

Flocksil® 1503 D Flock Adhesive

Description

LORD Flocksil® 1503 D adhesive is a single-coat, polyurethane adhesive used to adhere polyester or cotton flock fibers to a variety of uncured and semi-cured elastomers including EPDM, NR, CR and SBR. When used in combination with a surface treatment, Flocksil 1503 D adhesive can be used for flocking of a variety of thermoplastic elastomers (TPE).

Flocksil 1503 D flock adhesive will react and cure with moisture; however, an elevated temperature cure is required to optimize adhesion and performance properties.

Features and Benefits

Durable – provides a flexible, abrasion-resistant cured film.

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

Process Compatible – can be catalyzed to achieve faster cure time; provides extended working time at room temperature (>20 hours, 50% RH).

Application

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

Mixing – Thoroughly stir Flocksil 1503 D adhesive before use, and agitate sufficiently during use to keep dispersed solids uniformly suspended.

The cure rate of Flocksil 1503 D adhesive can be accelerated by using Cuvertin® K18 catalyst. Adding 0.4% catalyst is suggested. Keep the adhesive at low agitation when adding the catalyst.

Applying – Apply Flocksil 1503 D adhesive by brush or spray methods. Recommended dry film thickness of Flocksil 1503 D adhesive is 40-50 micron (1.6-2.0 mil).

Curing – When uncatalyzed, Flocksil 1503 D adhesive will typically cure in 1.5 minutes at 180°C (356°F). When catalyzed with Cuvertin K18 catalyst, Flocksil 1503 D adhesive will cure in approximately 1 minute at 180°C (356°F).

Typical Properties*

| | |
|---|--------------------------|
| Appearance | Black Liquid |
| Viscosity, cps @ 25°C (77°F) Brookfield LVT Spindle 1, 30 rpm | 35-60 |
| Density @ 20°C (68°F) g/cm ³ (lb/gal) | 0.94-0.97 (7.84-8.01) |
| Solids Content by Weight, % 1 gram dried 30 min @ 130°C (266°F) | 40-44 |

*Data is typical and not to be used for specification purposes.

LORD TECHNICAL DATA

Shelf Life/Storage

Shelf life is one year from date of manufacture when stored in a well ventilated area below 25°C (77°F) in original, unopened container.

After opening and while removing contents, protect adhesive from excessive exposure to moisture by 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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