

EU Declaration of Conformity

In accordance with ČSN ISO/IEC 17050-1:2011
ČSN EN 1568-1 ed. 2:2018 Article 5 and 6 Annex J and Article 8 Annex F
ČSN EN 3-7+A1:2007 Article 14.2, 15.2, 15.3, and 15.4

18/FRS EXcellent1/2024-001

Manufacturer and Issuer of the Declaration:

FIRESI s.r.o. Company ID (IČO): 291 88 024
Lidická kolonie 1108/47, 586 01 Jihlava, Czech Republic, European Union

Product: Special Firefighting Mixture

Type: FRS EXcellent 1

FIRESI s.r.o., Company ID 29188024, located at Lidická kolonie 1108/47 Jihlava 586 01, declares under its sole responsibility that the product listed below meets the stated properties. The manufacturer has all documentation related to the declaration of conformity and is capable of presenting it to the appropriate inspection body.

Product Use Information:

Special Firefighting Mixture: FRS EXcellent 1 is a clear, viscous liquid with a mild characteristic odor, free of regulated perfluorinated substances and toxic properties. It is a mixture of anionic surfactants, nonionic surfactants, foam stabilizers, preservatives, carbamides, and an inorganic synergistic salt solution with a pH of 8-11, density of 1.1 g/cm³ at 20°C, freezing point of -12°C, and surface tension of 22-45 nM.m-1.

FRS EXcellent 1 is a ready-to-use firefighting mixture (premix) intended for direct filling into fire extinguishers, sprays, firefighting equipment, or for direct firefighting use when filled into high-pressure firefighting equipment or directly pumped into firefighting equipment. It is designed for extinguishing class A fires (34A) including Li-ion batteries (300 Wh cylindrical Li-ion batteries extinguished with 400 ml of the mixture, resulting in extinguishment without reignition), class B (183B) fires with a minimum extinguishing agent volume of 6 liters, class D (flammable metals), and class F (75F) fires with a minimum extinguishing agent volume of 12 liters.

Properties of the extinguishing agent: See the safety data sheet for FRS EXcellent 1.

Basis for Conformity Assessment:

Type Certificate No. 221/042/2024 for Special Firefighting Mixture: FRS EXcellent 1 dated 29.5.2024 by MV-General Directorate of Fire Rescue Service of the Czech Republic, Technical Institute of Fire Protection.

Final Certification Report No. 042/2024 for Special Firefighting Mixture: FRS EXcellent 1 dated 22.5.2024 by MV-General Directorate of Fire Rescue Service of the Czech Republic, Technical Institute of Fire Protection.

Protocol on Determination of Chemical Composition of Active Substance No. 045-2024 dated 11.4.2024 by Testing Laboratory No. 1011.2 TÚPO MV GŘ HZS ČR.

Protocol on Determination of Perfluorinated Substances No. 620 dated 21.4.2023 by Testing Laboratory No. 1630 Chemical Laboratory IOO Lázně Bohdaneč MV GŘ HZS ČR.

Protocol on Testing No. 047-2024 dated 15.4.2024 by Testing Laboratory No. 1011.2 TÚPO MV GŘ HZS ČR.

Protocol on Determination of Specific Gravity, pH Value, Viscosity, and Freezing Point No. 046-2024 dated 26.3.2024 by Testing Laboratory No. 1011.2 TÚPO MV GŘ HZS ČR.

Protocol on Extinguishing Capability Tests 34A, 183B, and 75F No. 30-17132/M dated 14.5.2024 by Testing Laboratory No. 1045.1 Engineering Test Institute s.p. Brno.

ISO 9001 Certificate No. DQS – 9001/02/19/rev.1 dated 8.6.2023 by DGQ Cert s.r.o. Prague. Certificate of Test FIRESI FLI for Extinguishing LiFePo4 Batteries No. O-B-012204-23 dated 6.3.2023 issued by Engineering Test Institute s.p. Accredited Testing Laboratory No. 1045.1 Brno.

Test Result Protocol FIRESI FLI No. 39-16929/M dated 28.02.2023 issued by Engineering Test Institute s.p. Accredited Testing Laboratory No. 1045.1 Brno.

Certificate of Test FRSystem LP Li2.2 for Extinguishing Li-ion Batteries No. O-B-01427-23 dated 31.10.2023 issued by Engineering Test Institute s.p. Accredited Testing Laboratory No. 1045.1 Brno.

Test Result Protocol FRSystem LP Li2.2 for Extinguishing Li-ion Batteries No. 39-17291/M dated 31.10.2023 issued by Engineering Test Institute s.p. Accredited Testing Laboratory No. 1045.1 Brno.

Certificate of Test FRSystem LP R2 for Extinguishing Fryers and Frying Pans No. O-B-01425-23 dated 31.10.2023 issued by Engineering Test Institute s.p. Accredited Testing Laboratory No. 1045.1 Brno.

Test Result Protocol FRSystem LP R2 for Extinguishing Fryers and Frying Pans No. 39-17289/M dated 31.10.2023 issued by Engineering Test Institute s.p. Accredited Testing Laboratory No. 1045.1 Brno.

Certificate of Test FRSystem LP M2 for Extinguishing Light Metals No. O-B-01426-23 dated 31.10.2023 issued by Engineering Test Institute s.p. Accredited Testing Laboratory No. 1045.1 Brno.

Test Result Protocol FRSystem LP M2 for Extinguishing Light Metals No. 39-17290/M dated 31.10.2023 issued by Engineering Test Institute s.p. Accredited Testing Laboratory No. 1045.1 Brno.

Safety data sheet for FRS EXcellent 1 extinguishing agent.

The properties of this product meet the basic requirements for products. The product is safe under normal and intended use conditions, and measures have been taken to ensure the conformity of all products placed on the market with the technical documentation and basic

requirements according to the cited standards. When handling the product, it is necessary to follow the product's safety data sheet.

The certification of the product Special Firefighting Mixture: FRS EXcellent 1 has been carried out according to the provisions of § 10 of Act No. 22/1997 Coll. on Technical Requirements for Products and on Amendments and Supplements to Certain Acts, as amended, and according to the provisions of § 3 paragraph 5 of Government Regulation No. 173/1997 Coll. which stipulates selected products for conformity assessment as amended.

Declaration of Conformity Compiled by: František Klika

In Jihlava, on May 30, 2024

Signature and Stamp:



FIRESI s.r.o. 
Lidická kolonie 1108/47, 506 01 Jihlava
IČ: 29188024, DIČ: CZ29188024

František Klika
Managing Director of the Company