Technical Data Sheet

vaPUREx® AR 3/3 F-5 #8343

Product Name

vaPUREx® AR 3/3 F-5 #8343

Product Data

Manufacturer	Fabrik chemischer Präparate von Dr. Richard Sthamer GmbH & Co. KG
Place of Production	Liebigstraße 5, 22113 Hamburg
Grades of Foam	Synthetic
Type	Alcohol resistant fluorine free foam concentrate (F3-AR)
Use	Polar liquids, Hydrocarbons (water miscible/water immiscible)
Concentration of Use	3% [non polar]; 3% [polar]
Types of Application	Forceful Application [non-polar] and gentle Application [polar]
Expansion	Low, Medium, High expansion

Physico-chemical Data

Shape	liquid	Viscosity	see diagram below
Colour	colourless to yellow	Wetting power	see diagram below
pH value at 20°C	6,5 - 8,5	Surface tension (ring method)	23 - 25 mN/m
Density at 20°C	1,010 - 1,050 g/ml	Interface tension (Cyclohexane)	1 - 5 mN/m
Sediments	none	Spreading coefficient	-5 - 0 mN/m
Cloud point	none	Aqueous film-forming	no
Lowest temperature for use	≤ -5°C	Fluorine content (as inorg. fluorine)	fluorine free
Minimum storage temperature	≤ -5°C	VOC content	~ 10,0%
Maximum storage temperature	+50°C	Conductivity	~ 5790 µS/cm
Special proportioner required?	yes	Vapour pressure at 20°C	max. 22,5 mbar
Compatible with sea water?	yes	Contains detectable PFOS?	no
Recommended induction for wetting	0,5%	Contains detectable PFOA?	no

Foam Properties

	Expansion Ratio (Fresh Water - 20°C)			Expansion Ratio (Sea Water - 20°C)		
Low expansion foam3% 20°C	7 - 11	25% Drainage	38 - 42 min.	6 - 10	25% Drainage	26 - 30 min.
		50% Drainage	68 - 72 min.		50% Drainage	48 - 52 min.
Medium expansion foam3% 20°C	60 - 100	25% Drainage	18 - 22 min.	20 - 50	25% Drainage	10 - 14 min.
		50% Drainage	33 - 37 min.		50% Drainage	18 - 22 min.
High expansion foam3% 20°C	400 - 700	25% Drainage	18 - 22 min.	500 - 800	25% Drainage	10 - 14 min.
		50% Drainage	28 - 32 min.		50% Drainage	16 - 20 min.

Extinguishing Performance Class

DIN EN 1568-1	Fresh water: pass Sea Water: pass	DIN EN 1568-2	Fresh water: not tested Sea Water: not tested		IMO 1312 non-polar
DIN EN 1568-3	Fresh water: IA Sea Water: IIIB	DIN EN 1568-4	Acetone: IA/IA IPA: IA/IA Fresh/Sea Water		ICAO Level B

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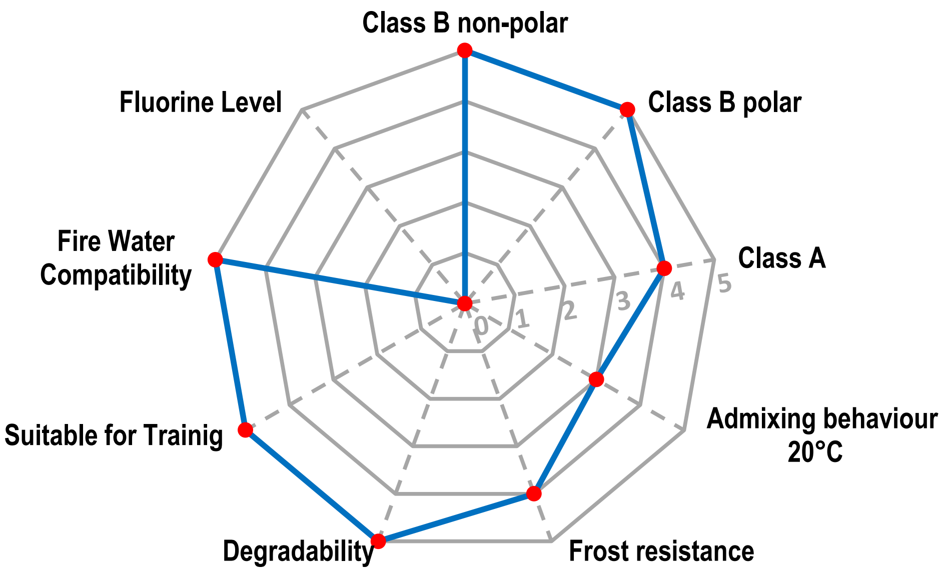
VAPUREX® AR 3/3 F-5 #8343

