

# Deep-freeze packaging

- Excellent adhesion even on difficult to bond surfaces
- Clean processing and high yield
- Reliable feeding on all automatic filling systems



**Jowatherm® 252.65**  
**Jowatherm® 252.70**  
**Jowat-Toptherm® 256.00**  
**Jowat-Toptherm® 256.53**  
**Jowat-Toptherm® 256.92**

## Attractive adhesive solutions for applications at low temperatures



It's a long way to the point of sale for frozen food. Starting with the filling process, the packaging has to meet the toughest demands. To complete the journey into the customer's fridge safely, the packaging needs an optimal bond.

Adhesive solutions from Jowat developed especially for applications at low temperatures master the many different challenges with ease. They are ideally suited for bonding lacquered, fat repellent and other critical surfaces. The high initial strength and short setting times ensure tightly locked packaging even at unfavourable pressure and high feed speeds. In the deep-frozen environment, the bond is resistant to temperatures down to -40 °C. Jowat adhesives for low-temperature applications from the **Jowatherm®** and **Jowat-Toptherm®** range are established products for packaging processes in the food industry and highly satisfied customers have relied on their superior performance for years. Jowat products provide the potential for substantial cost savings. The high yield and clean processing of the adhesives reduces maintenance costs and downtimes and facilitates lower application amounts. The tested and proven excellent feed performance of the adhesive granules ensures reliable processing on melting units with automatic filling systems. All adhesives are characterised by a high thermal stability in the melt and minimal odour. In addition, the adhesives are, of course, certi-

fied for food packaging according to the FDA regulation 175.105 and EU regulation 10/2011.

**Jowatherm® 252.65** is a superior EVA adhesive which covers a wide range of applications at low temperatures. **Jowatherm® 252.70** provides a shorter setting time and increased heat resistance. Therefore, packaging bonded with this adhesive is also suitable to be heated in the microwave oven.

Other adhesives available are the PO hot melts from the **Jowat-Toptherm®** product group for low-temperature applications. The widely used standard product **Jowat-Toptherm® 256.00** is characterised by broad range of adhesion and an excellent performance, which has been tested and proven in different low-temperature applications. **Jowat-Toptherm® 256.53** is the "green" alternative based on renewable raw materials and particularly eco-friendly. **Jowat-Toptherm® 256.92** can be processed at temperatures starting from 120 °C, provides energy savings and has a positive effect on workplace safety. Jowat **Toptherm® 256.92** is characterised by virtually no stringing and significantly reduced cleaning costs.

These modern adhesives meet all requirements of low-temperature processes, and the extensive advisory expertise of Jowat ensures that you always have the perfect solution for every application. Always aimed at providing sustainably improved packaging processes.



## Jowatherm® 252.65

EVA hot melt adhesive for deep-frozen goods

Viscosity at 170 °C	[mPas]	approx. 1,700
Processing temperature	[°C]	approx. 160 - 180
Open time	[s]	approx. 9 - 11
Setting time		medium
Softening point	[°C]	approx. 85

## Jowatherm® 252.70

EVA hot melt adhesive for deep-frozen goods

Viscosity at 170 °C	[mPas]	approx. 1,400
Processing temperature	[°C]	approx. 160 - 180
Open time	[s]	approx. 7 - 9
Setting time		short - medium
Softening point	[°C]	approx. 100

## Jowat-Toptherm® 256.00

PO hot melt adhesive for deep-frozen goods

Viscosity at 160 °C	[mPas]	approx. 1,450
Processing temperature	[°C]	approx. 140 - 170
Open time	[s]	approx. 3 - 5
Setting time		short - medium
Softening point	[°C]	approx. 110

## Jowat-Toptherm® 256.53

PO hot melt adhesive for deep-frozen goods | Green Line

Viscosity at 150 °C	[mPas]	approx. 1,400
Processing temperature	[°C]	approx. 140 - 160
Open time	[s]	approx. 3 - 5
Setting time		short - medium
Softening point	[°C]	approx. 110

