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## 3M™ Scotch® Filament Tape 890MSR

### 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

| Property             | Values   |       | Method     |
|----------------------|--|-------|------------|
| Backing Color        | Clear or Black                                     |       |            |
| Total Tape Thickness | 0.2 mm   | 8 mil | ASTM D3652 |
| Backing              | Polyester film                                     |       |            |
| Adhesive             | Pressure sensitive modified synthetic rubber resin |       |            |
| Reinforcement        | Glass yarn   |       |            |

## Typical Performance Characteristics

| 180° Peel Adhesion |          | Backing             | Notes  | Substrate       |
|--------------------|----------|---------------------|--|-----------------|
| 8.8 N/cm           | 80 oz/in | 2 mil Aluminum Foil | 12 in/min (300 mm/min)<br>72 hr dwell on Stainless Steel |                 |
| 88 N/100mm         |          |                     |  | Stainless Steel |

Property: 180° Peel Adhesion  
Method: ASTM D3330

| Tensile Strength |  |               |           |
|------------------|--|---------------|-----------|
| 1051 N/cm        |  | 10500 N/100mm | 600 lb/in |

Property: Tensile Strength  
Method: ASTM D3759

## Elongation at Break: 3 %

Methods  
ASTM D3759

## 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 behind present stock. Store in a clean, dry place. Temperature of 40-80°F (4-26°C) and 40-50% relative humidity are recommended. Rotate your stock.

## Trademarks

Scotch is a registered trademark of 3M.

## References

| Property                | Values  |
|-------------------------|---|
| 3m.com Product Page     | <a href="https://www.3m.com/3M/en_US/company-us/all-3m-products/-/Scotch-Filament-Tape-890MSR?N=5002385+3293241461&amp;rt=rud">https://www.3m.com/3M/en_US/company-us/all-3m-products/-/Scotch-Filament-Tape-890MSR?N=5002385+3293241461&amp;rt=rud</a>           |
| Safety Data Sheet (SDS) | <a href="https://www.3m.com/3M/en_US/company-us/SDS-search/results/?gsaAction=msdsSRA&amp;msdsLocale=en_US&amp;co=ptn&amp;q=890MSR">https://www.3m.com/3M/en_US/company-us/SDS-search/results/?gsaAction=msdsSRA&amp;msdsLocale=en_US&amp;co=ptn&amp;q=890MSR</a> |

## ISO Statement

This Industrial Adhesives and Tapes Division product was manufactured under a 3M quality system registered to ISO 9001 standards.

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