FLEXBOND

TECHNICAL DATASHEET

Flexbond 100A/Flexbond 201CX

Type of polymer: Two-component polyurethane solvent free adhesive system.

Range of use: The adhesive system is suitable to produce multilayers flexible laminates with aluminium and printed or non-printed films.

Polymer Specifications:		***Catalyst Specifications:***	
FLEXBOND 100A	**NCO terminated**	**FLEXBOND 201CX**	**OH terminated**
Colour (Gardner 1953)	5 MAX	Colour (Gardner 1953)	5 MAX
NV (%)	100	NV (%)	100
Viscosity (mPa*s 23°C)	9000 ± 2000	Viscosity (mPa*s 23°C)	1500±500
Density (g/ml 40°C)	1,15 g/ml +/- 0,05	Density (g/ml 40°C)	1,09 g/ml +/- 0,05
		Acidity (mg KOH/g)	< 2

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Legislation:

As a result of the continuous evolution of European and local regulations it is advisable to contact our customer service for additional information We believe, however, it is essential that the user of the adhesive system, and the final packaging, producer, make appropriate analysis to determine the suitability of this product for the particular application.

Product properties:

The cross linked and cured adhesive film of FB 100A / FB 201CX are transparent, elastic and age resistant.

Laminates exhibit:

- Good bond strength
- Good chemical and thermal resistance
- Good ink wetting, providing excellent appearance and finish

Mix Ratio(weight):

100 parts of FB 100A
70 parts of FB 201CX

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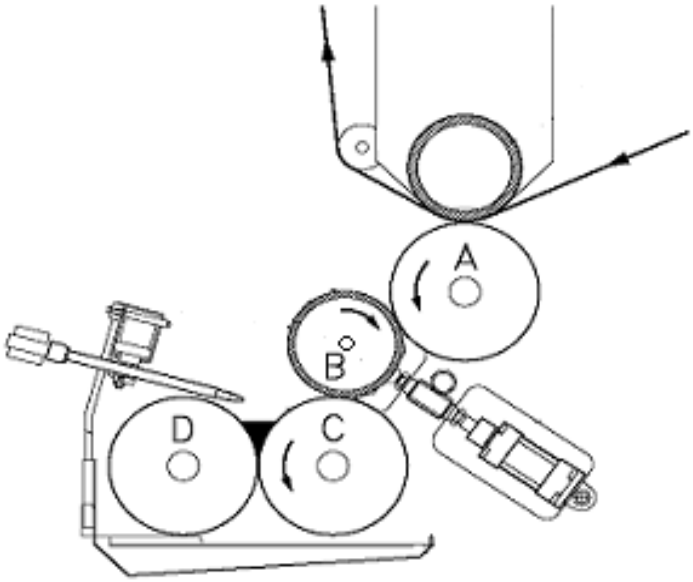
Application condition:

Laminating group:
C → Dosing roller
D → Fixed Dosing roller
B → Conveyor roller
A → Applicator roller



Temperature of application :

Mix and dosing unit	35°- 45°C
Dosing roller **D e C**	~ 30°C - 50 °C
Applicator roller **A**	~ 40°C - 50 °C
Lamination unit	variable between 40°C and 60°C

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Laminating conditions:

Application : The adhesive can only be applied on special laminating machines Depending upon the construction of the laminate the application weight varies between 1,5 and 3 gms/m^2.

Dosing : It is recommended to feed the adhesive continuously from a metering and mixing unit with a mechanical mixing head; preheating each component according to above table is necessary in order to improve flow properties in automatic mixing units. Propeller mixers are recommended instead of static mixers.

Viscosity increasing: The continuous adhesive flow prevents viscosity increase and allows continuous application of the adhesive thus avoiding pot-life problems.
Precise film tension control together with a suitable winding programme avoids delaminations as well as telescoping curling effects.

Note : *Our technical assistance service is at your disposal for further information*.

Cleaning:

After a standstill of the machine for more than 30 min, it could be necessary to clean application unit with some solvents. The same cleaning procedure has to be followed as soon as production stops. Suitable cleaning agents, which are MEK and/or ethyl acetate, may also be used provided that safety guidelines are being observed.

Curing:

Curing begins during lamination and continues slowly at room temperature. The laminates may be rewound and slit be after 16-48 hours. Complete curing will be achieved after about 7-14 days of storage at room temperature (depending upon the laminate structure, environmental and coupling conditions).

Storage of trials at low temperature (<20°C) and/or high humidity is not guaranteed.

Cautionary information:

In order to minimize emissions of isocyanic volatile compounds, the coating unit must be equipped with vacuum systems. Make sure that the value of TLV (maximum concentration in air) in the work does not exceed the limits set.

Storage:

RTC guarantees 6 months for the NCO terminated product and of 12 months for OH terminated product, taking care to keep them in the original containers, tightly closed and in a dry and ventilated place.

Waste classification:

In accordance with the local legislation the adhesive system FB 100A / FB 201CX cross-linked and cured, can be classified as special waste.
In case of dilution with Ethyl acetate don't change the polymer classification.

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Additional information:

Films, additives, contained in such films (antistatic, slip agents etc.) printing inks, preliminary treatment proceedings, operative conditions of rolling and manufacture products are all factors which may influence, even after some time, the properties of adhesion and endurance of the rolled products.
In order to achieve the best results in relation to the final properties of the products, the specific features of each component used in the production of the package must be considered.
Adhesive technical assistance (ATA) service of RTC is available for providing you with all the assistance and information you might need for the correct use of our adhesive system.

RTC warrants that the properties of the product FLEXBOND is exact, in compliance with all statutory requirements and exclusively derive from its own knowledge and experience. RTC also warrants that, when used in accordance with the instructions provided and standard conditions of use, the product FLEXBOND is free from defects. There are no other warranties, expressed or implied. Considering the existence of different materials and the fact that the conditions of application cannot be under our control, the user must verify the suitability of the product for the intended use, through adequate tests, so the user undertakes all responsibilities of the final packaging. The user of the product FLEXBOND accepts all risks and liability related to inappropriate use of the product. Stating that FLEXBOND are not suitable for direct food contact, the producer of the final article has the duty to prove the absence of migration from indirect food contact.