances.

GHS: Globally Harmonized System of Classification and Labeling of Chemicals.

GWP: Global Warming Potential HS Code: Harmonized System Code

IATA: International Air Transport Association.

IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).

ICAO: International Civil Aviation Organization.

IMDG: International Maritime Code for Dangerous Goods.

N/A.: Not available

ODP: Ozone Depletion Potential

PBT: Persistent bio accumulative and Toxic

RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.

TLV: Threshold Limiting Value.

TWATLV: Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).

vPvB: Very Persistent and very bio accumulative

Comply with Manufacturer's installation and maintenance procedures

EUH210: Safety data sheet available on request.

Validated and verified by	Mr. Enzo Perna, Quality Mgr.
Revision #7	April 1, 2019

WARRANTY

All fire suppressant products carry a 3 year warranty after date of shipment against defects in materials and workmanship under conditions of normal use. Any product found defective within this period shall be replaced or repaired at ESP INTERNATIONAL SRL discretion.

Manufacturer's warranty, terms and conditions apply in all cases. No other warranty express or implied is valid.

Manufacturer shall not be liable or responsible, however, for any defects attributed to normal wear and tear, erosion or corrosion or improper storage, use or maintenance, negligence. In addition, Manufacturer shall not be liable for any defects arising from alteration or modification, nor from consequential incidental damages. Buyer shall give Manufacturer an opportunity to investigate. Transportation charges for the return of fire suppressants to Manufacturer shall be prepaid by Buyer.

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