Polyacetal (POM)

DURACON®

SF-10

CF2001

(High Impact,Flexible grade)

POLYPLASTICS CO., LTD.

General Properties of SF-10

table1-1 General Properties（ISO）

Item	Unit	Test Method	High Impact,Flexible
			SF-10
			High impact,Flexible
Color			CF2001
ISO(JIS)quality-of-the-material display:		ISO11469 (JIS K6999)	>POM-I<
Density	g/cm^3	ISO 1183	1.36
Water absorption (23℃,24hrs)	%	ISO 62	0.6
Tensile strength	MPa	ISO 527-1,2	45
Strain at break	%	ISO 527-1,2	60※1
Flexural strength	MPa	ISO 178	61
Flexural modulus	MPa	ISO 178	1,800
Charpy impact strength (notched)	kJ/m^2	ISO 179/1eA	12
Temperature of deflection under load (1.8MPa)	℃	ISO 75-1,2	82
Coefficient of linear thermal expansion (23 - 55℃、Flow direction)	x10^{-5}/℃	Our standard	13
Coefficient of linear thermal expansion (23 - 55℃、Transverse direction)	x10^{-5}/℃	Our standard	13
Dielectric breakdown strength (3mmt)	kV/mm	IEC 60243-1	-
Volume resistivity	Ω·cm	IEC 60093	-
Surface resistivity	Ω	IEC 60093	-
Volume resistivity (Our standard)	Ω·cm		-
Surface resistivity (Our standard)	Ω		-
Rockwell hardness	M(Scale)	ISO2039-2	60
Specific wear amount (vs C-Steel, material side, pressure 0.49MPa, 30cm/s)	x10^{-3}mm^3/(N·km)	JIS K7218	0.50
Specific wear amount (vs C-Steel, steel side, pressure 0.49MPa, 30cm/s)	x10^{-3}mm^3/(N·km)	JIS K7218	0.01>
Coefficient of Dynamic Friction (vs C-Steel, pressure 0.49MPa, 30cm/s)		JIS K7218	0.50
Specific wear amount (vs C-Steel, material side, pressure 0.98MPa, 30cm/s)	x10^{-3}mm^3/(N·km)	JIS K7218	-
Specific wear amount (vs C-Steel, steel side, pressure 0.98MPa, 30cm/s)	x10^{-3}mm^3/(N·km)	JIS K7218	-
Coefficient of Dynamic Friction (vs C-Steel, pressure 0.98MPa, 30cm/s)		JIS K7218	-
Specific wear amount (vs M90-44, material side, pressure 0.06MPa, 15cm/s)	x10^{-3}mm^3/(N·km)	JIS K7218	1.0
Specific wear amount (vs M90-44, M90-44 side, pressure 0.06MPa, 15cm/s)	x10^{-3}mm^3/(N·km)	JIS K7218	3.0

Item	Unit	Test Method	High Impact,Flexible
			SF-10
			High impact,Flexible
Coefficient of Dynamic Friction (vs M90-44, pressure0.06MPa, 15cm/s)		JIS K7218	0.40
Flammability		UL94	HB
The yellow card File No.			E45034
Appropriate List number of Ministerial Ordinance for Export Trade Control			Item 16 of Appendix -1

※1) Nominal strain at break

All figures in the table are the typical values of the material and not the minimum values of the material specifications.

