



Destructible Polyurethane Label Stock

3812DSL, 3812, 3813

Product Data Sheet

August 2016
Supersedes: May 2016

Product Description

3M™ 3812DSL, 3812, 3813 are destructible, non-shrink polyurethane films. They are designed as a non-removable label stock. Resists one-piece removal. Face material fractures and tears easily.

Key Features

- #350 modified acrylic adhesive offers good adhesion on LSE/HSE plastics with high initial tack
- Destructible on most surfaces

Physical Properties

(Callipers are nominal values)

Facestock Thickness Film Layer (AFERA 5006)	41 micron, Matte White
Adhesive	25 micron, #350 Hi-Holding modified acrylic PSA
Liner 3812DSL	53 micron, glassine paper, double sided siliconized
Liner 3812	78 micron, glassine paper, single sided siliconized
Liner 3813	164 micron, polycoated paper single sided siliconized

Application Ideas

- Durable goods marking
- Depending on application the material also can be used for tamper-indication. In most cases, labels cannot be transferred without damage once they have been applied.

Performance Characteristics

Resistance to Chemicals and Solvents

(acc. to KBA (March 2014) tested on 1mm Aluminium. Results immediately after storage.

*Other solvents need to be tested

Substance	Exposure Time	Results
n-Heptane	4h	No change
Brake Fluid Dot4	4h	No change
Engine Oil (15W40)	4h	No change
Glass cleaner	4h	No change

Performance Characteristics

Temperature Resistance (DIN30646)	
24h at – 40 °C	No change
24h at+ 150 °C	No change

Spraying with Salt Water (DIN 50021SS) - Applied to Aluminium panel	
150 h	No change

QUV (DIN EN ISO4892-3 Typ 1A - applied to aluminium panel)	
500h	No change
1000h	No change
2000h	No change

High Humidity (DIN EN ISO 6270-2KK - September 2005) 72h @40 °C/98 %r.H.	Destructible / visual no change
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Low temperature application 72h @ 4 °C* (applied and stored at 4 °C to aluminium panel)	Destructible
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Flammability DIN75200(1980) on 1mm Aluminium panel and Propane (101,2 MJ/m ³) , applied to Aluminium)	Non Inflammable when applied
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Processing

Cutting:

3M™ Destructible Polyurethane Labelstock features a smooth, hard, calliper controlled liner with very good kiss cutting characteristics. Weed stripping is recommended using a 25 mm idler. For better handling we recommend label formats with "rounded" corners, length of label in the machine direction, minimum 3 mm between labels and minimum 10 mm liner-supported waste matrix sidebars.

Printing:

3M™ Destructible Polyurethane Labelstock is recommended for printing processes using appropriate inks. Both UV and solvent based inks are suitable. 3813 is recommended for sheet printing.

Special Considerations

For maximum bond strength, the surface must be clean and dry. Isopropyl alcohol is a typical cleaning solvent.

NOTE:

When using solvents, read and follow the manufacturer's precautions and directions for use.

For best bonding conditions, application surface should be higher than 20°C. Low temperature surfaces (below 5°C) can cause the adhesive to become so firm that it will not develop maximum contact with the substrate. Higher initial bonds can be achieved through increased rubdown pressure.

Shelf Life

24 months from date of manufacture by 3M when stored at temperature conditions between 15 °C and 25 °C & 40 % - 60 % relative humidity in a cool, dry and sun protected storage

For Additional Information

For additional product information, please contact us at the address below.

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