

Ultrason® E 2020 P
PESU

BASF

Polyethersulfone flakes, e.g. for membrane applications, coatings and membranes. The product is soluble in N-Methylpyrrolidone (NMP) and N, N- Dimethylacetamide. The product is not developed for injection moulding.
Abbreviated designation according to ISO 1043-1: PESU

Processing/Physical Characteristics	Value	Unit	Test Standard
ASTM Data			
Density, 73°F	1370	kg/m³	ASTM D 792

Mechanical Properties	dry / cond	Unit	Test Standard
ISO Data			
Tensile Modulus	- / 2650	MPa	ISO 527
Yield stress	- / 85	MPa	ISO 527
Yield strain	- / 6.9	%	ISO 527
Charpy impact strength (+23°C)	- / no break	kJ/m²	ISO 179/1eU
Charpy notched impact strength (+23°C)	- / 6.5	kJ/m²	ISO 179/1eA
ASTM Data			
Flexural Modulus	2599 / -	MPa	ASTM D 790

Thermal Properties	dry / cond	Unit	Test Standard
ISO Data			
Glass transition temperature, 10°C/min	225 / *	°C	ISO 11357-1/-2
Temp. of deflection under load (1.80 MPa)	205 / *	°C	ISO 75-1/-2

Other Properties	dry / cond	Unit	Test Standard
ISO Data			
Humidity absorption	1 / *	%	Sim. to ISO 62

Material Specific Properties	dry / cond	Unit	Test Standard
ISO Data			
Viscosity number	56 / *	cm³/g	ISO 307, 1157, 1628

Characteristics

Processing

Injection Molding, Coating

Delivery form

Powder, Natural Color

Chemical Media Resistance

Acids

- ✓ Acetic Acid (5% by mass) (23°C)
- ✓ Citric Acid solution (10% by mass) (23°C)
- ✓ Hydrochloric Acid (36% by mass) (23°C)
- ✓ Sulfuric Acid (38% by mass) (23°C)
- ✓ Sulfuric Acid (5% by mass) (23°C)

Bases

- ✓ Sodium Hydroxide solution (35% by mass) (23°C)
- ✓ Sodium Hydroxide solution (1% by mass) (23°C)

Alcohols

- ✓ Isopropyl alcohol (23°C)
- ✓ Methanol (23°C)
- ✓ Ethanol (23°C)

Hydrocarbons

- ✓ Toluene (23°C)
- ✓ iso-Octane (23°C)

Ketones

- ✗ Acetone (23°C)

Ethers

- ✓ Diethyl ether (23°C)

Mineral oils

- ✓ SAE 10W40 multigrade motor oil (23°C)
- ✓ SAE 10W40 multigrade motor oil (130°C)
- ✓ SAE 80/90 hypoid-gear oil (130°C)

Salt solutions

- ✓ Sodium Chloride solution (10% by mass) (23°C)
- ✓ Sodium Hypochlorite solution (10% by mass) (23°C)
- ✓ Sodium Carbonate solution (20% by mass) (23°C)
- ✓ Sodium Carbonate solution (2% by mass) (23°C)

Other

- ✓ Ethyl Acetate (23°C)
- ✗ DOT No. 4 Brake fluid (130°C)
- ✓ Ethylene Glycol (50% by mass) in water (108°C)
- ✓ Water (23°C)
- ✓ Deionized water (90°C)
- ✗ Phenol solution (5% by mass) (23°C)

Disclaimer

These guide values are measured and provided by the product manufacturer and have been determined on standardised test specimens and can be affected by pigmentation, mould design and processing conditions. M-Base has taken the guide values from the producer's original Technical Data Sheet. **ALBIS AND M-BASE ARE THEREFORE NOT RESPONSIBLE FOR THE ACCURACY OF THE GUIDE VALUES AND CANNOT GIVE ANY WARRANTY WITH REGARD TO THEIR CORRECTNESS.**

Any information given on the chemical and physical characteristics of our products, including, without limitation, technical advice on applications, whether verbally, in writing or by testing the product, is given to the best of our knowledge and in good faith and does not exempt the buyer from carrying out their own investigations and tests in order to ascertain the product's specific suitability for the purpose intended. The buyer is solely responsible for confirming the suitability of the product for a particular application, its utilization and processing and must observe any applicable laws and government regulations. **NO EXPRESS OR IMPLIED RECOMMENDATION OR WARRANTY IS GIVEN WITH REGARD TO THE SUITABILITY OF THE PRODUCT FOR A PARTICULAR APPLICATION, SUCH AS, BUT NOT LIMITED TO, SAFETY-CRITICAL COMPONENTS OR SYSTEMS.**

Healthcare uses: the supply of any product by ALBIS for any medical, pharmaceutical or diagnostic application is conditional to an assessment by ALBIS in terms of compliance with ALBIS' internal risk management policy – even for products which are in general designated for use in Healthcare applications.

Important: irrespective of product type or designation, ALBIS does not recommend or support the use of any products it supplies which fall into the following medical, pharmaceutical or diagnostic application categories:

- risk class III applications according to EU directive 93/42/EEC
- any bodily implant application for greater than 30 days
- any critical component in any medical device that supports or sustains human life.

At all times, our standard terms and conditions of sale apply.