



# 213 High Temperature Masking Tape

## Product Data Sheet

Updated : March 1996  
Supersedes : October 1993

### Product Description

A naturally coloured smooth creped paper treated with a high quality saturant to prevent solvent penetration. The specially formulated adhesive performs in applications requiring very high temperatures.

### Physical Properties

Not for specification purposes

|                                |  |  |
|--------------------------------|--|--|
| <b>Adhesive Type</b>           | Firm synthetic rubber-resin.   |  |
| <b>Backing</b>                 | Saturated creped paper.  |  |
| <b>Thickness</b> (ASTM D-3652) | 165 µm   |  |
| <b>Tape Colour</b>             | Natural  |  |
| <b>Shelf Life</b>              | 12 months from date of despatch by 3M when stored in the original carton at 21°C (70°F) & 50 % Relative Humidity |  |

### Performance Characteristics

Not for specification purposes

|  |             |  |
|--|-------------|--|
| <b>Adhesion to Stainless Steel</b> ASTM D-3330 | 3.8 N/10mm  |  |
| <b>Tensile Strength</b> ASTM D-3759            | 35.0 N/10mm |  |
| <b>Elongation at Break</b> ASTM D-3759         | 10.0 %      |  |
| <b>Temperature Range Maximum</b>               | 175 °C      |  |

### Additional Product Information

No 213 has the firmest and generally most transfer resistant adhesive of all 3M paper tapes. A very close product is No. 214 which should always be evaluated at the same time.

This tape has often been used to overcome paint puffing complaints despite its rather high adhesion. Its firm adhesive does not anchor itself as softer adhesives often do.

This firm adhesive often makes No. 213 the best tape for use on treated metal surfaces.

This tape is not recommended for applications requiring outdoor exposure, but generally can be used on indoor applications for a reasonable length of time.

No. 213 has been used in bake cycles up to 175°C for one hour with clean, easy removal. Performance is governed by total time, temperature, surface tape is applied to, and any other coatings and conditions.

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|-------------------------------|--|---|--|
| <b>Application Techniques</b> | <p>1. Bond strength is dependent upon the amount of adhesive-to-surface contact developed. Firm application pressure develops better adhesive contact &amp; thus improves bond strength.</p> <p>2. To obtain optimum adhesion, the bonding</p> | <p>surfaces must be clean dry and well unified. A typical surface cleaning solvent is isopropyl alcohol &amp; water. Use proper safety precautions for handling solvents.</p> <p>3. Ideal tape application temperature range is 21°C to 38°C (70°F to 100°F).</p> | <p>Initial tape application to surfaces at temperatures below 10°C (50°F) is not recommended because the adhesive becomes too firm to adhere readily. However once properly applied low temperature holding is generally satisfactory.</p> |
| <b>Applications</b>           | <p>No. 213 should be considered whenever treated metals, especially light metals, are encountered.</p>   | <p>It should also be considered whenever a bake cycle exceeds one hour at 150°C or wherever a moderate tack tape is desired.</p>  |  |

| <b>Features</b>                        | <b>Advantages</b>                | <b>Benefits</b>                           |
|--|----------------------------------|---|
| Highly cured adhesive.                 | Good high temperature holding.   | Less edge lifting/less rework and labour. |
| Specially treated crepe paper backing. | Adhesive transfer resistance.    | Clean removal/less clean up.              |
|  | Sliver resistance.               | One piece removal/less labour.            |
|  | Conformability.                  | Easier handling/less time involved.       |
|  | Easy tear.                       | Better handling/less waste.               |
| Exclusive backsize treatment.          | Solvent and moisture resistance. | Reduces bleed through/less rework         |
|  | Controlled unwind.               | Easier to use/less waste.                 |

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Values presented have been determined by standard test methods and are average values not to be used for specification purposes. Our recommendations on the use of our products are based on tests believed to be reliable but we would ask that you conduct your own tests to determine their suitability for your applications. This is because 3M cannot accept any responsibility or liability direct or consequential for loss or damage caused as a result of our recommendations.



#### Specialty Tapes & Adhesives

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