



TECHNICAL DATA SHEET

Viking ARK SFFF Fluorine-Free Foam Concentrate

1. PRODUCT IDENTIFICATION

This document covers the following product, hereafter referred to as “concentrate”:

Viking ARK SFFF Fluorine-Free Foam Concentrate

2. INTENDED USE

The concentrate is intended to be used in fixed and semi-fixed fire protection systems as allowed by applicable approval authorities. The concentrate shall be used in accordance with:

1. The concentrate’s Listings, Approvals, and associated design requirements.
2. The recognized design and installations standards issued, for example by FM and NFPA.
3. The latest revisions of all applicable manufacturer’s and distributor’s documentation.



Governmental codes, ordinances, and standards may apply and may differ from one another.

WARNING:

Cancer and Reproductive Harm www.P65Warnings.ca.gov

The concentrate is intended for use:

- On Class A fires.
- On Class B hydrocarbon fuel fires and polar solvent fires.

For minimum density requirements and the specific discharge devices associated with the concentrate, refer to the FM Approval Guide or the UL Listing.

NOTE: Do not use the concentrate as a pre-mixed solution.

NOTICE

Viking ARK concentrate is FM Approved for use with fresh water only.

3. APPLICABLE DOCUMENTS

- Technical document F_110121.



TECHNICAL DATA SHEET

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4. LISTINGS, APPROVALS, AND CERTIFICATIONS



FM Approved

Refer to the FM Approval guide for systems and devices that are approved for use with the concentrate. For correct system design, refer to the system and device documentation from Viking, NFPA, FM Global Property Loss Prevention data sheets, and relevant local/state standards. The foam extinguishing system's FM Approval is contingent upon the design, installation, testing and maintenance performed in accordance with NFPA and/or FM Global Property Loss Prevention data sheet, Foam/Water Sprinkler Systems.



GreenScreen Certified: v2.2 Certificate #20221046



SFFF Compatible

“SFFF compatible” refers to this product as being part of a SFFF foam system that has been tested to recognized standards. Not all configurations are available. Please consult technical data and/or the approval/listing for usage requirements.

Viking ARK SFFF Fluorine-Free Foam Concentrate is manufactured by Fomtec™ for The Viking Corporation. The following approvals are in the name of the manufacturer: EN 1568-1-2018, EN 1568-3-2018, and EN1568-4-2018.

Fomtec™ is a trademark of Dafo Fomtec AB.

5. TECHNICAL SPECIFICATIONS

Parameter	Value
Appearance	Clear yellowish liquid
Specific gravity at 68 °F (20 °C)	1.013 ± 0.01 g/ml
Viscosity	Pseudo-plastic*
pH	6.5 — 8.5
Freezing point	25 °F (-4 °C)
Suspended sediment (v/v)	Less than 0.2%
Recommended storage temperature	32 — 131 °F (0 — 55 °C)
Typical storage/shelf life	Up to 10 years**
*See detailed viscosity data in section 9.	
**See more storage details in technical document F_110121.	



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6. ENVIRONMENTAL IMPACT

The concentrate contains no intentionally added fluorinated surfactants, polymers, or other organohalogens. The concentrate is biodegradable and contains **NO PFOS or PFOA**. For more information, refer to the concentrate's Safety Data Sheet (SDS).

7. PROPORTIONING

For more details concerning proportioning components, refer to their FM Approval, UL Listing, or the appropriate Viking technical documents.

8. INSPECTIONS, TESTS, AND MAINTENANCE

The concentrate should be tested annually. Refer to respective requirements, according to the relevant inspection, testing, and maintenance standards. Where applicable, refer to the Authority Having Jurisdiction (AHJ) and/or FM Global Property Loss Prevention data sheets for specific criteria.

9. VISCOSITY

The Brookfield RST rheometer determines the concentrate's viscosity flow curves from low-to-high shear rates. The viscosity curves below are determined by calculating the average value of 8 or more measurements and add a safety margin of three standard deviations from the average.

Shear Rate (s ⁻¹)	Dynamic Viscosity (mPa/s)		Kinematic Viscosity (mm ² /s)	
	68 °F (20 °C)	41 °F (5 °C)	68 °F (20 °C)	41 °F (5 °C)
10.7	3083	3258	3043	3217
21.5	1726	1851	1703	1827
53.7	791	870	781	859
107.4	444	505	438	499
214.8	261	304	258	300
375.0	174	206	171	204
537.0	136	164	134	162
1074.0	106	121	104	119
1611.0	68	88	67	87
2148.0	58	75	57	74
2792.2	79	87	78	86



