Compound GPlast™ 643 USP Class VI High Temperature (UW)
POLYMER TYPE: Perfluoroelastomer FFKM70 (+/-5°)

Physical Properties

Property	Test Method	Units	Typical Values
COLOUR			White
HARDNESS	ISO 48	°IRHD	70
TENSILE STRENGTH	ISO 37	MPa	16.1
MODULUS @ 100%	ISO 37	MPa	2.0
ELONGATION @ BREAK	ISO 37	%	296
TEAR STRENGTH	ISO 34	N/mm	20.1
SPECIFIC GRAVITY	ISO 2781	g/cm3	2.45
COMPRESSION SET VALUE IN AIR 25% STRAIN – 24HRS @ 204°C	ISO 815	%	24

Description

This white high temperature material has been specifically developed for use with a wide range of potent active pharmaceutical ingredients (API's) and aggressive cleaning agents, being especially suited to withstand steam-in-place (SIP) and clean-in-place (CIP) procedures. It has excellent temperature resistance -15°C (5°F) to +300°C (+572°F). This material is tested to meet the requirements of FDA21 CFR 177.2600€ (F). It is intended for repeated use in food processing equipment and to be in contact with food. It meets the requirements of USP Class VI, having passed the United States Pharmacopoeia (USP) Biological Reactivity test, IN VIVO.
Do not use any GPlast™ grade with molten alkali metals.

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
Esters	1
Ketones	1
Propylene Oxide	1
Steam/Hot Water	1
Strong Oxidisers	1

More detailed information available on request.

GPlast 643 USP Class VI Material has passed USP Systemic, USP Intracutaneous and USP Muscle Implantation studies when test article was extracted at 70°C for 24 hours. Although GPlast 643 USP Class VI has passed USP IN VIVO testing, the material is supplied by Gapi as a FDA grade product only for use in non-implant devices. It is for the developers of the finished product to determine the suitability of use of the material for its end application and that it complies with statuary, regulatory and health care industry requirements.