



# **Thioplast G44**

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	Brownisch liquid polymer
Average Molecular weight, relative to SEC standard	≤ 1100 g/mol
Branching, calculated on mol% TCP	0.5 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 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. 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). Support on stoichiometric calculation to cure Epoxies with Thioplast G44 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 G44 is available in 200 Liter drums, 1000 Liter IBC and  $20m^3$  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.

All information concerning this product and/or suggestions for handling and use contained herein are offered in good faith and are believed to be reliable. Nouryon, however, makes no warranty as to accuracy and/or sufficiency of such information and/or suggestions, as to the product's merchantability or fitness for any particular purpose, or that any suggested use will not infringe any patent. Nouryon does not accept any liability whatsoever arising out of the use of or reliance on this information, or out of the use or the performance of the product. Nothing contained herein shall be construed as granting or extending any license under any patent. Customer must determine for himself, by preliminary tests or otherwise, the suitability of this product for his purposes. The information contained herein supersedes all previously issued information on the subject matter covered. The customer may forward, distribute, and/or photocopy this document only if unaltered and complete, including all of its headers and footers, and should refrain from any unauthorized use. Don't copy this document to a website.

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