## Fomblin PFPE: Lubricants Product Data Sheet

## **Fomblin Z Lubricants**

Fomblin Z perfluoropolyether fluids have the following unique features:

- Good low temperature viscosity
- Superior evaporative loss
- Very high viscosity indices
- Very good E.P. and wear characteristics

Typical Properties	;	Fomblin Z Lubricant Grades		
	Z03	Z15	Z25	Z60
Approximate ISO grade	15	100	150	320
Molecular weight (AMU)	4000	8000	9,500	13,000
Kinematic viscosity (ASTM D445) 20°C (cSt)	30	160	263	600
40°C (cSt)	18	92	157	355
100°C (cSt)	5.6	28	49	98
Viscosity index (ASTM D2270)	317	334	358	360
Pour point (°C) (ASTM D97)	-90	-80	-75	-63
Evaporation weight loss (ASTM 2595) 149°C, 22 hr (%)	6.0	0.2		
204°C, 22 hr (%)	n.a.	1.2	0.4	0.2
Surface tension (ASTM D1331) 20°C (dynes/cm)	23	24	25	25
Density (ASTM D891) 20°C (g/cm3)	1.82	1.84	1.85	1.85
Four ball E.P. wear tests (IP 239) Init. Seiz. Load (kg)	355	400	501	501
Welding load (kg) Mean hertz load (kg)	447 104	631 123	631 118	631 118
Four ball wear test (ASTM D4172 B 75°C, 1 hr, 1200 RPM 40 kg)				
Avg. scar diameter (mm)	0.60	0.66	0.90	0.93

Solvay Solexis S.p.A. (Italy) Tel: +39-02-3835-1 Fax: +39-02-3835-2129		Ivay Solexis representative or: North America Solvay Solexis, Inc. Tel: +1-856-853-8119 Fax: +1-856-853-6405 Email: solvaysolexisinfo@solvay.com	To our actual knowledge, the information contained herein is accurate as of the date of this document. However, neither Solvay Solexis, Inc. nor any of its affiliates makes any warranty, express or implied, or accepts any liability in connection with this information or its use. This information is for use by technically skilled persons at their own discretion and risk and does not relate to the use of this product in combination with any other substance or any other process. This is not a license under any patent or other proprietary right. The user alone must finally determine suitability of any information or material for any contemplated use, the man- ner of use and whether any patents are infringed. This information gives typical properties only and is not to be used for specification purposes.		
			Trademarks and/or other Solvay Solexis, Inc. products referenced herein are either trade- marks or registered trademarks of Solvay Solexis, Inc. or its affiliates.		
page 3 of 4	ww	w.solvaysolexis.com	Copyright 2002, Solvay Solexis, Inc. All Rights Reserved.	modified 12/13/02	





\_\_\_\_\_

 $\overline{\mathbf{z}}$ 

Solvay Solexis