

TECHNICAL DATA SHEET

VOLTALEF® OIL 1S

Voltalef oils and greases are low-molecular-weight polymers of chlorotrifluoroethylene.

Cl-- (CF2--CFCl) n --Cl

They have unique properties as thermic stability up to + 250°C, excellent properties of chemical resistance, unflammability, low thermic conductivity, excellent properties under high stress.

MAIN APPLICATIONS

- Lubricants

DELIVERY FORM

- Liquid

RHEOLOGICAL PROPERTIES

PROPERTIES	VALUE	UNIT	TEST STANDARD
Absolute viscosity, 25°C (77°F)	9.3	mPa.s	
Absolute viscosity, 38°C (100°F)	5.5	mPa.s	
Absolute viscosity, 71°C (160°F)	3.2	mPa.s	
Absolute viscosity, 99°C (210°F)	1.7	mPa.s	
Absolute viscosity, 130°C (266°F)		mPa.s	
Kinematic viscosity, 25°C (77°F)	5	mm ² /s	
Kinematic viscosity, 38°C (100°F)	3	mm ² /s	
Kinematic viscosity, 71°C (160°F)	1.8	mm ² /s	
Kinematic viscosity, 99°C (210°F)	1	mm ² /s	
Kinematic viscosity, 130°C (266°F)		mm ² /s	
Surface tension	23	mN/m	

THERMAL PROPERTIES

PROPERTIES	VALUE	UNIT	TEST STANDARD
Boiling point	141	°C	
Vapour pressure, 25°C (77°F)	8	mm Hg	
Vapour pressure, 50°C (122°F)	28	mm Hg	
Vapour pressure, 100°C (212°F)	209	mm Hg	
Vapour pressure, 150°C (302°F)	977	mm Hg	
Vapour pressure, 200°C (392°F)		mm Hg	
Volume expansion coefficient	9.6E-10	10E-6 / °K	

VOLTALEF® OIL 1S

OTHER PROPERTIES

PROPERTIES	VALUE	UNIT	TEST STANDARD
Acid value	<0.02	mg KOH/g	
Freezing point	-55	°C	
Density, 20°C (68°F)	1.86	g/cm ³	ISO 1183-1
Density, 38°C (100°F)	1.83	g/cm ³	ISO 1183-1
Density, 71°C (160°F)	1.77	g/cm ³	ISO 1183-1
Density, 99°C (210°F)	1.72	g/cm ³	ISO 1183-1

PACKAGING

- Available packaging:
- 0.625 L / 21 fl oz aluminum bottle
 - 6.25 L / 1.65 gal aluminum bottle

Headquarters: Arkema France
51, Esplanade du Général de Gaulle
92800 Puteaux – France
T +33 (0)1 49 00 80 80