**Product Data Sheet**

**Thioplast™ G21F**

Liquid polysulfide polymer with thiol end groups

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### Description

Liquid Polysulfide Pre-polymer, end-capped by SH-functional end groups.

### Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>brownish liquid polymer</td>
</tr>
<tr>
<td>SH content</td>
<td>2.6 – 3.0% (related to viscosity/Molecular weight)</td>
</tr>
<tr>
<td>Viscosity (25 °C)</td>
<td>10 – 15 Pas</td>
</tr>
<tr>
<td>Av. Molecular weight</td>
<td>2100 – 2500 g/mol (relative to SEC standard)</td>
</tr>
<tr>
<td>Branching</td>
<td>1.45 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>&gt; 230 °C</td>
</tr>
<tr>
<td>CAS-No</td>
<td>68611-50-7</td>
</tr>
</tbody>
</table>

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### Application

Thioplast G21F is used to formulate flexible, highly elastic sealants being used in Insulating Glass applications with best performance in high Nobel Gas retention and low moisture vapor permeability. Furthermore, Thioplast G21F is used in low viscos sealants with good UV-resistance being used in construction applications.

### Curing

Curing agent: Manganese(IV)-oxide (*): 7.5 – 9.4 g/100 g Thioplast G 21

(*) Pure curing agent: Manganese (IV)-oxide. The concentration of active/activated Manganese (IV)-oxide needs to be considered.

**Curing paste**

- **MnO₂**, Grade Honeywell FA 100
- **Santicizer 278** 100
- **Perkacit DPG** 6
- **Airex 900** 7.4

Properties of Thioplast G21F cured with 21 g curing paste/100 g Thioplast G21F:

- **Shore A-hardness**: min 36
- **Elongation @ break %**: min 100

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### Packaging

Thioplast G21F is available in 200 Liter drums, 1000 Liter IBC and 20m³ 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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