



# **Technical Data Sheet**

3M<sup>™</sup> Scotch® Filament Tape 890MSR

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Product Details

Regulatory Info/SDS

#### **Product Description**

Scotch® Filament Tape 890MSR is a high-performance transparent filament tape reinforced along its length with continuous fiberglass-yarn filaments, which gives the tape a very high tensile strength. The clear polyester backing provides excellent abrasion, moisture and scuff resistance. The adhesive is a modified synthetic rubber resin adhesive specifically formulated to provide very good oily metal adhesion performance. The adhesive also provides a balanced performance having high adhesion and long term holding power for a variety of metal working applications.

#### **Product Features**

- 890MSR (Clear) meets ASTM D5330, Type III.
- 890MSR (Black) meets ASTM D5330, Type IV.
- · Abrasion and moisture resistant.
- · Good oily metal adhesion.
- Printable by the print seal process.
  Very high tensile strength.

- High shear strength.Good initial adhesion.
- Excellent aging before and after application.

- Good protection of filaments and adhesive to provide longer package life.
  Assures maximum package performance for limited outdoor use.
  Saves time through ease of dispensing and handling versus glue and strapping.
  Provides advertising and warning capability when printed.
- Low unit cost on applications where high tensile strength is main requirement by using less tape.
- Good holding under a wide range of application conditions with minimum amount of tape.
  Boxes remain securely closed through normal warehouse time cycles.

#### **Technical Information Note**

The following technical information and data should be considered representative or typical only and should not be used for specification purposes.

# **Typical Physical Properties**

| Attribute Name       | Test Method            | Value                                 |  |
|----------------------|------------------------|---------------------------------------|--|
| Adhesive Type        |                        | Pressure sensitive modified synthetic |  |
|                      |                        | rubber resin                          |  |
| Backing              |                        | Polyester(PET)                        |  |
| Backing Color        |                        | Clear or Black                        |  |
| Fiber Reinforcement  |                        | Glass Yarn                            |  |
| Total Tape Thickness | ASTM D3652, AFERA 5006 | 0.2 mm (8 mil)                        |  |

# **Typical Performance Characteristics**

| Attribute Name      | Test Method       | Temperature   | Substrate       | Value                            |  |
|---------------------|-------------------|---------------|-----------------|----------------------------------|--|
| 180° Peel Adhesion  | ASTM D3330, AFERA | 23 °C (73 °F) | Stainless Steel | 8.1 N/cm (74 oz/in) <sup>1</sup> |  |
|                     | 5001              | 25 C (75 F)   |                 |                                  |  |
| Elongation at Break | ASTM D3759, AFERA |               |                 | 8 % 1                            |  |
|                     | 5004              |               |                 |                                  |  |
| Tensile Strength    | ASTM D3759, AFERA |               |                 | 1380 N/cm (788 lb/in)            |  |
|                     | 5004              |               |                 | 1                                |  |

<sup>1 304</sup> mm/min (12 in/min)

# **Handling/Application Information**

# **Application Techniques**

An extensive line of application equipment including hand-held dispensers and an automatic L-Clip applicator is available. Application is most easily accomplished at room temperature. At lower temperatures, approaching 32°F (0°C), the adhesive becomes firm. Once applied, Scotch® Filament Tape 890MSR performs well throughout the normal temperature ranges encountered by packaged products in shipping and storage environments.

#### **Storage and Shelf Life**

Store under normal conditions of  $4^{\circ}$  to  $27^{\circ}$ C ( $40^{\circ}$  to  $80^{\circ}$ F) and 40 to 50% relative humidity in the original packaging, out of direct sunlight. For best performance, use this product within 24 months from date of manufacture.

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#### **ISO Statement**

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