

## PO hot melt

# 238.97

**Application:** Assembly bonding of sand cores in casting operations.

**Characteristics/ Directions for Use:** Long open time, high hot tack, good adhesion, and high heat resistance. Very good resistance to oxidation and colour stability in the melt.  
Can be applied with automatic units and hand guns with nozzle applicators.

Processing temperature [°C]:	180 – 200
Feed speed [m/min]:	not applicable
Appearance:	colourless opaque
Density at 20 °C [g/cm <sup>3</sup> ]:	approx. 0.90 ± 0.02 (Jowat test method)
Open time at 190 °C* [s]:	approx. 15 ± 2 (Jowat test method)
Setting time at 190 °C* [s]:	approx. 2 ± 1 (Jowat test method)

\* Measured on a hot melt bead, 2 mm Ø.

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".

**General bonding requirements:** The properties (e.g. surface tension, plasticiser content...) and the conditioning of the substrates, as well as the processing conditions (e.g. ambient temperature, humidity...) will influence the processes of joining and bonding. 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 temperature should be at 18 °C. Avoid draught.

**Specification:** Viscosity at 200 °C [mPas]: 1,100 ± 300  
(Brookfield, Thermosel, spindle 21, 20 rpm)  
Softening point [°C]: 159 ± 5  
(Ring and Ball)

The values are always determined on the date of production.

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**08/20** 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.**

**Jowat**   
Klebstoffe

**Cleaning:** Preliminary mechanical cleaning while hot (e.g. with a spatula). Remove any residues in the application environment when cold using Jowat® Cleaner 402.40.

**Safety instructions:** The German Adhesives Association developed the following recommendation concerning the processing of hot melt adhesives which are not subject to classification:

“When hot melt adhesives are melted, vapours may be set free. The composition and amount of the vapour depends on the type of adhesive, the application method, and the processing temperature. The instructions of the manufacturer, especially with regard to the processing temperature, must be strictly adhered to. Vapours are to be extracted with suitable extraction and ventilation systems.”  
The Technical Leaflet “Voluntary warning information for hot melt adhesives not subject to classification” can be made available upon request.

**Storage:** The product should remain stored in closed original containers, dry and cool. 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 packaging types 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.