JAMES CROPPER

TECHNICAL DATA SHEET

OPTIVEIL®

CARBON VEIL

20332A

James Cropper is a leading advanced materials supplier, offering wide range of highly porous technical nonwovens. Our materials are designed for use in composites and can be customised to meet specific customer or market needs, ensuring an optimum performance benefit as well as process and resin compatibility. They are used across a broad range of industries, improving the finish, fabrication and performance of composites to create market leading products for our customers.



MARKETS

- ADVANCED AIR MOBILITY (AAM)
- AEROSPACE
- AUTOMOTIVE
- CONSUMER ELECTRONICS
- DEFENCE
- INDUSTRIAL
- MEDICAL
- MARINE
- SPORTING GOODS
- WIND ENERGY

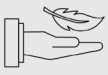
OPTIVEIL® 20332A

MATERIAL INFORMATION

Our lightweight nonwovens are ideal carrier substrates for adhesive films or fragile materials. They act as a support and enable rapid, even wet out of adhesive, creating a thin, uniform bond-line and improving the handling of the final product. In addition to acting as a carrier substrate, our lightweight thermoplastic and glass veils also improve both resin flow and interlaminar fracture toughness in a composite.

DESCRIPTION	Wet-laid nonwoven carbon fibre veil
FIBRE TYPE	Carbon
FIBRE LENGTH	12 mm / 0.5”
FIBRE DIAMETER	7µm
BINDER TYPE	Cross-linked styrene acrylic
KEY PROPERTIES	Electrical conductivity, high temperature resistance, high thermal stability, EMI shielding, static dissipation, chemical resistance
TYPICAL APPLICATIONS	Surfacing veils for composites, adhesive carriers and supports, EMI shielding of composite enclosures, resistive heating, static control in assembly areas, use in fuel cell assemblies.

REDUCE WEIGHT



- LIGHTWEIGHT FOR MINIMUM WEIGHT ADDITION
- AREAL WEIGHTS FROM 2 g/m²

FASTER PRODUCTION TIME



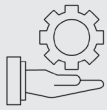
- FAST, EVEN WET OUT OF ADHESIVE
- MINIMISES PROCESSING TIME
- PROVIDES A THIN, UNIFORM BOND LINE TO ENSURE FILM CONSISTENCY AND QUALITY

QUALITY



- IMPROVED RESILIENCE AND HANDLING OF FILM OR FRAGILE MATERIAL
- AS9100 QUALITY ASSURED
- UNIFORM FIBRE DISTRIBUTION AND THICKNESS

PROCESSING EASE



- EASY TO HANDLE
- GOOD TEMPERATURE STABILITY
- RESIN/ADHESIVE COMPATIBILITY

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MATERIAL PROPERTIES

AREAL WEIGHT	g/m^2 oz/yd^2	2 0.06
THICKNESS AT 10 kPa (1.45lb/in^3)	mm mil	0.03 1
MD TENSILE STRENGTH	N/15mm lb/in	4 2
CD TENSILE STRENGTH	N/15mm lb/in	0.8 42
TYPICAL SURFACE RESISTANCE*	ohm/sq	40 - 80

The values shown in the table are the typical surface resistance range for this material. If you require a specific surface resistance please contact us - we have the experience and capability to design and manufacture material to deliver a specific level of surface resistance and would welcome the opportunity to discuss this.

The data in the table represents indicative values only. The user must be satisfied that the product is entirely suitable for the intended application.

* Surface resistance is measured using a Vermason 75mm square contact block. The contact block is placed on a sample measuring 10cm x 10cm and a 1.0kg deadweights.

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MATERIAL SUPPLY

SUPPLY FORM	Continuous Rolls
MAX ROLL WIDTH	2100mm
MIN ROLL WIDTH	10mm
OTHER SUPPLY FORMS	Sheets and cut shapes

ACCREDITATIONS

We provide assurance that all OPTIVEIL® materials are of the highest possible quality and our manufacturing processes are accredited to BS EN (AS) 9100: 2018 Global Aerospace Quality Standard, ISO 9001 : 2015 Quality Standard, ISO 14001 : 2015 Environmental Management and the OHSAS 18001 : 2007 Occupational Health & Safety Standard.