

# Macroplast QR 4663

Moisture curing Hotmelt Adhesive  
with high green strength

Basis: Polyurethan

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## Product Description

Macroplast QR 4663 is a high performance, reactive, moisture curing hotmelt adhesive based on Polyurethane-Prepolymers. The adhesive is pressure sensitive and gives a special high initial strength instantly after joining the parts. Therefore it is suitable for substrates with a very high reaction force. Additionally it has a long open time so that joining is still possible after cooling. After moisture curing the product has duroplastic properties and a very high heat and cold resistance.

## Application Areas

Macroplast QR 4663 was especially designed for industrial flat lamination but may also be used for assembly application. The adhesive has a very broad adhesion spectrum and demonstrates also good flexibility. It can be used to bond wood, plastic, textiles, different films and foams and is also well suitable for bonding pretreated substrates.

## Technical Data

		Method
Colour:	opaque when molten, after cooling light ivory, crystalline in UV-light fluorescent	
Odour:	weak characteristically	
Density:	1,13 – 1,23 g/cm <sup>3</sup>	ASTM D 972
Solids:	100 %	
Viscosity (Brookfield, Spindle 27) at 130°C:	5.000 – 13.000 mPa.s	ASTM D 3236
Application temperature:	110 – 140°C	

## Application

### Preliminary remark

Prior to application it is necessary to read the Safety Data Sheet for information about precautionary measures and safety recommendations. Also, for chemical products exempt from compulsory labelling, the relevant precautions should always be observed.

### Preparation

The bonding surfaces must be clean, dry and free of oil, grease and dust. Substrate temperature should not fall below 20°C during application. Lower temperatures will lead to an early solidification of the adhesive and thus to a reduced open time, possibly the adhesive might even flake off. If necessary the substrates maybe preheated, however longer open times and thus extended cycle times will have to be taken into consideration at temperatures above 45°C.



## Application

Macroplast QR 4663 can be applied from heatable cartridge guns, usual tank melting equipment and from drums or pails, using heatable equipment. The material may be applied by nozzle, roller and sprayable systems.

At longer rest periods melting and application temperatures should be decreased. Longer exposure to higher temperatures can lead to a viscosity increase.

## Curing

Macroplast QR 4663 cures exclusively by moisture and gains its final strength after 1-7 days, but exhibits high handling strength instantly after joining.

Curing is a chemical reaction depending on the following parameters:

- humidity in the rooms of application and storage
- humidity of the substrates
- permeability of the substrates to be bonded
- application weight / layer of the adhesive film

## Cleaning

The uncured material can be cleaned with **Purmelt Cleaner 2**. For an easy cleaning of heated rollers we recommend our **Macroplast Cleaner 03** (see separate Technical Data Sheets). Cured material can removed only mechanically.

## Storage

Frost-sensitive	No
Recommended storage temp.	5°C to 25°C
Shelf-life	12 months

## Packaging

Cartridge	300 gr.	
Block	2 Kg	(shelf life only 9 months)
Pail	20 Kg	
Drum	190 Kg	

<b>Hazard Indications/ Safety Recommendations/ Transport Regulations</b>	see Safety Data Sheet
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## Important

The above data, particularly the recommendations for application and use of our products are based on our knowledge and experience. Due to the different materials and conditions of application which are beyond our knowledge and control we recommend strongly to carry out sufficient tests in order to ensure that our products are suitable for the intended processes and applications. Except for willful acts any liability based on such recommendations or any oral advice is hereby expressly excluded.

**This Technical Data Sheet supersedes all previous editions.**

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