

Flocklok® 870 Flock Adhesive

Description

LORD Flocklok® 870 adhesive is a single-coat adhesive used to adhere polyester or nylon flock fibers to a variety of elastomers including EPDM, NR, CR and SBR. Flocked substrates provide good resistance to abrasion. Flocklok 870 flock adhesive will react and cure with moisture; however, an elevated temperature cure is required to optimize adhesion and performance properties.

Features and Benefits

Versatile – performs under a wide range of cure conditions.

Colorable – allows for the addition of color to create a customized appearance.

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

Process Compatible – may be used on-line or off-line; can be catalyzed to achieve faster set time.

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 870 adhesive for 15-30 minutes at low speed with the agitator contained in an agitator drum or other suitable 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 xylene as the diluent.

The cure rate of Flocklok 870 adhesive is improved by using Flocklok Catalyst 9986. Adding 1-4% catalyst is suggested. A pot life of 1-2 days can be expected when stored at 21°C (70°F) and material is protected from moisture.

Typical Properties*

Appearance	Clear Liquid
Viscosity, cps @ 25°C (77°F)	20-120
Density	
kg/m ³	970.6
(lb/gal)	(8.1)
Solids Content by Weight, %	51.50-53.50
Flash Point (Seta), °C (°F)	16 (61)
Solvents	Xylene, Methyl Isobutyl Ketone (MIBK), Acetates

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

LORD TECHNICAL DATA

Applying – Transfer Flocklok 870 adhesive using a peristaltic pump or pressurized vessel.

Apply adhesive at a wet film thickness of 101-152 micron (4-6 mil), which is the dry film equivalent of 51-76 micron (2-3 mil). Thicker films of Flocklok 870 adhesive may be required depending upon profile temperature and flocking efficiency.

The optimum profile temperature at time of adhesive application is 65-93°C (150-200°F).

Curing – An elevated temperature cure cycle is required to optimize adhesion to EPDM elastomers. The cure cycle is time and temperature dependent. Cure temperatures usually range from 190-232°C (375-450°F). A typical cure cycle is 3 minutes at 204°C (400°F) or 2 minutes at 232°C (450°F) in a forced, hot air oven.

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. Do not store or use near heat, sparks or open flame. Store container out of direct sunlight.

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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