

Product Data Sheet

Thioplast™ G131

Status:

July 2019

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>1,0 – 1,3% (related to viscosity/Molecular weight)</td> </tr> <tr> <td>Viscosity (25 °C)</td> <td>80 – 145 Pas</td> </tr> <tr> <td>Av. Molecular weight</td> <td>5200 – 6500 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. 0.5%</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	1,0 – 1,3% (related to viscosity/Molecular weight)	Viscosity (25 °C)	80 – 145 Pas	Av. Molecular weight	5200 – 6500 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. 0.5%	Glass point	approx. – 55 °C	Flash point	> 230 °C	CAS-No	68611-50-7
Appearance	brownish liquid polymer																						
SH content	1,0 – 1,3% (related to viscosity/Molecular weight)																						
Viscosity (25 °C)	80 – 145 Pas																						
Av. Molecular weight	5200 – 6500 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. 0.5%																						
Glass point	approx. – 55 °C																						
Flash point	> 230 °C																						
CAS-No	68611-50-7																						
Application	<p>Thioplast G131 is used to formulate highly flexible and elastic sealants being used in Aerospace applications with best performance in Jet Fuel resistance, high Nobel Gas retention and low moisture vapor permeability.</p> <p>Furthermore, Thioplast G131 is used in highly flexible sealants with good UV-resistance being used in construction applications.</p>																						
Curing	<p>Curing agent: Manganese(IV)-oxide (*): 5,3 – 5,6 g/100 g Thioplast G 131 (*) Pure curing agent: Manganese (IV)-oxide. The concentration of active/activated Manganese (IV)-oxide needs to be considered.</p> <table> <thead> <tr> <th>Curing paste</th> <th>pbw</th> </tr> </thead> <tbody> <tr> <td>MnO₂, Grade Honeywell FA</td> <td>100</td> </tr> <tr> <td>Santicizer 278</td> <td>100</td> </tr> <tr> <td>Perkacit DPG</td> <td>6</td> </tr> <tr> <td>Airex 900</td> <td>7.4</td> </tr> </tbody> </table> <p>Properties of Thioplast G131 cured with 13 g curing paste/100 g Thioplast G131:</p> <table> <tr> <td>Shore A-hardness</td> <td>min 33</td> </tr> <tr> <td>Elongation @ break %</td> <td>min 120</td> </tr> </table>	Curing paste	pbw	MnO ₂ , Grade Honeywell FA	100	Santicizer 278	100	Perkacit DPG	6	Airex 900	7.4	Shore A-hardness	min 33	Elongation @ break %	min 120								
Curing paste	pbw																						
MnO ₂ , Grade Honeywell FA	100																						
Santicizer 278	100																						
Perkacit DPG	6																						
Airex 900	7.4																						
Shore A-hardness	min 33																						
Elongation @ break %	min 120																						
Packaging	Thioplast G131 is available in 200 Liter drums, 1000 Liter IBC and 20m ³ ISO Bulk.																						
Storage	<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>																						
Handling	<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.

Nouryon Functional Chemicals GmbH
Liebigstr.7, D-07973 Greiz, Germany
Tel. +49-3661-78-0

thioplast@nouryon.com
<https://sulfurderivatives.nouryon.com/thioplast/>