

# TECHNICAL INFORMATION

Revision: 1  
Date: 05.10.2018  
Page: 1/2

## NEWOTEC<sup>®</sup> 350

<b>Product Category:</b>	Dispersing agent for aqueous plastic dispersions												
<b>Fields of Application:</b>	Dispersions of plastic powder in water (e.g. hot melts)												
<b>Product Characteristics:</b>	<ul style="list-style-type: none"><li>➤ multi-purpose dispersant for plastic powder dispersions</li><li>➤ effective at low concentration levels</li><li>➤ easy to use</li></ul>												
<b>Chemical Composition:</b>	Aqueous emulsion containing modified polyglycol ethers, acrylic polymers, hydrocarbons, defoamer and vinylpolymers												
<b>Technical Data:</b>	<table><tr><td>Appearance (20 °C):</td><td>white - yellowish pasty liquid</td></tr><tr><td>Active content:</td><td>approx. 40-45%</td></tr><tr><td>Flash point:</td><td>&gt;200 °C</td></tr><tr><td>Boiling range:</td><td>approx. 100°C (water)</td></tr><tr><td>Solidification range:</td><td>approx. 0°C (water)</td></tr><tr><td>Compatibility:</td><td>compatible with most commonly used plastic powders like CoPA, CoPES, PU and others</td></tr></table>	Appearance (20 °C):	white - yellowish pasty liquid	Active content:	approx. 40-45%	Flash point:	>200 °C	Boiling range:	approx. 100°C (water)	Solidification range:	approx. 0°C (water)	Compatibility:	compatible with most commonly used plastic powders like CoPA, CoPES, PU and others
Appearance (20 °C):	white - yellowish pasty liquid												
Active content:	approx. 40-45%												
Flash point:	>200 °C												
Boiling range:	approx. 100°C (water)												
Solidification range:	approx. 0°C (water)												
Compatibility:	compatible with most commonly used plastic powders like CoPA, CoPES, PU and others												
<b>Storage:</b>	<table><tr><td>Shelf life:</td><td>in originally sealed drums, approximately one year from the date of delivery under the conditions recommended below</td></tr><tr><td>Storage Conditions:</td><td>Recommended storage temperature: min +3°C, max +40 °C Protect from moisture</td></tr></table>	Shelf life:	in originally sealed drums, approximately one year from the date of delivery under the conditions recommended below	Storage Conditions:	Recommended storage temperature: min +3°C, max +40 °C Protect from moisture								
Shelf life:	in originally sealed drums, approximately one year from the date of delivery under the conditions recommended below												
Storage Conditions:	Recommended storage temperature: min +3°C, max +40 °C Protect from moisture												
<b>Packaging:</b>	drums												
<b>Use concentration:</b>	<p>Approx. 2 to 6%, referring to the weight of the ready-to-use dispersion</p> <p>The quantity needed depends on how much plastic powder has to be dispersed as well as on the viscosity of the resulting dispersion. Therefore we recommend to carry out pilot tests to determine the optimum dosage.</p>												

## NEWOTEC<sup>®</sup> 350

### **Application:**

NEWOTEC<sup>®</sup> 350 is a multi-purpose dispersing agent for various types of plastic powder in water. Fields of application are hot melt dispersions, screen printing pastes, coating systems mainly in the textile industry.

NEWOTEC<sup>®</sup> 350 can be used to disperse plastic powders in water (like CoPA, CoPES, PU, EVA and some PE grades).

Below is a general guideline how to formulate hot melt pastes for use in screen printing processes (values in % by weight):

<b>water</b>	<b>60.0</b>
<b>NEWOTEC<sup>®</sup> 350</b>	<b>4.0</b>
<b>hot melt powder</b> (CoPA, CoPES 0-80µm)	<b>30.0</b>
<b>NEWOTEC<sup>®</sup> 570</b> (printing agent)	<b>6.0</b>
<b>NEWOTEC<sup>®</sup> 503</b> (thickener)	<b>as needed</b>

First, NEWOTEC<sup>®</sup> 350 is premixed with water until a homogeneous and smooth emulsion is obtained. The use of a high-speed stirrer with a dissolver blade will accelerate the process. Then the powder is added in portions whilst stirring at high speed. Continue mixing until a homogeneous dispersion without particle agglomerations is obtained.

**Before adding the printing agent it is essential to reduce the speed of the stirrer as NEWOTEC<sup>®</sup> 570 is very sensitive to high shear forces.** NEWOTEC<sup>®</sup> 570 is easily water-soluble and requires only low speed mixing for a short time (less than a minute in most cases).

The next step of the paste preparation is to adjust the final viscosity of the dispersion (again at low speed!). This can be done by adding approximately 0-1% of our thickener NEWOTEC<sup>®</sup> 503 to the paste, depending on the desired viscosity. If NEWOTEC<sup>®</sup> 503 is not at hand, the addition of a little more NEWOTEC<sup>®</sup> 350 will do the same (approx. 0-2%).

The data in this technical information are derived from practical experience. They do not guarantee specific product properties or the suitability of the product for particular applications. Lab or pilot tests should be carried out in any case. Due to many different possible process conditions we cannot assume any liability. Any existing industrial patent rights have to be respected. Additional information on product properties pertaining to working safety as well as environmental protection can be found in the material safety data sheet.