Foam Properties Overview



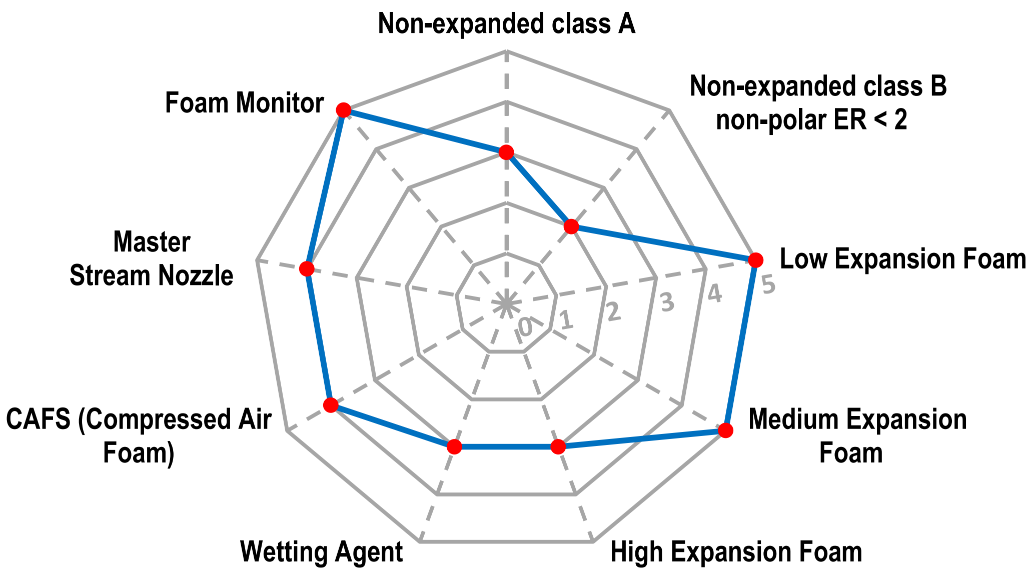
Legend:

5 = very good/very high
4 = good/high
3 = satisfactory/low
2 = limited/very low
1 = not
0 = zero

applicable/present

This diagram does not replace a technical expert consultation.

Foam Applicability Overview



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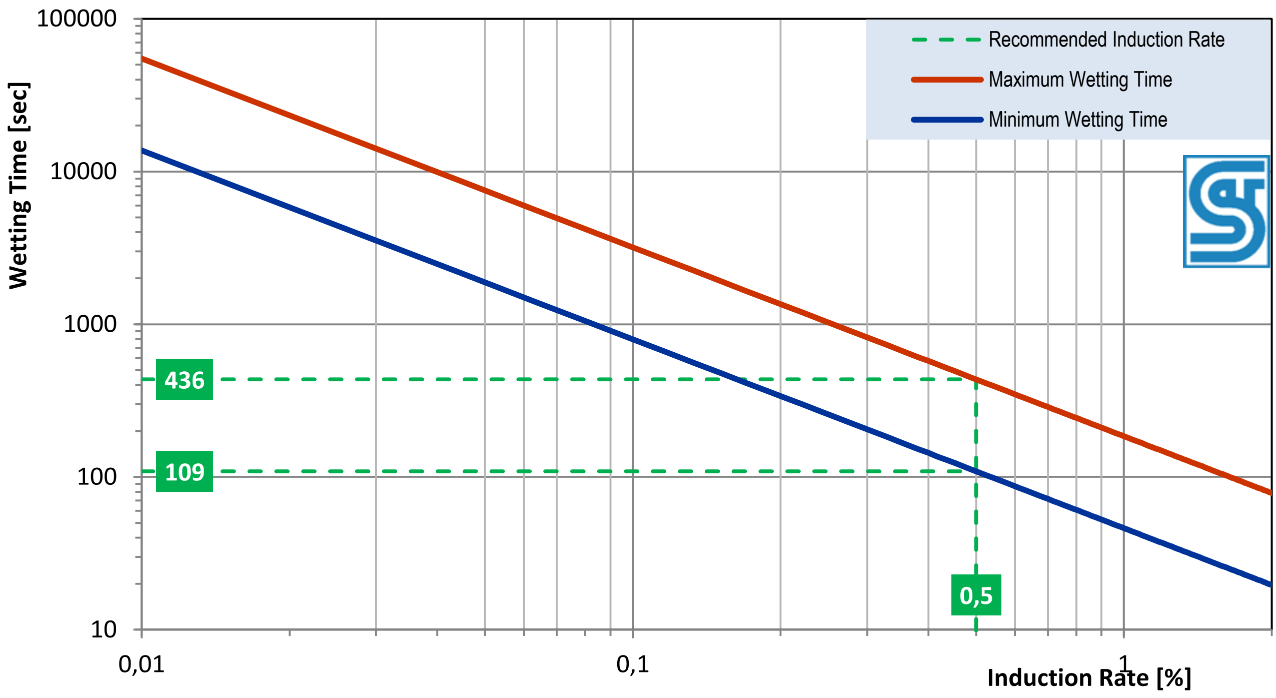
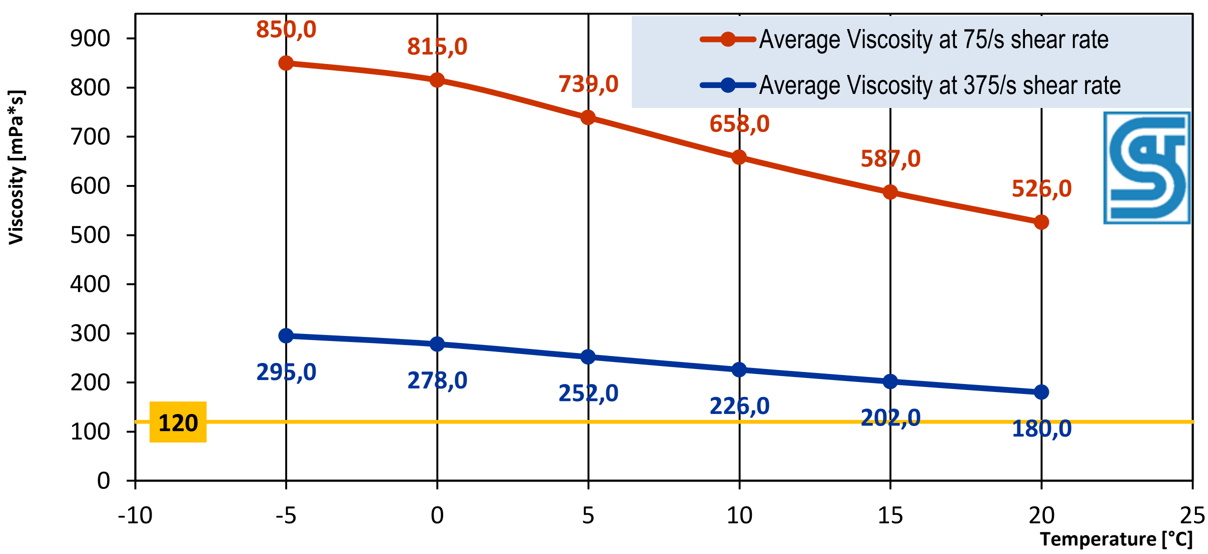
Wetting Properties acc. to DIN EN 1772



