

Flocklok® 550P Flock Adhesive

Description

LORD Flocklok® 550P adhesive is a single-coat adhesive used to adhere polyester or nylon flock fibers to a variety of uncured and semi-cured elastomers including EPDM, NR, CR and SBR. Flocked substrates provide good resistance to abrasion. Flocklok 550P flock adhesive will react and cure with moisture; however, an elevated temperature cure is required to optimize adhesion and performance properties.

Features and Benefits

Environmentally Friendly – formulated in non-HAP solvents, providing reduced VOC emissions.

Versatile – performs under a wide range of cure conditions.

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

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 – Mix Flocklok 550P adhesive for 15-30 minutes with drum mixer at low speed to disperse any settling that may have occurred during storage. Then mix for 4-6 hours at 40-60 rpm using the agitator contained in an agitator drum or other suitable mixer (air-driven mixer or other explosion-proof mixer). Maintain either continuous mixing at 15-30 rpm or mix the drum for 10 minutes every hour at 15-30 rpm.

If application method requires dilution, use n-butyl acetate (NBA) or n-butyl propionate as the diluent.

The cure rate of Flocklok 550P adhesive can be accelerated by using a catalyst. The amount of catalyst needed is determined by the type of catalyst used and cure conditions. Keep the adhesive at low agitation when adding the catalyst.

Applying – Transfer Flocklok 550P adhesive using a peristaltic pump or pressurized vessel. Apply Flocklok 550P adhesive by brush (drip-and-drag) or spray methods.

Apply Flocklok 550P adhesive at a wet film thickness of 76-114 micron (3-4.5 mil), which is the dry film equivalent of 51-76 micron (2-3 mil). Thicker films of Flocklok 550P adhesive may be required depending upon profile temperature and flocking efficiency.

Typical Properties*

Appearance	Brown Liquid
Viscosity, cps @ 25°C (77°F)	125-500
Density	
kg/m ³	1042.5-1090.4
(lb/gal)	(8.7-9.1)
Solids Content by Weight, %	70-74
Flash Point (Seta), °C (°F)	44 (112)
Solvents	N-butyl Propionate

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

LORD TECHNICAL DATA

The optimum profile temperature at time of adhesive application is 71-93°C (160-200°F). Optimum adhesive appearance after application is a uniform brown color with no black profile color showing through, no streaks and no “fisheyes.”

Curing – An elevated temperature cure cycle is required to optimize adhesion to EPDM elastomers. The cure cycle is time and temperature dependent. A typical cure cycle is 1-3 minutes at 204-260°C (400-500°F) in a hot air oven.

Cleanup – Purge fluid lines and equipment with ketone, aromatic or acetate 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.

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.

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.

Information provided herein is based upon tests believed to be reliable. In as much as LORD Corporation has no control over the manner in which others may use this information, it does not guarantee the results to be obtained. In addition, LORD Corporation does not guarantee the performance of the product or the results obtained from the use of the product or this information where the product has been repackaged by any third party, including but not limited to any product end-user. Nor does the company make any express or implied warranty of merchantability or fitness for a particular purpose concerning the effects or results of such use.

Flocklok and “Ask Us How” are trademarks of LORD Corporation or one of its subsidiaries.

LORD provides valuable expertise in adhesives and coatings, vibration and motion control, and magnetically responsive technologies. Our people work in collaboration with our customers to help them increase the value of their products. Innovative and responsive in an ever-changing marketplace, we are focused on providing solutions for our customers worldwide ... Ask Us How.

LORD Corporation World Headquarters

111 Lord Drive
Cary, NC 27511-7923
USA

Customer Support Center (in United States & Canada)

+1 877 ASK LORD (275 5673)

www.lord.com

For a listing of our worldwide locations, visit LORD.com/locations.

Cautionary Information

Before using this or any LORD product, refer to the Material Safety Data Sheet (MSDS) 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.