



TECHNICAL DATASHEET

DANAFIX

Water resistant D3-adhesives

Product: DANAFIX 433 DANAFIX 434 DANAFIX 435 DANAFIX 436	DANAFIX 437 DANAFIX 439	Date of issue: 22.10.2020 (Replaces: 01.06.2018) Company: DANA LIM A/S, www.danalim.dk Københavnsvej 220, DK-4600 Køge, Denmark Phone.: +45 56 64 00 70, , Technical Service Phone.: +45 56 64 00 75 Prepared by: Bo Brehmer
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Product description and application:

The DANAFIX 430-series has been developed especially for industrial wood production, where D3 water resistance is required. DANAFIX 433, 434, 435, 436, 437 and 439 are suitable for almost all types of laminating and jointing, in cold, warm and high frequency pressing. All types require short pressing times, of which DANAFIX 434 and 435 require the shorter press time. DANAFIX 437 has the longest open assembly time whereas DANAFIX 436 and 439 have a medium open assembly time, which makes them especially suitable for roller application. DANAFIX 433, 434 and 436 have neutral pH, therefore they do not give any discoloration problems. DANAFIX 437 and 439 have additionally been added UV detector. If adding hardener to DANAFIX 435, 437 and 439, an even higher water resistance D4 will be obtained according to EN204/205.

Application:

Laminating:

	DANAFIX 433	DANAFIX 434	DANAFIX 435	DANAFIX 436	DANAFIX 437	DANAFIX 439
Furniture:.....	●	●	●	●	●	●
Frame wood (D4):.....			with 5% hardener DANAFIX 921		with 3-4 % hardener DANAFIX 921	with 5% hardener DANAFIX 921 or with 5 % DANA Dark Hardener

Dowel-, tenon- & finger jointing:

Furniture:.....	●	●	●	●	●	●
Frame wood:.....	●	●	●	●	●	●

Types of wood:

Soft (ex. pine):.....	●	●	●	●	●	●
Hard (ex. beech, oak, teak):.....	●	●	●	●	●	●
MDF:.....	●	●	●	●	●	●
Chipboard:.....	●	●	●	●	●	●

After treatment:

Cutting tools (low wear):.....	●	●	●	●	●	●
Lye treatment:.....	●	●	●	●	●	●

Article Numbers:

20 l bucket:.....	7254	7255	6411	-	7120	2197
125 l drum:.....	-	7256	6416	-	7117	2196
600 l container:.....	-	-	-	-	7119	-
1000 l container:.....	7258	7257	6417	4367	7118	2198

Physical / chemical properties:

Adhesive:

	DANAFIX 433	DANAFIX 434	DANAFIX 435	DANAFIX 436	DANAFIX 437	DANAFIX 439
Type:.....	Water based PVAc-dispersion					
Colour:.....	White					
Solid contents:.....	49 %	49 - 51 %	50 - 51 %	50 %	45 - 47 %	49 - 50 %
Viscosity (Brookf. RVF, 20 rpm):.....	8000 cp	9000 cp	10000 cp	6000 cp	6200 cp	7000 cp
Specific gravity:.....	app. 1.1 kg/ltr					
pH:.....	4.5 - 6	4.5 - 6	2.5 - 3.5	4.5 - 6	2.5 - 3.5	
Shelf life:.....	6 months	9 months	12 months	Min. 12 months in unopened package if stored cool		

Joint:

Color:.....	Transparent					
Water resistance (EN204/205):.....	D3	D3	D3/D4	D3	D3/D4	D3/D4
Temperature resistance:.....	App. -20 °C to +70 °C					

Directions for use:

Preparation: To be bonded wood should be flat and achieve a good fit. The surfaces must be clean, dry and free of dust, grease and other contaminations before glue is applied. Wood preferable is glued within the same day after machining/cutting.

Application: The adhesive is applied on one surface. When bonding hard woods, two-sided application is recommended, as well as increasing assembly time and pressing time.

Wood moisture content: 8 - 14 %

Amount of glue: 100 - 200 g/m²

Working temperature: 5 – 90 °C

Open assembly time:
20 °C, 50 % RH
pine, 9 % moisture

DANAFIX 433	DANAFIX 434	DANAFIX 435	DANAFIX 436	DANAFIX 437	DANAFIX 439
4-6 min.	3 – 5 min.	3 – 5 min.	5 - 7 min.	6 - 9 min.	5 - 8 min.

If assembly time is "closed", it can be increased 1 - 2 minutes. Assembly time is increased with two-sided application, hard wood, lower temperature and higher humidity of air and wood. Assembly time is reduced at higher temperatures and lower humidity of air and wood.

Pressure: Lamination pressure (side press): 7-10 kg/cm² (soft wood) and 13-15 kg/cm² (hard wood)
Top pressure: 1-1.2 kg/cm². In case of tensions in the wood a higher pressure should be applied.

Pressure times, pine approx. 50 % RH, approx. 9 % moisture content of the wood.

20 °C	4 min. - 30 min.
40 °C	3 min. - 20 min.
60 °C	2½ min. - 15 min.
80 °C	2 min. - 10 min.

Pressing time should be increased for hard woods, two-sided application, higher humidity of the air and higher moisture content of the wood. Pressing times can be reduced by ex. pre-heating of the wood. Full strength is usually obtained after 24 hours. Full water resistance is usually obtained after 7 days.

Cleaning: Wet uncured adhesive can be removed with water. Cured adhesive can only be removed by soaking in lukewarm water or with the use of organic solvents (ex. acetone).

Storage: Adhesive should be stored cool (max. 20 °C) in tightly closed package. Must be protected from frost.

All stated times are meant as a guideline. Sufficient tests should be carried out to establish final working conditions.

Safety:

Hazard symbols: None

Risk & safety phrases: None

For further information regarding to safety, refer to Safety Datasheet.

Further information:

DANA LIM offers a range of adhesives for professionals:

100-series: Upholstering adhesives

200-series: Flooring adhesives

300-series: Wall adhesives

400-series: Wood adhesives

500-series: Sealants & PU-foams

600-series: Building-additives, fillers etc.

700-series: Paper-, packaging- and newspaper adhesives

800-series: Hot melt

900-series: Cleaning-, release agents and hardeners.

In the 400-series Wood adhesives DANA LIM offers:

400-series: Special adhesives

410-series: Adhesives for edge-bonding (Cold-Activating)

430-series: Moisture resistant D3-adhesives

440-series: Moisture resistant D4-adhesives

450-series: Urea-formaldehyde adhesives

460-series: Adhesives for dowel-, tenon and finger joints

470-series: Adhesives for foiling of PVC, metals etc.

480-series: Adhesives for lacquered wood

490-series: Adhesives for production of laminated wood for furniture.

The information and data contained in this data sheet are based on extensive laboratory testing and our practical experiences, and are meant for helping the user to find optimum working methods. As the conditions at the user are beyond our control, we make no warranties concerning the results, achieved by the products. The information's in this technical data sheet are typical values, intended as a guideline. They should not be regarded as product specifications. Please also refer to our standard sales conditions and terms of delivery.