

DuploCOLL® 103 HCR

Double-sided pressure-sensitive adhesive tape for mounting and permanent bonding on smooth and rough surfaces

Product construction

	Name	Colour	Thickness [mm]
Liner	Polyethylene paper	white, printed	approx. 0,130
Adhesive	Pure acrylic		approx. 0,125
Total thickness:			approx. 0,255

Product advantages

- The use of a high strength pure acrylic adhesive with an exceptionally high resistance to temperatures, guarantees maximum resistance to ageing and UV-radiation
- The adhesive has good to excellent resistance to oil, grease
- Excellent chemical resistance according FINAT 17 FTM 1
- The high initial adhesion (tack) offers high application security immediately after mounting
- The PE coated release paper increases the transparency of the adhesive film avoids wrinkles at high humidity fluctuations and offers excellent die-cutting properties
- Excellent die-cutting properties
- Easily removable protective liner
- Non-slip liner
- High electrical insulating properties

Main application fields

- Mounting of plates, emblems, face plates, decorative trims and scales where a particularly high transparency is required
- Manufacture of membrane switches
- Bonding of product samples and displays in the advertising industry
- Suitable for internal and external applications
- Application for electronic industry for PCB bonding
- Bonding to glass, metal, ceramics, high energy plastics

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Specific technical data*

Electrical Properties:***

Electrical Surface resistance Ω/sq
according IEC 60243-1:2016 > 10 E+12 Ohm/sq

Electrical Volume resistance $\Omega\cdot\text{cm}$
according IEC 60243-1:2016 > 2 E+14 Ohm*cm

Dielectrically Strength AC > 4 kV
Rel. Dielectrically Strength AC > 36 kV/mm

Dielectrically Strength DC > 5 kV
Rel. Dielectrically Strength DC > 44 kV/mm

ϵ_r 3,9

$\tan \lambda$ 0,019

Thermal Properties:***

According to ASTM D5470-12


λ_{eff} W/m*K 0,18

R_{th} K/W 1,02

R_{thxA} mm²*K/W 720

General:

Temperature range -40 °C to +200 °C** (short term up to +270°C)

Certified and recognized according to UL 969  File MH15429.PGGU2

* Specific test results, statistically not approved.

** Reached temperature in a rising heat test according to the internal test method PM-211 following DIN EN 1943 at 0,5 kg strength, beginning at 30 °C, increasing of temperature every 30 minutes by 10 °C.

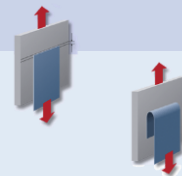
*** measured in external laboratories (not accredited to ISO/IEC 17025 and the specified test method)

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Technical Data

Shear strength	on steel according to DIN EN 1943, edition 1996, at +23 °C +/- 2 °C	80 N/625 mm ²
Peel strength	on steel according to DIN EN 1939, edition 1996, at +23 °C +/- 2 °C	20 N/25 mm



Application

Recommended application temperature	18 °C to 35 °C
Application guidelines	www.lohmann-tapes.com

Storage

Adhesive tapes should be stored at room temperature and normal humidity (50-70 %).
The storage stability is two years after delivery.

Product presentation

Converted product	Rolls		
Width [mm]	> 15	> 25	> 50
Length [m]	50	100	200
Max. log width: 1400 mm	Other dimensions, die-cuts and sheets on request.		

For mechanical mounting of this adhesive tape we also offer a wide range of application devices.

IMPORTANT NOTE

The physical characteristics contained in this data sheet represent typical or average values. All application related statements, information and recommendations herein are given to the best of our knowledge and practical experience. Many factors beyond our control and uniquely within buyer's knowledge and control can affect the use and performance of our tape in a particular application. EXCEPT AS EXPRESSIVELY AGREED IN WRITING WE DO NOT TAKE OVER ANY WARRANTY OR LIABILITY FOR THE SUITABILITY OR USABILITY OF OUR TAPES FOR CERTAIN PURPOSES AND APPLICATIONS RESULTING FROM BUYER'S SPECIAL USAGE OF THE TAPES. EXCEPT WHERE PROVIDED BY MANDATORY LEGAL PROVISIONS, WE WILL NOT BE LIABLE FOR ANY DIRECT OR INDIRECT MATERIAL OR IMMATERIAL LOSSES OR DAMAGES ARISING FROM THE USAGE OR APPLICATION OF OUR TAPES. Solely the buyer is responsible for determining the suitability of the specific tape for its use in connection with his method of application. Please consult our Technical Applications Department for specific advice.

Date of issue: April 2021

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