

Product Data Sheet

Thioplast™ EPS 35

Status:
 June 2020

Liquid polysulfide polymer with epoxy end groups

Description	Thioplast™ EPS 35 is an epoxy terminated, liquid polysulfide polymer. The aliphatic polysulfide backbone is terminated by epoxy end-groups. Thioplast™ EPS 35 exhibits excellent chemical resistivity, high flexibility and very good low-temperature impact resistance compared to conventional amine curatives.														
Properties¹⁾ <small>1) Typical properties, not to be construed as product specifications</small>	<table> <tr> <td>Appearance</td> <td>clear, amber liquid</td> </tr> <tr> <td>Epoxy equivalent weight</td> <td>600 – 700 g/eq</td> </tr> <tr> <td>Epoxy-oxygen content</td> <td>approx. 2.3 – 2.6</td> </tr> <tr> <td>Viscosity (25 °C)</td> <td>approx. 3.5 Pas</td> </tr> <tr> <td>Water content</td> <td>max. 0.1 %</td> </tr> <tr> <td>Glass point</td> <td>approx. – 55 °C</td> </tr> <tr> <td>Specific weight</td> <td>1.23 kg/m³</td> </tr> </table>	Appearance	clear, amber liquid	Epoxy equivalent weight	600 – 700 g/eq	Epoxy-oxygen content	approx. 2.3 – 2.6	Viscosity (25 °C)	approx. 3.5 Pas	Water content	max. 0.1 %	Glass point	approx. – 55 °C	Specific weight	1.23 kg/m ³
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Application Curing	<p>Thioplast™ EPS 35 is primarily used in metal or concrete coatings to improve the flexibility, impact and thermal shock resistance as well as the resistivity against chemicals, oils, corrosion and low-temperature cracks. Thioplast™ EPS 35 is compatible with most Bisphenol A, A/F, F and Novolac resins and can also be used in epoxy-based adhesives and sealant formulations. As with any product, the use of Thioplast™ EPS 35 in a given application must be tested (including, but not limited to field testing) in advance by the user to determine suitability.</p> <p>Thioplast™ EPS 35 is used in two-component systems. Typical curatives are linear or cyclic aliphatic or aromatic amines.</p> <p>Typical physical properties range of formulated Thioplast™ EPS 35 cured at room temperature with amine curatives:</p> <table> <tr> <td>Pot-life (@ r. t.) [h]</td> <td>7 – 18</td> </tr> <tr> <td>Tack-free time (@ r. t.) [h]</td> <td>14 – 48</td> </tr> <tr> <td>Shore D-hardness</td> <td>15 – 85</td> </tr> <tr> <td>Elongation @ break [%]</td> <td>10 – 100</td> </tr> <tr> <td>Tensile strength [N/mm²]</td> <td>3 – 25</td> </tr> </table> <p>Maximum curing temperature is 150 °C.</p> <p>The final properties of the formulation strongly depend on the ingredients and the drying procedure utilized.</p>	Pot-life (@ r. t.) [h]	7 – 18	Tack-free time (@ r. t.) [h]	14 – 48	Shore D-hardness	15 – 85	Elongation @ break [%]	10 – 100	Tensile strength [N/mm ²]	3 – 25				
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Packaging	Thioplast™ EPS 35 is available in 200 Liter drums. Other packages upon request.														
Storage	Thioplast™ EPS 35 may be stored under air at ambient temperatures for extended periods. Containers should be kept closed to protect Thioplast™ EPS 35 from moisture contaminations. Shelf life under appropriate storage conditions at least 12 months.														
Handling	Full information on the safe handling of Thioplast™ EPS 35 is available in the Material Safety Data Sheet (MSDS).														

Legal Disclaimer: All information is based upon tests and data believed to be reliable, however, it is the user's responsibility to determine the suitability for his own use of the products described here. Nothing herein contained is to be construed as permission or as a recommendation to infringe any patent. All orders accepted shall be subjected to the standard conditions of sales of the manufacturing company, Nouryon Functional Chemicals GmbH, Greiz, Germany.

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