Jowatherm-Reaktant® MR

PUR Hot Melt Low in Monomer

Application: Laminating adhesive not subject to hazard labeling requirements, for the

manufacture of composite materials in the textile industry.

The properties of the bonded parts and the surfaces of the substrates (including primer coating on the reverse side or other surface pretreatment) have to

undergo application-related testing prior to use.

Directions for Use:

Laminating adhesive not subject to hazard labeling requirements.

Polyurethane hot melt adhesive, not subject to labelling requirements under the

German Ordinance on Hazardous Substances.

Processing with special equipment from moisture-proof sealed containers. The viscosity of the product may increase during storage due to the ingredients' chemical reactions that cannot be influenced. High storage temperatures

promote that increase in viscosity.

The processing characteristics may vary depending on the application

technology, which can affect the bonding process.

Customer trials are required.

Typical Key Data: Processing temperature [°C]: 110 - 140(depending on application)

yellowish translucent to white opaque; Appearance:

contains UV tracer

Density at 20 °C [g/cm³]: approx. 1.10 ± 0.05

approx. 55 ± 3 (Ring and Ball) Softening point [°C]:

approx. 5-7 (dep. on ambient conditions) Reaction time [d]:

Residual monomer content [%]: < 0.1

Key data measured according Jowat test methods.

Requirements

Bonding Process:

for a High-Quality of the substrates, as well as the processing conditions (e.g. ambient temperature, humidity...) will influence the processes of joining and bonding. Among other factors, the crosslinking of the adhesive depends on the application amount, the temperature and humidity of the ambient air, as well as on the temperature, moisture content, and permeability of the substrates. Customer tests under consideration of everyday production conditions are therefore absolutely necessary to define stable process parameters and to ensure that the product is fit for purpose. For best bonding results, the materials to be bonded should be free of dust, oil, and grease, and be dry. Ideally, the minimum

The properties (e.g. surface tension, plasticizer content...) and the conditioning

temperature should be at 18 °C. Avoid draft.

Our Application Technology Department and our Application Specialists will provide technical data to assist you in your choice of an appropriate product for your requirements. Please observe the information in the section "Remarks." As a suggestion on how to establish high-quality bonding processes, please refer

to DIN 2304.

Specification: Viscosity at 110 °C [mPas]: 17.000 ± 5.000

(Brookfield, Thermosel, spindle 28, 20 rpm)

The values are always determined on the date of production.

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All data indicated are characteristics represented as average values. Our technical data sheets are periodically revised to represent the latest state of technology. This edition is replacing and superseding all previous ones, and is valid on the date of compilation. Please refer to the last page of this technical data sheet for additional information.





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Cleaning:

Flush out PUR melt remnants from roller applicator units with Jowat® Cleaner

930.22 or 930.23 (if necessary, repeat procedure several times).

For other applicator systems and for melt units, we recommend to use the Jowat®

Flushing Agent 930.84 (red).

Crosslinked, solid material has to be dissolved with Jowat® Cleaner 930.60

(please test for suitability before use).

For more information, please refer to the "PUR hot melt Manual" under the

heading "Maintenance and Cleaning" (available upon request).

Safety Considerations:

The product contains isocyanates. Please observe the information on safe

handling in the safety data sheet.

Like all hot liquids, this product can cause severe burns in the molten state. Please take appropriate precautions to prevent the hot adhesive from coming into contact with the skin (e.g. by wearing appropriate protective gloves). If this does happen, cool the affected area immediately with water. Do not try to

remove the adhesive from the skin. Seek medical attention.

Storage: The product should remain stored in properly closed original containers, dry and

> cool (15 - 25 °C). Protect from moisture!

For best-before date, please see container label.

After the elapse of the best-before date, it is essential that you again verify that

the product is fit for your intended application.

Packaging: Information about moisture-proof packaging and units is available upon request.

Remarks: For further information concerning safety, handling, transport and

disposal, please refer to the safety data sheet.

The information on this data sheet is based on test results from our laboratories as well as on reported experience gained in the field by our customers. It can, however, not cover all parameters for each specific application and is therefore not binding upon Jowat, nor should it be relied upon in lieu of your own required testing. The information given in this leaflet does not represent a performance guarantee. Unless otherwise agreed with our customers, the values stated in the section "Specification" shall be regarded as the finally agreed upon product properties. No liability may be derived from the information contained herein nor

from the information provided by our free technical advisory service.



Jowat Information

Gluing as one of the most efficient methods of bonding is constantly gaining importance and expanding into new areas of application. At the same time, the number of substrates to be bonded is also growing at an unprecedented rate. New methods and equipment to process adhesives are developed.

The in-house R & D departments of Jowat are responding with intensive efforts to keep pace with these constant changes. A highly qualified team of chemists and engineers is using the latest techniques and brightest ideas to provide the utmost in advice our customers and to make sure that they get the adhesive which meets their needs.

Our information is based on test results from our laboratories as well as on experience gained in the field by our customers. This advice, however, cannot cover all eventualities for each specific application and as such is not binding for us. Please, contact our technical service department in each case to find out what the actual technical state of development for the respective product is, and request the latest data sheet. Any use of our product without this precautionary measure would be your sole responsibility.

The processing company itself must therefore test the adhesives manufactured by us for suitability in each individual case. This applies to the first use of a sample as well as to modifications during an ongoing production.

We are therefore requesting all our new customers to test our adhesives for suitability on original parts at conditions equal to normal processing conditions. The bond has then to be subjected to the actual stress which it would undergo when in use and has to be assessed. This test is absolutely necessary.

Customers who undertake modifications during a running production are requested to pass this information on to us. Please notify us when machines are set to new parameters as well as when the substrates to be bonded are changed. Only then will Jowat be able to provide our most up-to-date information to the processor using our adhesives.

The information given in this leaflet is based on practical experience and on results of tests in our laboratory, and does in no way constitute any guarantee of properties. No liability may be derived from these indications nor from the recommendations made by our technical advisory service.