Technical information

Garlast®2090 Perfluoroelastomer parts

Suzhou Diwei sealing technology Co.,Ltd

Color: black

General Description

Garlast® 2090 is a carbon black filled compound having excellent chemical resistance and mechanical properties. It has a maximum operating temperature of 316°C, although short excursions to higher temperatures are possible. It exhibits low swell in organic and inorganic acids and aldehydes and has good response to temperature cycling effects. Garlast 2090 has outstanding hot air ageing properties and exhibits very low and stable compression set at high temperatures. Its relatively low modulus can be a great help in assembly.

This is a general purpose material suitable for around 95% of all applications in all industries. Some of its uses are O-rings, diaphragms, seals, gaskets and other custom parts.
Compound 2090 is not recommended for applications involving water/steam and aliphatic amines at higher temperature. It should never be used in applications involving ethylene oxide or propylene oxide. The physical properties and chemical resistance of compound 2090 are as follows:

Physical Properties[1]

Hardness[2] Shore A	±5	89
100% Modulus[3]	MPa	11.8
TS at break[3]	MPa	15.6
Elongation at break[3]	%	123
Compression set[4],% 25 70h at 204°C		35

1 Not to be used for specifications
2 ASTM D2240
3 ASTM D412, 500 mm/min (20 in/min)
4 ASTM D395 B, 214 o-rings

Application

- Mechanical seals
- Valves
- Pump housings
- Sprayers/dispensers
- Sampling/metering
- Reactors
- Mixers
- Compressors
- Controls/instrumentation
- Bearing isolators

Chemical Resistance

Chemical Resistance to	
Aromatic/Aliphatic oil	++++
Acids	++++
Bases	+++
Alcohols	++++
Aldehydes	+++
Amines	+
Ethers	++++
Esters	++++
Ketones	++++
Steam/Hot water	+
Strong Oxidizers	++
Ethylene Oxide	x

++++ = Excellent
+++ = Very Good
++ = Good
+ = Fair
x = Not Recommended