

Technical Datasheet

Meltblown TPU is a multi-directional stretch TPU (Thermoplastic Polyurethane) nonwoven fabric, with excellent memory. As a breathable, fluid repellent, and comfortable nonwoven fabric Meltblown TPU does not restrict mobility, due to its enhanced stretch and recovery capabilities. As a result, these high performance characteristics makes Meltblown TPU the ideal solution for applications such as plasters, wound dressings and tapes.

Other notable benefits include:

- ▶ Highly elasticity, up to 450% elongation
- ▶ Excellent abrasion resistance
- ▶ High vapour permeability
- ▶ Good resistance to microbial degradation
- ▶ Good resistance to swelling from oil and fat

TEST	METHOD	Meltblown TPU Stretch										
Fabric weight (g/m ²)	NWSP 130.1	50	55	75	80	90	100	140	160	180	200	
Tensile Strength (N)	NWSP 110.4	MD	30	30	35	40	45	50	80	95	100	115
		CD	20	20	30	35	40	45	65	65	90	100
Elongation (%)	NWSP 110.4	MD	200	250	250	300	300	300	300	300	300	300
		CD	200	250	250	300	300	300	300	300	300	300
Air permeability (l/m ² /s)	NWSP 070.1	400	550	330	315	300	250	150	110	95	85	
Thickness (mm)	NWSP 120.1	0.29	0.32	0.35	0.36	0.38	0.40	0.52	0.60	0.65	0.70	

TEST	METHOD	Meltblown TPU High Stretch						
Fabric weight (g/m ²)	NWSP 130.1	75	100	125	150	175	200	
Tensile Strength (N)	NWSP 110.4	MD	45	60	70	100	110	120
		CD	35	50	60	80	80	90
Elongation (%)	NWSP 110.4	MD	400	400	400	450	450	450
		CD	400	400	400	450	450	450
Air permeability (l/m ² /s)	NWSP 070.1	380	200	150	100	65	55	
Thickness (mm)	NWSP 120.1	0.36	0.45	0.46	0.53	0.55	0.60	

MD = machine direction, CD = cross/transverse direction

This is provisional data, as such this will be subject to change as more information is generated.



Use of Meltblown TPU in medical devices or pharmaceutical applications

Don & Low make no warranties regarding the suitability of Meltblown TPU for a specific medical use. In all cases the Don & Low customer has to establish from their own experience and from tests on Meltblown TPU that this fabric is suitable for the manufacture of their products. The customer has also to ensure that the medical device or pharmaceutical application manufactured using Meltblown TPU fabric is safe, lawful and technically suitable for the intended use. Don & Low excludes to the fullest extent possible any warranties with regards to the products, other than to the fabric specification against which it is supplied. Don & Low do not warrant the fitness for purpose of the product for any particular use or application. Specifically, neither Don & Low nor the supplier of the TPU resin from which the product is manufactured have tested the material with respect to all of the special requirements related to use in medical devices ("medical device" being as defined in the EU Medical Device Regulation of any analogous rules or laws worldwide). Cytotoxicity testing on a plaque made from the raw material has shown that Meltblown TPU will fulfil the requirements in ISO 10993 for irritation, sensitisation and cytotoxicity assuming the materials are processed correctly and only

approved additives are used. Biocompatibility testing on final products under conditions of use must however be confirmed by the customer. Don & Low has not tested its material with respect to all of the special requirements related to use in medical devices (defined in risk classes I to III according to the European and US Medical Device legislation). In the limited testing carried out by the TPU resin supplier, there are no known issues relating to the use of the product in certain categories of medical devices, although the product is not suitable for use in any kind of implant, blood-bags, containers for liquid medicines or other liquids which are intended for transfer to the human body, or for articles which could come into contact with saliva for a length of time. For applications involving long-term body contact over a large area a textile cover or coating is recommended. In the event that Don & Low shares the conclusions on any of its testing, you shall not be entitled to rely on this and it shall be for you to carry out testing and satisfy yourself as to the suitability and safety of the Product for its intended use before you offer this for sale.



Don & Low reserves the right to change specifications or other product information. Don & Low accepts no responsibility or liability for information provided by third parties. No warranties, express or implied, are offered regarding the suitability of any product for your use, as site conditions and customer requirements vary. Should you require further information, please contact us. Products are sold subject to the seller's terms and conditions of sale. No warranty or immunity is offered against infringement of patents or other intellectual property rights.

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