1.Moldability of SF series

Fig.2-1:Effects of cylinder residence time

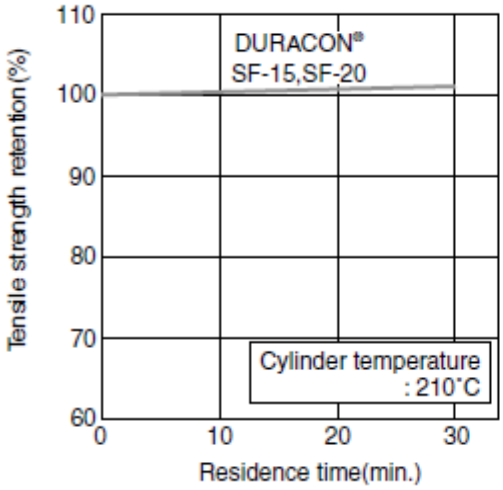
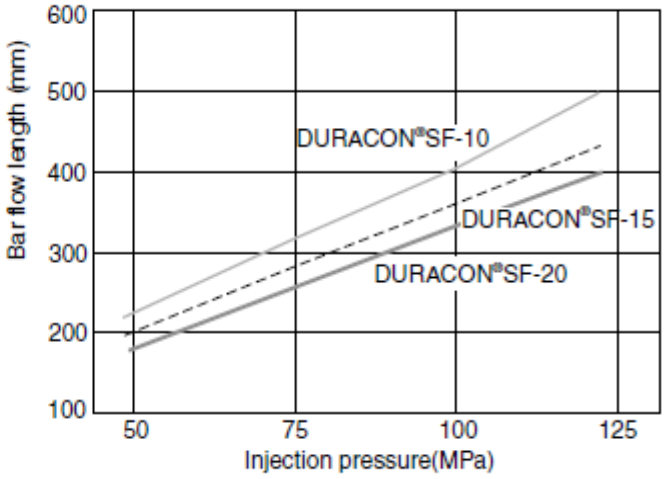
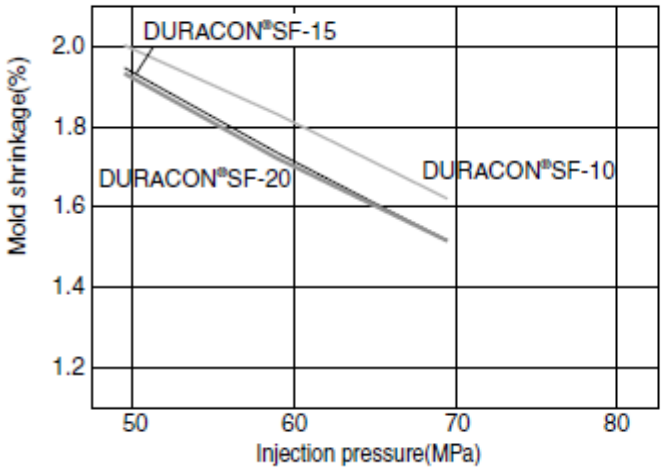


Fig.2-2:Bar flow length (2mmt)

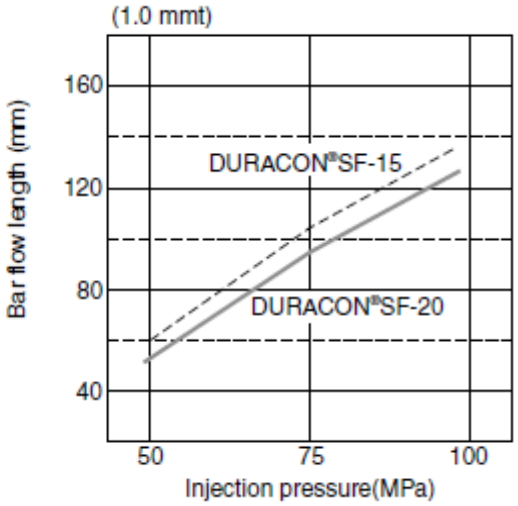


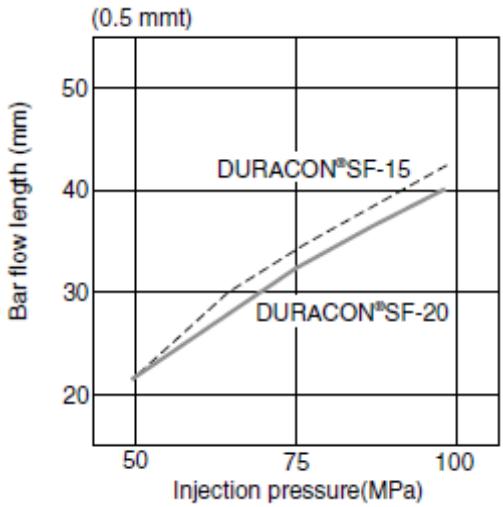
Processing parameters
Cylinder temperature : 190-190-170-150°C
Mold temperature : 80°C
Injection speed : 66 mm/sec

Fig.2-3:Mold shrinkage (80 ·80 ·2mmt)



