

## Product Data Sheet

# Thioplast™ G4

Status:

July 2019

Liquid polysulfide polymer with thiol end groups

<b>Description</b>	Liquid Polysulfide Pre-polymer, end-capped by SH-functional end groups.																						
<b>Properties<sup>1)</sup></b> <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>&lt;1100 g/mol (relative to SEC standard)</td> </tr> <tr> <td>Branching</td> <td>2,0 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>&gt; 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	2,0 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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<b>Application</b>	<p>Thioplast G4 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 applications with best performance in high Nobel Gas retention and low moisture vapor permeability.</p> <p>Additionally, Thioplast G4 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>																						
<b>Curing</b>	Support on stoichiometric calculation to cure Epoxies with Thioplast G4 is available on request.																						
<b>Packaging</b>	Thioplast G4 is available in 200 Liter drums, 1000 Liter IBC and 20m <sup>3</sup> ISO Bulk.																						
<b>Storage</b>	<p>Store the container in cool and dry area, keep it closed when not in use.</p> <p>Shelf life under appropriate storage conditions min 3 years.</p>																						
<b>Handling</b>	<p>Full information on the safe handling is available in the Material Safety Data Sheet (MSDS).</p> <p>Further details are available upon request.</p>																						

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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