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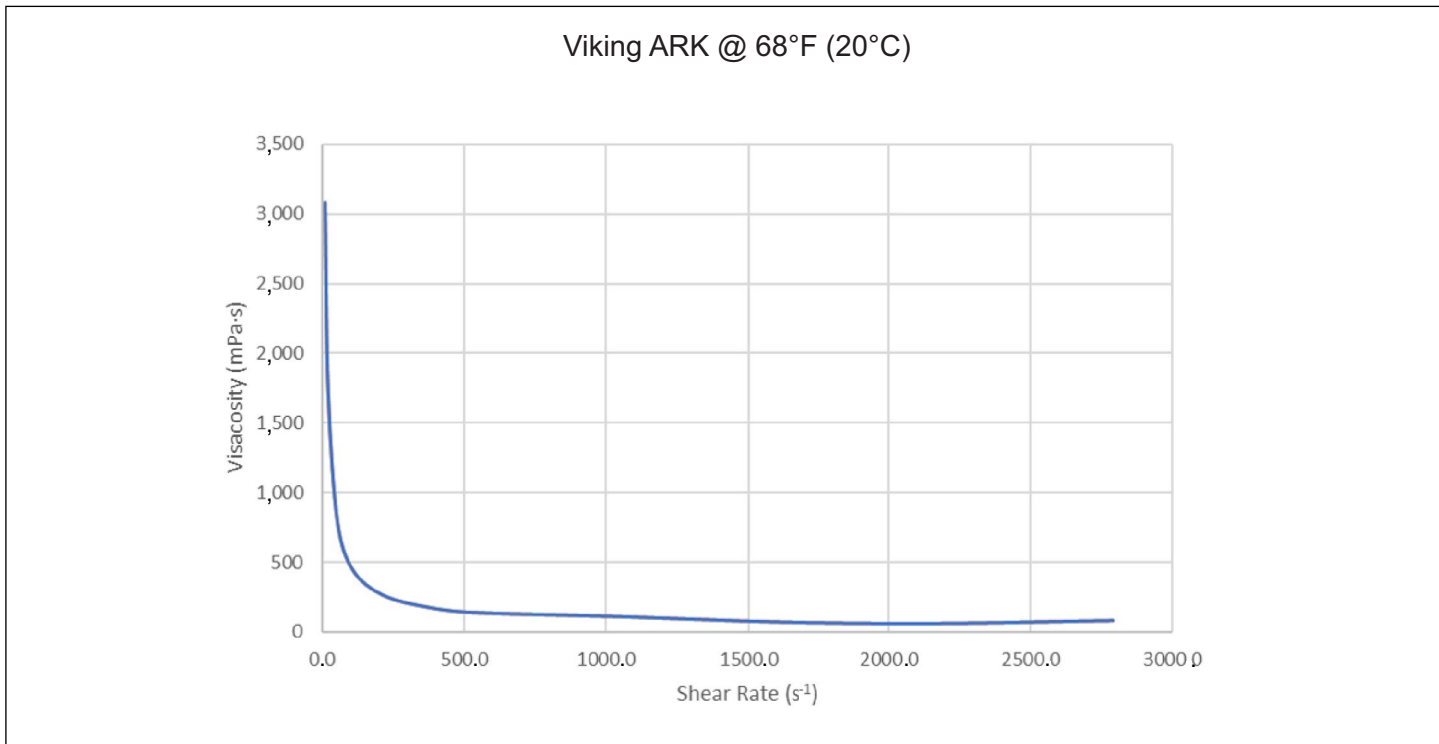


Figure – 1 Viscosity vs. Shear Rate - Viking ARK SFFF at 68°F (20°C)

