



Fomblin OT-20, UT-18, RT-15

Technical Specifications

GREASE TYPE	OT 20	UT 18	RT 15
Viscosity of base fluid at 20 C ASTM D 445 (cSt)	35	500	1500
THICKENER	PTFE	PTFE	PTFE
Penetration after 60 strokes (ASTM D 217) mm/10	265 295	265 295	265 295
NLGI CLASS	2	2	2
Stability after 10000 strokes (ASTM D 217) mm/10	320	310	295
ANTI RUST ADDITIVATION	NO	NO	NO
Anti rust properties EMCOR test	—	—	—
Apparent viscosity Poise at 20 C Shear rate 100 sec ⁻¹ Shear rate 300 sec ⁻¹	130 80	190 100	90 40
Oil separation FTMS 791-321 loss weight % at 66 C / 30 hrs at 149 C / 30 hrs at 204 C / 30 hrs	5.50 — —	— 7.50 —	— — 10
Evaporation ASTM D 972 loss weight % at 66C/22h/120 1/h at 149C/22h/120 1/h	3 —	— 3.50	— —
Evaporation ASTM D 2595 loss weight % at 204C/22h/120 1/h	—	—	1.50
Range of continuous use (Temperature C)	-70 100	-30 150	-20 200
Maximum flash Temp. value C	140	200	250

STANDARD PROPERTIES OF FOMBLIN GREASE

Thermal stability:

Fomblin greases have no dropping point and can be used at high temperatures and in oxidising conditions.

Chemical resistance:

Fomblin greases are inert and do not react even at high temperatures with fuels, acids, inorganic alkali, halogens, fuming nitric acid and oxidising solutions.

Solubility/wash-out:

Fomblin greases are stable, do not emulsify with water, and are resistant to all solvents except highly fluorinated solvents. Therefore, Delifrene LS registered trade mark of Montefluos (1, 1, 3 Trichlorotrifluoroethane) can be used to clean surfaces lubricated with Fomblin greases.

The compatibility of Fomblin greases with common solvents is given in table 3.

Oxygen compatibility:

Bundesanstalt fur Materialprufung, Berlin (BAM), has approved the use of Fomblin fluids and greases in the presence of oxygen. Furthermore the National Aeronautics and Space Administration (NASA) and the Naval Ship Engineering Center of the US Navy have both approved the use of Fomblin fluids and greases in liquid oxygen applications.

Temperature and pressure limits of oxygen with Fomblin greases are given in table 4.

Compatibility with metals and structural materials:

Fomblin greases are compatible with all types of polymers, plastomers and elastomers. During tests over one month at 20°C none of these materials (nitrile, butyl, polyfluorosiloxane, EPDM rubber) revealed swelling, mechanical or physical alterations.

Melamine, phenolic, polyoxymethylene, polyoleofin resins are not altered after contact with Fomblin greases for one month at 100°C. Fomblin greases can be used in continuous contact with metal, and oxygen, at temperatures up to 200°C.