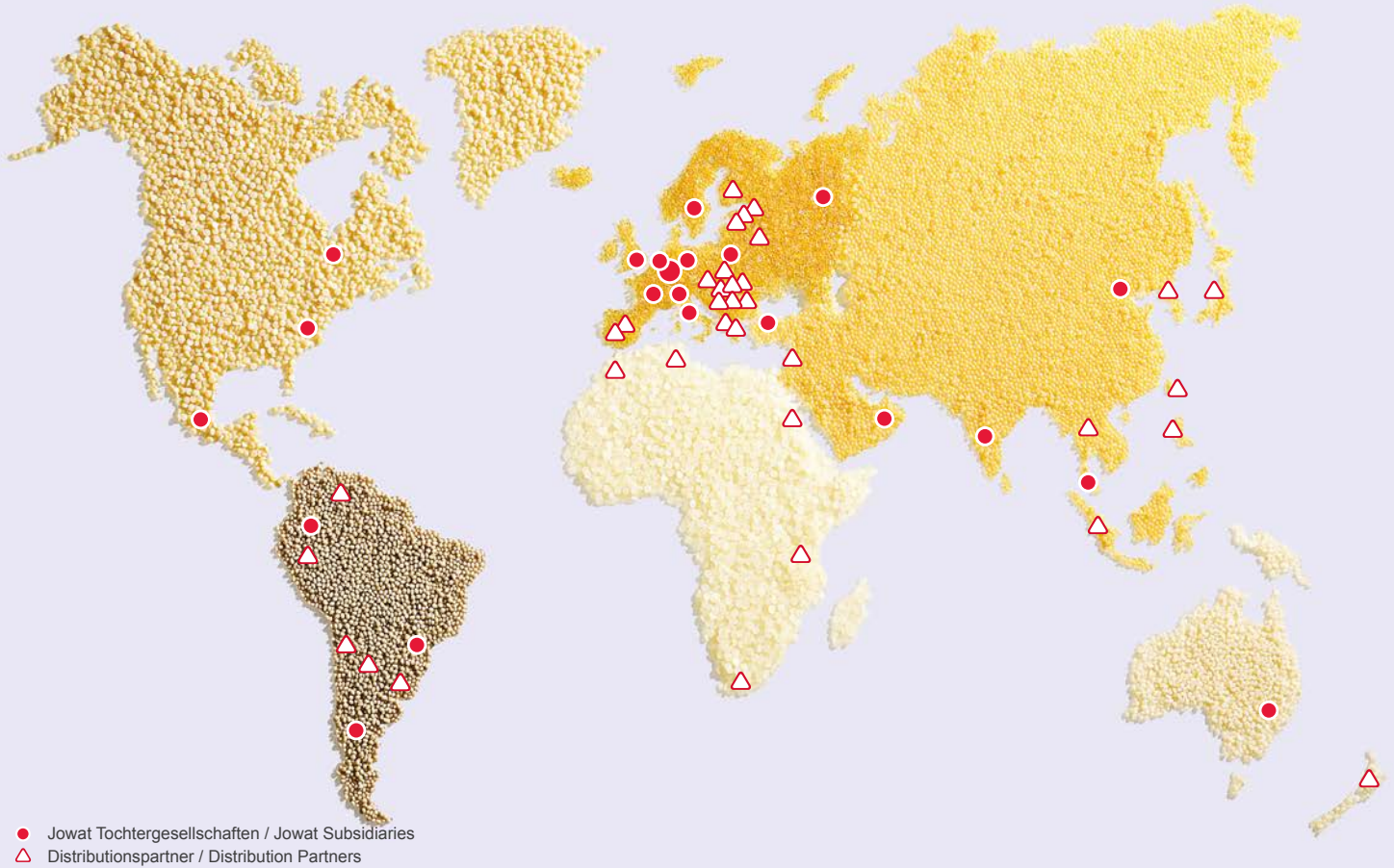
## Jowat-Toptherm® 256.92

PO hot melt adhesive for deep-frozen goods | Low Temp

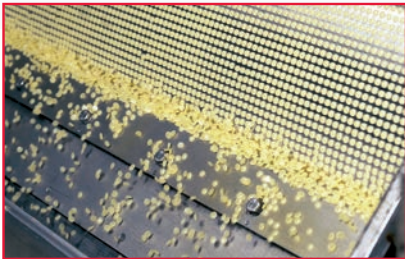
Viscosity at 140 °C	[mPas]	approx. 1,100
Processing temperature	[°C]	approx. 120 - 160
Open time	[s]	approx. 3 - 5
Setting time		short
Softening point	[°C]	approx. 100



**Jowat | Ihr Partner in Sachen Kleben**  
**Jowat | Your Partner in bonding**



● Jowat Tochtergesellschaften / Jowat Subsidiaries  
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**Jowat – Kleben erster Klasse**  
**Jowat – first class bonding**

**Jowat**   
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