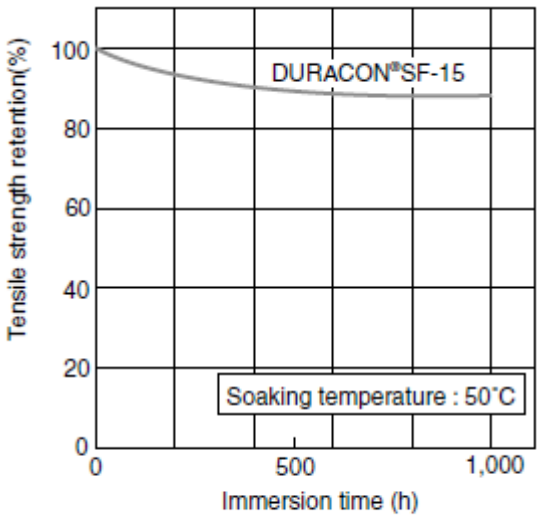
Processing parameters:
Cylinder temperature : 190-190-170-150°C
Mold temperature : 60°C
Injection speed : 66 mm/sec





2.Other Properties of SF series

Fig.3-1:Gasoline resistance



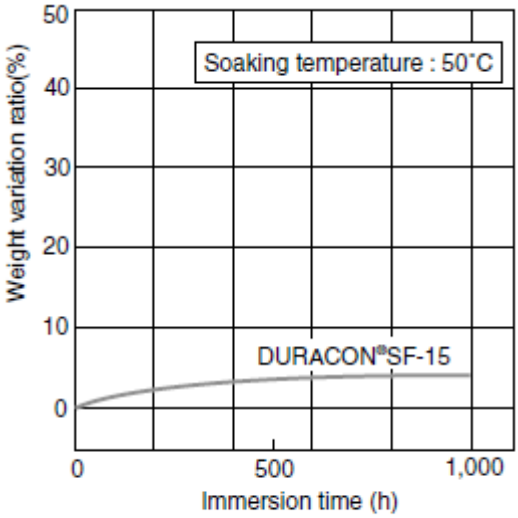
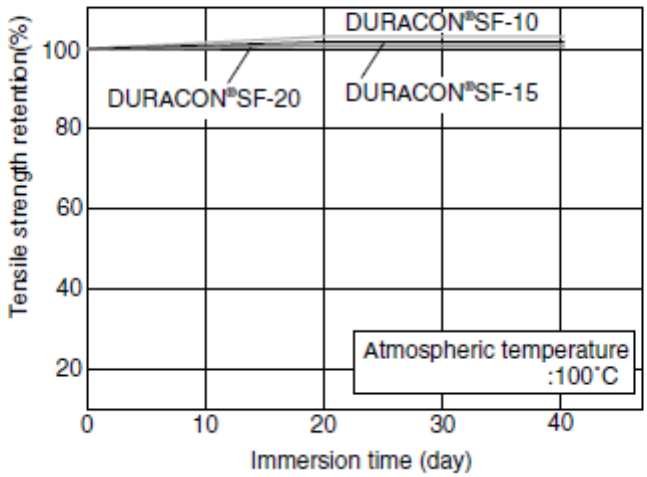


Fig3-2



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NOTES TO USERS

- All property values shown in this brochure are the typical values obtained under varying conditions prescribed by applicable standards and test methods.
- This brochure has been prepared based on our own experiences and laboratory test data, and therefore all data shown here are not always applicable to parts used under different conditions. We do not guarantee that these data are directly applicable to the application conditions of users and we ask each user to make his own decision on the application.
- It is the users' responsibility to investigate patent rights, service life and potentiality of applications introduced in this brochure. Materials we supply are not intended for the implant applications in the medical and dental fields, and therefore are not recommended for such uses.
- For all works done properly, it is advised to refer to the appropriate "**Technical Catalog**" for specific material processing.
- For safe handling of materials we supply, it is advised to refer to the Safety Data Sheet "**SDS**" of the proper material.
- This brochure is edited based on reference literatures, information and data currently available to us. So the contents of this brochure are subject to change without notice due to new data.
- Please contact our office for any questions about products we supply, descriptive literatures or any description in this brochure.

POLYPLASTICS CO., LTD.

JR Shinagawa East Bidg.,
18-1, Konan 2-chome, Minato-ku, Tokyo, 108-8280 Japan
Tel: +81-3-6711-8610 Fax: +81-3-6711-8618

http://www.polyplastics.com/en/

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