

HPU diet

Hydrolysis-resistant Polyurethane, suitable for foodstuff

Standard colour: white

- HPU with approval according FDA as well as EU1935/2004, for critical hygienic applications
- Resistant to mineral oils, HFD-U and HETG-fluids, sour oils and gases, cold water as well as diluted acids and bases
- Applicable for static seals, rod and piston seals, wiper seals and rotary seals

Properties	Value	Unit	DIN Standard
Hardness	93 ±5	Shore A	DIN ISO 7619-1
Hardness	46 ±3	Shore D	DIN ISO 7619-1
Density	1,20	g/cm ³	DIN EN ISO 1183-1
100% Modulus	12,8	MPa	DIN 53504
300% Modulus	37,7	MPa	DIN 53504
Elongation at break	445	%	DIN 53504
Tensile strength	43,7	MPa	DIN 53504
Compression set 70°C/22h	24	%	DIN ISO 815-1
Compression set 70°C/70h	28	%	DIN ISO 815-1
Compression set 100°C/22h	33	%	DIN ISO 815-1
Rebound resilience	45	%	DIN ISO 4662:2017
Tear resistance	38	N/mm	DIN ISO 34-1 A
Abrasion resistance	35	mm ³	DIN ISO 4649 B
min. Service temperature	-30	°C	
max. Service temperature	+110	°C	

Confirmation according FDA

Hereby we, Trygonal, Kunststoffinnovationen GmbH, confirm, that all single components used for our compound named «HPU diet» are listed on Code of Federal Regulation of U.S. Food and Drug Administration (FDA), Rockville MD. They are mentioned under following subchapters: 21CFR 177.1680.

Confirmation according EU1935/2004

The confirmation according FDA mentioned above provides an approval according EU1935/2004. Due to unavoidable technical factors or due to the form of delivery of the elastomeric pre-materials traces of non-specified impurities could be included. A compulsory test should be applied to the final product.

Allowed for contact with foods. Not permitted for medical articles (implants)!

All above stated data result from random tests which were taken from the ongoing production. All data were established based on standard test-specimen according to ISO, DIN and ASTM standards and can basically not be carried over to the construction element.

Our applied technical advice, either oral, written or through tests is given according to our best knowledge. However, this information is to be considered as non-obligatory instruction, also in terms of any protective rights of a third party, and does not exempt you from testing our product in reference to its suitability for the intended process and purpose. Utilisation, application and processing of the products occur entirely outside of our control and are therefore exclusively your responsibility. However, should a case of liability come into question, it will be limited to all damages in the value of the product which we delivered and you used. By all means, we do warrant the impeccable quality of our products in accordance with our general sales and delivery conditions.