

Technical datasheet for: epsotech PP MR0 RC, epsotech PP MS0 RC

Overview and Structure

epsotech PP MR0 RC (rolls) and epsotech PP MS0 RC (sheets) are compounds recycled from Marine fishing nets, trawls, ropes and containers. By re-using this material, the CO2 impact is more than 5x less than using virgin polymer.

Our supplier continually tests its raw materials and maintains a database of >700 different types of rope and net, enabling them to provide very consistent mechanical and thermal properties.

Standard material is available in green or black.

Typical Physical Properties

Property	Value	Unit	Standard	Test Method
GENERAL PROPERTIES:				
Density*	0.90 – 0.96	g/cm3	ISO 1183	-
MECHANICAL PROPERTIES:				
Tensile Modulus	>1000	MPa	ISO 527	23°C 1mm/min
Yield stress	27 - 36	MPa	ISO 527	23°C 50mm/min
Elongation at Yield	11	%	ISO 527	23°C 50mm/min
Elongation at Break	-	%	ISO 527	23°C 50mm/min
THERMAL PROPERTIES:				
VICAT softening Point	80 - 82	°C	ISO 306	B/50
HDT-A	-	°C	ISO 075	HDT/A 1.8 MPa
UV STABILISATION:				
UV Stabilisation	Optional	-	-	According to customer requirement
BURNING BEHAVIOUR:				
Burning Rate	-	-	-	-
Flammability Rating	-	-	-	-
Flammability Rating UL**	-	-	-	-
SURFACE/VOLUME:				
MISCELLANEOUS:				
Mould Shrinkage	1.4 – 2.0	%	-	-
Thermoforming Temperature	-	°C	-	-

Unless otherwise stated, products are tested at a typical thickness of 4mm

* The density quoted should only be used as a guide. This value can change depending upon the type and quantity of pigments or additives used.

** Fire behaviour values given by raw material supplier or by indicative test on raw material. Not intended as a specification

Supplemental Information

Chemical Contact and cleaning

Reagent	Chemical resistance		Reagent	Chemical resistance
Acetone	Very good		Chloroform	Good
Acid – (Weak)	Excellent		Citric Acid Solution	Good
Acid – (Strong)	Very good		Anti-freeze	Excellent
Apple juice	Very good		Detergents	Good
Beef Fat	Very Good		Dairy Products	Good
Butter	Good		Diesel	Good
Base (Weak)	Excellent		Ethyl Alcohol	Good
Base (Strong)	Good		Fertilisers	Good
Carrott Juice	Excellent		Petrol	Good

Chemical resistance is influenced by many factors, including concentration, temperature, exposure time and material stress. Therefore the data should only be used as a guide.

Most common mild soaps or detergents dissolved in warm water can be used to effectively clean general dirt and surface contaminants, but in all cases should be objectively tested. Abrasive products will damage the surface.

Storage and Drying

PP has a very low moisture absorption, therefore pre-drying is not normally required

Dimensional Tolerances

Standard tolerances are subject to the local standard tolerance set. Extra tolerance requirements may be possible on request and by special agreement

Product Modification

Product code nomenclature takes in to account selected primary features of a product. The suffix may indicate a primary additional functionality, however, further multiple modifications are almost always possible and may be agreed upon and specified prior to our technical and commercial offer. Such enhancements are a normal part of our service capability and they do not affect the general characteristics listed in technical datasheets.

Disclaimer:

Suitability for use - epsotech sells thermoplastic sheet and monofilament products. The above information describes the basic features of our products. However, these are largely influenced by their specific application, the application environment, final processing and the customer's intended usage. We recommend that in each case the suitability of our products for the intended usage is thoroughly listed and evaluated. We do not give any warranty or guarantee for any particular quality required by a customer or for the usability of our products in any particular customer environment. epsotech will under no circumstance be liable for wear and tear, for damages resulting from disregard of product instructions – including those contained in this technical data sheet – operating instructions, disregard of other instructions, misuse, alteration or unauthorised repairs or processing. All deliveries shall be subject to the Terms and Conditions of the Seller.

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Edition 1, February 2020

Published by epsotech Holding GmbH, Im Reinfeld 2, Jülich Kirchberg, 52428 Germany