Flocklok® 851 Flock Adhesive

Description
LORD Flocklok® 851 adhesive is a polyurethane adhesive used to adhere flock to SBR, thermoplastic elastomers and plastics, such as ABS. Use of surface treatments, such as plasma, Chemlok® 459X primer or Autoseal® 3690 primer, on thermoplastic elastomers is required to obtain good adhesion. Flocked substrates provide good resistance to abrasion. Flocklok 851 flock adhesive will react and cure with moisture at room or elevated temperature cure.

Features and Benefits

**Versatile** – performs under a wide range of cure conditions.

**Excellent Adhesion** – provides excellent adhesion to a wide variety of elastomers and types of flock.

**Process Compatible** – can be catalyzed to achieve faster cure rate.

**Durable** – provides good solvent resistance.

Application

**Surface Preparation** – Remove contaminants (e.g., dirt, bloom, processing oils and mold release) from substrate surface. For some compounds, adhesion is enhanced by using surface treatments such as LORD primers, corona, plasma or mechanical abrasion.

**Mixing** – Thoroughly stir Flocklok 851 adhesive before use, and agitate sufficiently during use to keep dispersed solids uniformly suspended. If application method requires dilution, use xylene as the diluent.

The cure rate of Flocklok 851 adhesive is improved by using Flocklok Catalyst 9986. Addition of 1-4% catalyst, by weight, to adhesive is suggested.

**Applying** – Apply adhesive by spray or drip and drag methods.

Apply Flocklok 851 adhesive at an initial wet film thickness of 127 micron (5 mil). Thicker films may be required depending upon profile temperature and flocking efficiency.

Typical Properties*

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
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</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Clear to Slightly Hazy Liquid</td>
</tr>
<tr>
<td>Viscosity, cps @ 25°C (77°F)</td>
<td>30-110</td>
</tr>
<tr>
<td>Brookfield LVT Spindle 1, 60 rpm</td>
<td></td>
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<tr>
<td>Density</td>
<td>941</td>
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<tr>
<td>kg/m³</td>
<td>(7.8)</td>
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<tr>
<td>(lb/gal)</td>
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<tr>
<td>Solids Content by Weight, %</td>
<td>39-43</td>
</tr>
<tr>
<td>Flash Point (Seta), °C (°F)</td>
<td>17 (64)</td>
</tr>
<tr>
<td>Solvents</td>
<td>Xylene, Toluene, Methyl Isobutyl Ketone (MIBK), Acetates</td>
</tr>
</tbody>
</table>

*Data is typical and not to be used for specification purposes.*
Curing – When used uncatalyzed, Flocklok 851 adhesive will typically cure in 10 minutes at 149°C (300°F). Layover parts for a minimum of 24 hours before performing tests. Flocklok 851 adhesive will also cure at room temperature.

Cleanup – Purge fluid lines and equipment with ketone or aromatic solvents. Do not use water. Once the adhesive is in a dried and cured state, clean up will not be possible.

Shelf Life/Storage

Shelf life is six months from date of shipment when stored in a well ventilated area at 21-27°C (70-80°F) in original, unopened container. If not stored at ambient temperature, equilibrate container at ambient temperature for 48 hours prior to initial mixing and use.

After opening and while removing contents, protect adhesive from excessive exposure to moisture by installing desiccant cartridges in the cover and/or using dry nitrogen as an inert cover. Do not leave container open.

Cautionary Information

Before using this or any LORD product, refer to the Safety Data Sheet (SDS) and label for safe use and handling instructions.

For industrial/commercial use only. Must be applied by trained personnel only. Not to be used in household applications. Not for consumer use.

Values stated in this technical data sheet represent typical values as not all tests are run on each lot of material produced. For formalized product specifications for specific product end uses, contact the Customer Support Center.

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