

Compound GPlast™ 642 FDA Black (US)
POLYMER TYPE: Perfluoroelastomer FFKM80 (+/-5°)

Physical Properties

Property	Test Method	Units	Typical Values
COLOUR			Black
HARDNESS	ISO 48	°IRHD	78
TENSILE STRENGTH	ISO 37	MPa	13.5
MODULUS @ 100%	ISO 37	MPa	9.4
ELONGATION @ BREAK	ISO 37	%	132
TEAR STRENGTH	ISO 34	N/mm	22.3
SPECIFIC GRAVITY	ISO 2781	g/cm ³	2.01
COMPRESSION SET VALUE IN AIR 25% STRAIN – 24HRS @ 204°C	ISO 815	%	19.1

Description

This Black FDA material provides excellent temperature resistance up to +260°C (+500°F) and has similar chemical resistance to that of PTFE but with elastomeric properties comparable to standard fluorocarbon rubbers. Developed to comply with the requirements of FDA 21 CFR 177.2600. Along with all our GPlast™ range, this grade is suitable for use in a wide range of applications where other polymers are not suitable. Do not use any GPlast™ grade with molten alkali metals. Service Temperatures +260°C (+500°F) to -15°C (+5°F).

Chemical Resistance

1. Suitable, little or no effect. 2. Minor to moderate effect, not maximum resistance. 3. Moderate to severe effect – may be useful in some limited applications. 4. Unsuitable and not recommended – severe effect.

Chemical Group	Rating
Aromatics / Aliphatic Oils	1
Acids	1
Alkalis	1
Alcohols	1
Aldehydes	1
Amines	1
Ethers	1
Ethylene Oxide	1
Esters	1
Ketones	1
Propylene Oxide	1
Steam/Hot Water	1
Strong Oxidisers	1

More detailed information available on request.

Since development and improvement of compounds is a continuing process, Gapi reserves the right to modify their composition and characteristics.
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