



# TECHNICAL DATA SHEET

## REPELFLEX™ -L



### PROTECTIVE COATING FOR LEATHER

#### OVERVIEW

RepelFlex is a family of UV curable, flexible, hard coatings that are designed for a variety of substrates. RepelFlex-L is designed specifically for application to leather substrates, providing a highly durable, scratch and stain resistant surface. The coating is extremely flexible and thin, preserving the look and feel of genuine leather. In addition, it is friendly to the environment as it contains no solvent or Fluorine and is UV curable.

#### APPLICATIONS

RepelFlex-L is designed to provide outstanding anti-scratch and anti-stain protection to genuine and faux leather surfaces. Ideal applications include the following:

- Luxury leather goods and accessories (handbags, belts, bracelets, wallets, watch bands, etc.)
- Footwear
- Seating (automotive, aerospace, home and office furniture, etc.)
- Other applications where the protection against scratching and stains is equally important as the retention of the look and feel of genuine leather

#### TECHNOLOGY

The unique characteristics of RepelFlex-L result from a combination of proprietary polymers with distinct phases and properties. Balancing the ratio of these polymers is the key to enabling the unique characteristics of hardness, durability, and flexibility. RepelFlex-L is designed to be applied using simple atomized spray equipment followed by a rapid cure through the exposure to UV light. RepelFlex-L is formulated to be solvent and fluorine-free.

#### Product Information

Product Description: RepelFlex-L is a solvent and fluorine-free, UV curable, flexible, hard coating for genuine and faux leather surfaces.

Chemical Family: Organosilane

Room Temperature Physical State: Liquid

Storage Recommendations: Prevent exposure to light and maintain 10° C – 45° C.

Shelf Life: 1 year

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Material Characteristics
Target Coating Thickness (wet): 1.5 to 1.9 microns
Solvent-free
Fluorine-free
Static contact angle: Water 110° / Oil (Diiodomethane, CAS No. 75-11-6) 65°
Adhesion: ASTM D3359 - Cross Cut Adhesion Test: (5) - No de-lamination observed
Flexibility: ASTM D522 - Cylindrical Bend Test/Conical Mandrel – Pass
Static Bending: (R = 5mm, 7 days @70°C) – No deformation or cracking observed
Anti-Stain: Martindale Blue Jean Abrasion – 1KG force, 5000 cycles – Pass
Resistant to common fluids (lotions, condiments, cosmetics, household cleaners, etc.)
Transparency: ≥ 90%

Application
Wet based deposition methods such as dip or wipe are acceptable. Atomized spray preferred.
UV curing is achieved at 1,250 to 1,300 Joules/cm <sup>2</sup> using a class "H" lamp.
For some applications a short bake at 50-70°C is recommended prior to the UV cure step.

Handling and Storage
Follow good standard industry hygiene practices. Apply in a well-ventilated area. Wear appropriate personal protective equipment (PPE).
Avoid: Exposure to heat, flames, sparks and other sources of ignition
Store in tightly closed opaque containers under normal warehouse conditions.
Stable at normal storage temperatures and conditions for up to one year
See RepelFlex-L SDS for further information

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