



Specialty Label Material

7291

FOD# 0307

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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.

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