Viscosity Behaviour at the Shear Rates 75/s and 375/s

Type of viscosity: pseudo-plastic **Method: Brookfield** **Testing Geometry: Spindle**	**If applicable, the orange 120 mPa*s line (——) for the 375/s curve will be displayed, above which a pump-aided induction is recommended.**



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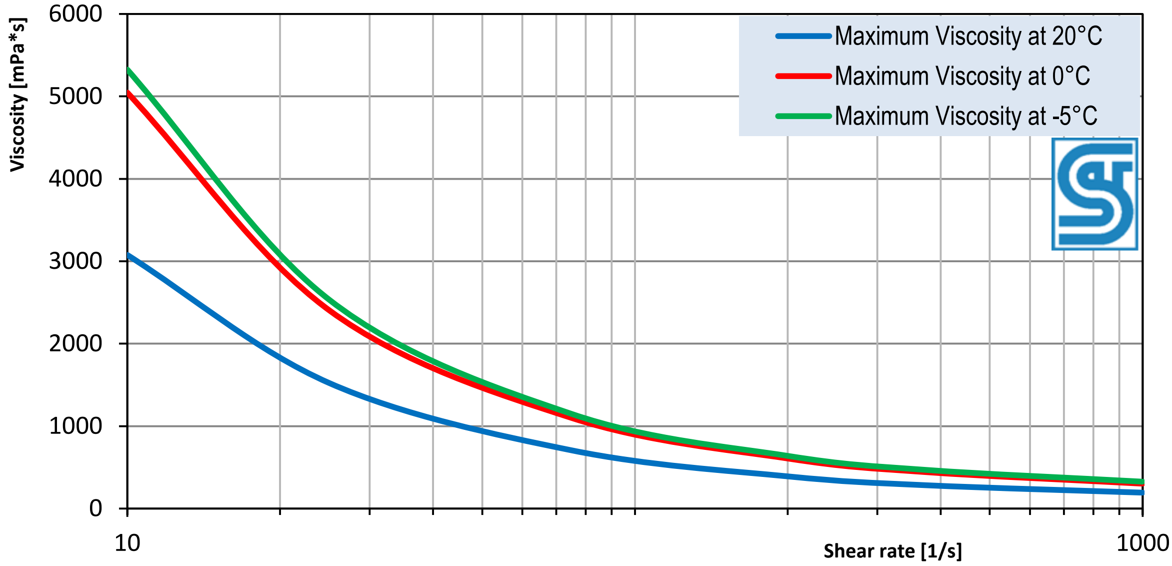
Viscosity curves at three Temperatures



	10 1/s	25 1/s	75 1/s	200 1/s	375 1/s	1000 1/s
20°C	3070	1520	700	380	280	190
0°C	5040	2400	1090	600	440	300
-5°C	5320	2530	1140	630	460	320