

# Thioplast G4

Liquid polysulfide polymer with thiol end groups (MW < 1800)

The low viscosity combined with Thioplast's unique combination of features like chemical resistance and low-temperature flexibility appeals to high-performance coating manufacturers of all industry branches to protect metal or concrete surfaces, floors, or pipelines. Formulators tailor properties like pot-life, tensile strength, adhesion and elongation at break by choosing from various compatible plasticizers, fillers and other additives. The viscosity, degree of branching and SH content can easily be adjusted by blending this grade with others to generate your tailored Thioplast polysulfide.

CAS number  
68611-50-7

## Characteristics

|                                                    |                         |
|----------------------------------------------------|-------------------------|
| Appearance                                         | Brownish liquid polymer |
| Average Molecular weight, relative to SEC standard | ≤ 1100 g/mol            |
| Branching, calculated on mol% TCP                  | 2.0 mol%                |
| Flash point                                        | ≥ 230 °C                |
| Free sulfur                                        | 0.01-0.1 %              |
| Glass point                                        | ~ -55 °C                |
| SH content, related to viscosity/Molecular weight  | 6.0-7.0 %               |
| Viscosity, 25°C                                    | ≤ 1.3 Pa.s              |
| Volatiles                                          | ≤ 0.7 %                 |
| Water content                                      | ≤ 0.35 %                |

### Notes:

Typical properties, not to be construed as product specifications.

## Applications

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. 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). Support on stoichiometric calculation to cure Epoxies with Thioplast G4 is available on request.

## 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.

## Packaging and transport

Thioplast G4 is available in 200 Liter drums, 1000 Liter IBC and 20m<sup>3</sup> ISO Bulk.

## Safety and 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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## Contact Us

Nouryon Pulp and Performance Chemicals AB  
13000  
SE-850 13 Sundsvall  
Sweden  
+46 60 13 4000  
+46 60 56 9518 (Fax)  
[info.expancel@nouryon.com](mailto:info.expancel@nouryon.com)

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