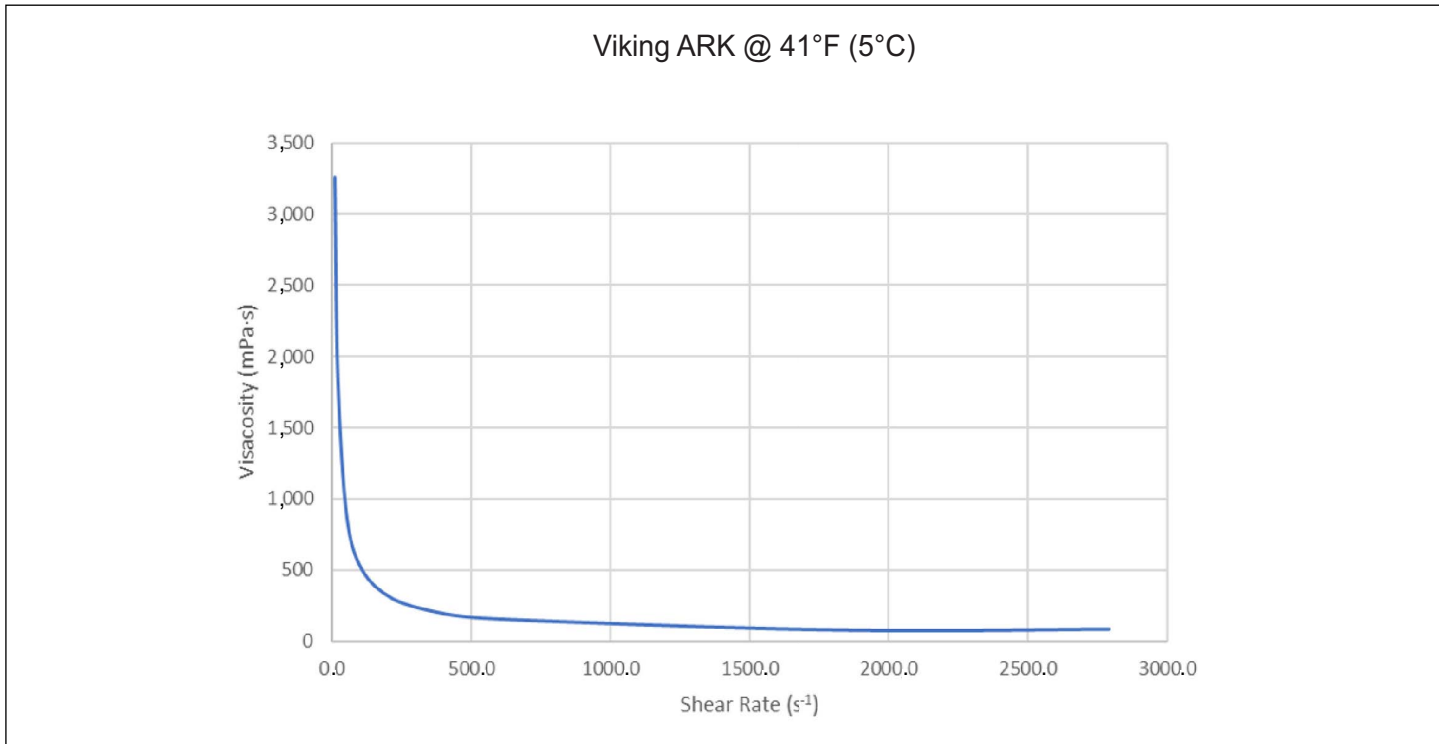


Figure – 2 Viscosity vs. Shear Rate - Viking ARK SFFF at 41°F (5°C)


TECHNICAL DATA SHEET
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10. ORDERING INFORMATION

Part number	Volume	Packaging	Approximate Shipping Weight*		Dimensions		Sales Region
			Lbs.	Kg	Inches	mm	
V-SFFFARK/25	25 liters	Pail	59	26.7	11 x 10 x 17	295 x 260 x 441	EMEA/APAC
V-SFFFARK/200	200 liters	Drum	468	212.5	23 x 23 x 37	581 x 581 x 935	EMEA/APAC
V-SFFFARK/1000	1000 liters	IBC Tote	2376**	1080**	47 x 39 x 45	1200 x 1000 x 1150	EMEA/APAC
F24175-6.5	6.5 US Gallons	Pail	59	26.7	11 x 10 x 29	295 x 260 x 737	Americas
F24175-55	55 US Gallons	Drum	468	212.5	23 x 23 x 37	581 x 581 x 935	Americas
F24175-265	265 US Gallons	IBC Tote	2376**	1080**	47 x 39 x 45	1200 x 1000 x 1150	Americas
BULK	Bulk tanker deliveries available by special request. Contact Viking for availability.						
*Shipping weight and dimensions are approximate.							
**Weight does not include pallet.							

11. CONTACT

The concentrate is available through Viking distributors only. Contact your local Viking sales office which can be found on our website:

Americas and Asia: www.vikinggroupinc.com/locations OR Europe, Middle East, Africa (EMEA): www.viking-emea.com/contact

Fomtec (Manufacturer)

Dafo Fomtec AB
Garnisonsgatan 47a
SE-254 66 Helsingborg, Sweden
Tel: (+46) 8 506 405 66
info@fomtec.com

Distributor US:

The Viking Corporation
5150 Beltway SE
Caledonia, MI 49316
Tel.: (800) 968-9501
Fax: 269-818-1680
Technical Services: 1-877-384-5464
techsvcs@vikingcorp.com

Distributor EMEA:

Viking S.A.
21, Z.I. Haneboesch
L-4562 Differdange / Niederkorn
Tel.: +352 58 37 37 - 1
Fax: +352 58 37 36
vikinglux@viking-emea.com

Distributor Asia Pacific (APAC):

The Viking Corporation (Far East) Pte. Ltd.
69 Tuas View Square
Westlink Techpark, Singapore 637621
Tel.: (+65) 6 278-4061
Fax: (+65) 6 278-4609
vikingAPAC@vikingcorp.com