

# 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 400% elongation
- ▶ Excellent abrasion resistance
- ▶ High vapour permeability
- ▶ Good resistance to microbial degradation
- ▶ Good resistance to swelling from oil and fat

TEST	METHOD	Meltblown TPU				
		MD	CD	MD	CD	
Fabric weight (g/m <sup>2</sup> )	NWSP 130.1	35	55	80*	85	
Tensile Strength (N)	NWSP 110.4	MD	27	35	73	75
		CD	21	30	44	50
Elongation (%)	NWSP 110.4	MD	300	290	320	390
		CD	330	350	350	390
Air permeability (l/m <sup>2</sup> /s)	NWSP 070.1	750	550	225	250	
Thickness (mm)	NWSP 120.1	0.21	0.26	0.26	0.33	

MD = machine direction, CD = cross/transverse direction

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

\*Compacted



## 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.

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