Compounding Solutions®
Global Leader in Thermoplastic Compounds

Technical Datasheet

PEBA RO™

Description: Polyether Block Amide, 20% Barium Sulfate

The Polyether-block amide grades offered by Arkema (PEBAX) and Evonik (Vestamid Care ME) are a plasticizer-free thermoplastic elastomer that is ideally suited for medical grade tubing and film due to its ease of processing and wide range of properties. Barium sulfate is a white powder that occurs naturally as barite or in the synthetic form Blanc Fixe. It has a density of (4.5 g/cm3) and offers radiopacity. Barium sulfate is the most widely used radiopacifier in the medical device industry because of its ease of processing, excellent dispersibility, color stability, and low-cost.

Form	Pellets
Appearance	White, Opaque
Processing Method	Injection Molding or Extrusion

Typical Material Properties: Pebax SA01 MED, 20% BaSO4

Material Property	Test Method	Units	PBX 7220	PBX 7020	PBX 6320	PBX 5520	PBX 4520	PBX 4020	PBX 3520	PBX 2520
Durometer (instantaneous)	ASTM D2240	Shore D	74	71	66	57	47	45	34	28
Density	ASTM D792	g/cm3	1.2	1.19	1.2	1.21	1.21	1.2	1.2	1.19
Melt Flow (230C, 2.16 kg)	ASTM D1238	g/10 min	16.8	16.5	17.8	46.7	54.3	38.7	58.8	62.1
Tensile Stress at Yield	ASTM D638	MPa	36.1	30.1	21.6	23.6	8.81	N/A	N/A	N/A
Tensile Stress at Break	ASTM D638	MPa	40.7	40.3	35.8	23.6	13.6	18.5	8.3	5.66
Elongation at Break	ASTM D638	%	270	360	460	>500	>500	450	>500	>500
Flexural Modulus	ASTM D790	MPa	740	640	370	228	110	105	31	16.2
Flexural Stress	ASTM D790	MPa	27.5	22.7	15.2	9.1	5.08	4.65	1.53	0.98

Typical Material Properties: Vestamid Care ME, 20% BaSO4

Material Property	Test Method	Units	VCME 7120	VCME 6220	VCME 5520	VCME 4720	VCME 4020
Durometer (instantaneous)	ASTM D2240	Shore D	76	65	59	51	48
Density	ASTM D792	g/cm3	1.21	1.2	1.18	1.19	1.21
Tensile Stress at Yield	ASTM D638	MPa	36.7	24.1	23.0	15.6	12.0
Tensile Stress at Break	ASTM D638	MPa	36.7	29.3	25.3	20.4	16.8
Elongation at Break	ASTM D638	%	150	210	300	470	>500
Flexural Modulus	ASTM D790	MPa	1020	430	260	130	87
Flexural Stress	ASTM D790	MPa	38.5	17	10.8	6.18	4.25

Drying Requirements

PEBARO™ grades are hydroscopic and do require drying prior to processing. It is recommended to dry all PEBARO™ grades to <0.05% moisture using a dessicant dryer at the following temperatures:

- 140 F - PBX2520, PBX3520, PBX4020, VCME4020, VCME4720
- 160 F - PBX4520, PBX5520, PBX6220, PBX7020, PBX7220, VCME5520, VCME6220, VCME7120

Purging

A similar durometer Polyether block Amide is recommended for purging into or out of PEBARO™ grades.

Handling

Supplied as free-flowing pellets. The Safety Data Sheet should be consulted for other detailed guidelines.

Storage

Typical shelf life is two years from date of delivery in unopened packaging. When not being used, the container and liner should be closed and stored in a cool, dry area protected from UV exposure.

Processing

For processing recommendations please contact your CS sales representative.

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See Safety Data Sheet for Health & Safety Consideration