# MIRALON® Products Technical Datasheet



# MIRALON® Sheets/Tape

## **Product Description**

MIRALON® Sheet and Tape products are carbon-based non-woven materials that can be used in a variety of applications to lightweight and enhance product or system performance.

Using a proprietary seaming process, MIRALON® Sheets and Tapes can be delivered in any length to meet customer requirements. These products can also be post processed for specific applications. MIRALON® Sheets can be pre-pregged with a variety of resin systems or infiltrated with various polymer systems, all with industry standard equipment.

## **Applications**

- Honeycomb core structures
- Composites
- EMI & ESD protection
- Ballistics
- FIR heating solutions
- Wire & cable shielding
- Mechanical damping

#### **Features**

- Electrically conductive
- Thermally conductive
- Flexible
- Lightweight
- High strength-to-weight ratio
- Chemically resistant

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## **Typical Physical Properties**

Unless otherwise stated, the data was compiled from typical production batches using standard test methods. These are typical values only, referencing properties of a condensed sheet with an average grams per square meter (gsm) of 12, and do not constitute a product specification. The reported strength can vary greatly depending on post treatments. Areal densities other than the 12 gsm are available<sup>(1)</sup>.

Property	Value
Bulk density, g/cm <sup>3</sup>	0.65
Areal density, g/m <sup>2</sup>	12 <sup>(1)</sup>
Thickness, µm	25
Standard widths, cm	0.79 – 106
Temperature operating range, °C / °F	-200 to +200 / -328 to +392
Maximum processing temperature, °C / °F	350 / 662
Thermal conductivity, W/m*K	30
CTE, ppm/K	-3.0
Surface resistivity, (Ω/□) @ 20°C	0.9
Specific electrical conductivity, S*cm²/g @ 20°C	600
EMI shielding effectiveness, dB @ 2 GHz	40
Temperature coefficient of resistivity (surface), Ω*cm/K	7.40*10 <sup>-7</sup>
Specific strength, MPa/(g/cm³)	40-140

<sup>(1)</sup>Standard ranges: 8-12gsm & 10-15gsm, custom ranges also available.

# **Storage**

MIRALON® Sheets and Tape should be stored in a cool, dry place, in their original package.

# **Precautionary Statement**

Huntsman Advanced Materials Americas LLC maintains up—to-date Safety Data Sheets (SDS) on all of its products. These sheets contain pertinent information that you may need to protect your employees and customers against any known health or safety hazards associated with our products. Users should review the latest SDS to determine possible health hazards and appropriate precautions to implement prior to using this material.

#### First Aid!

Refer to SDS as mentioned above.

#### KEEP OUT OF REACH OF CHILDREN

#### FOR PROFESSIONAL AND INDUSTRIAL USE ONLY

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