

Product Data Sheet

Thioplast™ G44

Status:
December 2018

Liquid polysulfide polymer with thiol end groups

Description	Liquid Polysulfide Pre-polymer, end-capped by SH-functional end groups.																						
Properties¹⁾ <small>1) Typical properties, not to be construed as product specifications</small>	<table><tr><td>Appearance</td><td>brownish liquid polymer</td></tr><tr><td>SH content</td><td>6,0 – 7,0% (related to viscosity/Molecular weight)</td></tr><tr><td>Viscosity (25 °C)</td><td>max. 1,3 Pas</td></tr><tr><td>Av. Molecular weight</td><td><1100 g/mol (relative to SEC standard)</td></tr><tr><td>Branching</td><td>0,5 mol% (calculated on mol% TCP)</td></tr><tr><td>Water content</td><td>max. 0.35%</td></tr><tr><td>Free sulfur</td><td>0.01 – 0.1%</td></tr><tr><td>Volatiles</td><td>max. 0.7%</td></tr><tr><td>Glass point</td><td>approx. – 55 °C</td></tr><tr><td>Flash point</td><td>> 230 °C</td></tr><tr><td>CAS-No</td><td>68611-50-7</td></tr></table>	Appearance	brownish liquid polymer	SH content	6,0 – 7,0% (related to viscosity/Molecular weight)	Viscosity (25 °C)	max. 1,3 Pas	Av. Molecular weight	<1100 g/mol (relative to SEC standard)	Branching	0,5 mol% (calculated on mol% TCP)	Water content	max. 0.35%	Free sulfur	0.01 – 0.1%	Volatiles	max. 0.7%	Glass point	approx. – 55 °C	Flash point	> 230 °C	CAS-No	68611-50-7
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Application	<p>Thioplast G44 is used as reactive diluent in Thioplast G based sealants to formulate low viscos, flexible and highly elastic sealants being used in Aerospace and construction with best performance in high Nobel Gas retention and low moisture vapor permeability.</p> <p>Additionally, Thioplast G44 is used as highly reactive partner in Amine cured Epoxies (like Bisphenol (A, F, AF) DGE and Novolac) to adapt and optimize tensile- / impact strength and elasticity (brittleness).</p>																						
Curing	Support on stoichiometric calculation to cure Epoxies with Thioplast G44 is available on request.																						
Packaging	Thioplast G44 is available in 200 Liter drums, 1000 Liter IBC and 20m ³ ISO Bulk.																						
Storage	Store the container in cool and dry area, keep it closed when not in use. Shelf life under appropriate storage conditions min 3 years.																						
Handling	Full information on the safe handling is available in the Material Safety Data Sheet (MSDS). Further details are available upon request.																						

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