



# Specialty Label Material

## 7291

FOD# 0307

page 1 of 3

Technical Data

January 1, 1999

*Supersedes February 2, 1998*

Construction	Facestock	Adhesive	Liner
	3.7 mils (94 microns)	0.9 mil (23 microns)	3.2 mils (80 microns)
	White Smudge-Proof Kimdura™	AP-360 all-purpose acrylic	#50 densified kraft – easy release

### Features

- Multi-ply, biaxially-oriented white polypropylene facestock has a consistent caliper to help prevent registration problems on press.
- Smudgeproof Kimdura™ is top coated for dot matrix, thermal transfer, and deposition.
- Polypropylene-based facestock has no plasticizers, so it resists shrinkage. Good weatherability and solvent resistance.
- AP-360 adhesive offers high initial tack and is designed for use on a wide variety of substrates including low surface energy (LSE) plastics.
- Film stiffness is well suited for high-speed dispensing.

### Application Ideas

- Ideal as a substitute for vinyl labels on rigid or semi-rigid containers.
- Drum labels.

### Typical Physical Properties and Performance Characteristics

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

Adhesion: 180° Peel (ASTM 3330)

Surface	Initial - 10 minute dwell		Conditioned for 3 days at room temperature	
	oz./in.	N/100 mm	oz./in.	N/100 mm
Stainless Steel	40	44	44	48
Polycarbonate	45	49	49	53
Polypropylene	43	47	44	48

Liner Release: 180° liner removal from facestock at room temperature

Rate of Removal	Grams/Inch Width
90 in./min.	8
300 in./min.	13

**Environmental Performance**

**Note: The following tests are intended as a guide to product performance. Application testing is recommended using actual substrates, expected dwell times, and actual conditioning for best determination of product suitability.**

The properties defined are based on four hour immersions at room temperature, unless otherwise noted. Samples were applied to stainless steel 24 hours prior to immersions and were evaluated one hour after removal.

Chemical	Appearance
Isopropyl Alcohol	No change
Detergent	No change
Engine Oil at 250°F (121°C)	Very slight change, white to off-white
Water for 48 hours	No change

Temperature resistance: 250°F (121°C) for 24 hours: Slight color change, white to off-white.  
-40°F (-40°C) for 24 hours: No change

Humidity resistance: 100°F (38°C) at 100% relative humidity for 24 hours: No change

Shelf life: Two years from date of manufacture of material if properly stored at 72°F (22°C) and 50% relative humidity.

**Processing**

- **Printing:** 3M 7291 is top coated for improved ink adhesion with thermal transfer, flexo, letterpress and screen printing processes.

The following ribbons are recommended for thermal transfer printing of 3M 7291.

- Wax-based ribbons:  
Sony 4052™  
Zebra 5030™
- Hybrid ribbons:  
Sony TR 4080™  
Zebra 5038™
- Resin based:  
Sony TR 4041™  
Astro-Med R-5™

- **Die-cutting:** Rotary or flat-bed process.

**Special Considerations**

- For maximum bond strength, surface should be clean and dry. A typical cleaning solvent is heptane or isopropyl alcohol. Consult the manufacturer's Material Safety Data Sheet for proper handling and storage of solvents.
- For best bonding conditions, application surface should be at room temperature or slightly higher. Low temperature surfaces, below 50°F (10°C), cause the adhesive to become so firm that it will not develop maximum contact with the substrate.
- Higher initial bonds are achieved through increased rub down pressure. Use maximum laminating pressure for best results.

---

## Technical Information and Data

The technical information and data, recommendations, and other statements provided are based on tests or experience which 3M believes to be reliable, but the accuracy or completeness of such information is not guaranteed.

---

## Product Use

Please remember that many factors can affect the use and performance of a 3M product in a particular application. The materials to be bonded with the product, the surface preparation of those materials, the product selected for use, the conditions in which the product is used, and the time and environmental conditions in which the product is expected to perform are among the many factors that can affect the use and performance of a 3M product. Given the variety of factors that can affect the use and performance of a 3M product, some of which are uniquely within the user's knowledge and control, it is essential that the user evaluate the 3M product to determine whether it is fit for a particular purpose and suitable for the user's method of application.

---

## Warranty and Limited Remedy

The 3M product will be free from defects in material and manufacture for a period of one (1) year from the date of manufacture. 3M MAKES NO OTHER WARRANTIES OR CONDITIONS, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY IMPLIED WARRANTY ARISING OUT OF A COURSE OF DEALING, CUSTOM, OR USAGE OF TRADE. User is responsible for determining whether the 3M product is fit for a particular purpose and suitable for user's method of application. If the 3M product is defective within the warranty period stated above, your exclusive remedy and 3M's sole obligation shall be, at 3M's option, to replace or repair the 3M product or refund the purchase price of the 3M product.

---

## Limitation of Remedies and Liability

Except where prohibited by law, 3M will not be liable for any loss or damage arising from the 3M product, whether direct, indirect, special, incidental, or consequential, regardless of the legal theory asserted, including contract, warranty, negligence, or strict liability.



This Industrial Tape and Specialties Division product was manufactured under a 3M quality system registered to ISO 9002 standards.

Sony 4050, TR 4080, and TR 4041 are trademarks of Sony Chemicals Corp. of America  
Zebra 5030 and 5038 are trademarks of Zebra Technologies Corp.  
Astromed R-5 is a trademark of Astro-Med Inc.  
Kimdura is a trademark of Kimberly Clark



### Industrial Tape and Specialties Division

3M Center, Building 220-7W-03  
St. Paul, MN 55144-1000  
USA  
1 800 362 3550  
1 800 223 7427 Fax On Demand  
www.3M.com