



# **Thioplast G12**

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

The pronounced flexibility, even at low temperatures and the high elongation at break in combination with Thioplast G's inherent chemical resistance makes this grade the best choice for the aerospace industry and industrial applications in general. 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	4100-4600 g/mol
Branching, calculated on mol% TCP	0.2 mol%
Flash point	≥ 230 °C
Free sulfur	0.01-0.1 %
Glass point	~ -55 °C
SH content, related to viscosity/Molecular weight	1.5-1.7 %
Viscosity, 25°C	38-50 Pa.s
Volatiles	≤ 0.5 %
Water content	≤ 0.35 %

#### Notes:

Typical properties, not to be construed as product specifications.

### **Applications**

Thioplast G12 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. Furthermore, Thioplast G12 is used in sealants with high elasticity and good UV-resistance being used in construction applications. Recommended use in combination with Managanese(IV)oxide curing agent (5.7-6.3 g  $MnO_2/100g$ ).

#### 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 G12 is available in 200 Liter drums, 1000 Liter IBC and 20m³ 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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