



# Thioplast® Polysulfides

The leading brand in polysulfides  
聚硫胶中的领导品牌

**Nouryon**

# Thioplast® Polysulfides

## The products

Thioplast® liquid polysulfide resins are aliphatic, liquid polymers. Their thiol end-groups react with a variety of curing agents to form a macro molecular network.

During the curing process at ambient temperature cross-linked and rubber-like polymers are formed, that show excellent resistance to weathering, water, UV-light, ozone, oils, fats, gasoline, solvents, alkali, diluted acids and many other chemicals.

Nouryon produces two product lines under the Thioplast® brand:

- Thiol- (SH-) end-group modified polysulfides (Thioplast® G-types)
- Epoxy end-group modified polysulfides (Thioplast® EPS-types)

## 产品

诺力昂 Thioplast®液体聚硫胶是脂肪族液态聚合物。其末端的硫醇基可以与许多固化剂反应形成高分子网状结构。在室温环境下固化反应形成交联的类橡胶聚合物，这些聚合物对气候、水、紫外线、臭氧、油、脂肪、汽油、溶剂、碱、稀酸和很多其他化学物质都有良好的耐受性。

诺力昂 Thioplast®品牌有两种产品系列：

- 硫醇基-(SH)-封端的改性多硫化物 (Thioplast® G-型)
- 环氧基封端的改性多硫化物 (Thioplast® EPS-型)

### Keeping the warmth inside...

Did you know that polysulfide sealants are the most popular and widely used sealants in insulating glass worldwide? It's the unique combination of chemical and physical properties that make it the industry's first choice. Thioplast® polysulfides produced by Nouryon is the leading product used to make polysulfide sealants that save energy and thereby help to reduce climate changing greenhouse gases.

### 维持室内温度

你知道聚硫密封胶是全球隔热玻璃中最受欢迎且应用广泛的密封胶吗？它独一无二的化学性能和物理性能使其成为工业应用的第一选择。目前诺力昂生产的Thioplast®聚硫胶是用于生产聚硫密封胶的领先产品，它有助于节约能源，减少引起气候变化的温室气体。





# Thioplast® G Polysulfides

## Thiol- (SH-) modified polysulfide polymers for sealants

Elasticity and pronounced chemical resistance are the key properties of our thiol- (SH-) modified cured Thioplast® G polysulfide. Therefore, they are ideally suited for the most important application as base polymers for sealants. Additional benefits: Thioplast® G polysulfides can be used among almost any curing conditions and the product's physical properties can be easily adapted to specific application requirements.

### Application areas:

- Manufacturing of insulating glass
- Construction
- Marine and aircraft sealants

- Coatings (e.g. concrete coatings)
- Molding compounds
- Electrical potting compounds
- Modification of epoxy resins and rubbers
- Leather impregnation
- Grinding wheel binder

Nouryon currently manufactures nine types of Thioplast® G polysulfides which differ in molecular weight (chain length) and degree of branching. This product range will meet requirements for nearly all applications. Specific, tailor-made polymers can be produced on special request.



## 用于密封胶的硫醇基(SH-)改性多硫化物聚合物

硫醇基(SH-)改性固化产品Thioplast® G 聚硫的重要特性是具有良好的弹性和耐化学性。因此，理想情况下，其最重要的应用是用作密封胶的基础聚合物。其他的优点包括：Thioplast® G 聚硫适用于几乎任何固化条件，且产品的物理性能满足特殊的应用要求。

### 应用领域：

- 制造中空玻璃
- 建筑
- 船舶和航空用密封剂

- 涂料（如混凝土涂料）
- 模塑料
- 电子灌封料
- 环氧树脂或橡胶的改性
- 皮革浸渍
- 砂轮粘合剂

目前诺力昂根据分子量（主链长度）和分支程度的不同，提供9种类型的Thioplast® G 聚硫，几乎能满足各种应用需求，特别是能根据客户需求定制产品。

Thioplast 



# Thioplast® EPS Polysulfides

Epoxy-modified polysulfide polymers  
for coatings and adhesives applications

EPS-type Thioplast® polysulfides are epoxy terminated, low viscosity polysulfide resins. The epoxy termination of the polysulfide structure results in a unique polymer which combines the excellent properties of Thioplast® G polysulfides with those of epoxy resins, including:

- Excellent adhesion to most surfaces
- Chemical resistance to many diluted acids, alkalis and solvents
- Mechanical stability and durability
- High-speed curing at ambient temperature

Thioplast® EPS resins are used in adhesives for steel, aluminum, concrete and automotive applications. They also form important components of anti-corrosive and marine coatings, coatings for chemical plants, as well as mechanically and chemically stressed coatings. Depending on the application, Thioplast® EPS polysulfides can either be used on its own or in combination with conventional aromatic A/F-glycidyl ethers, novolacs and other epoxies.

Marine Coatings are exposed to heavy conditions. Thioplast® EPS polysulfides combine the advantages of polysulfide and epoxies and ensure corrosion stability due to excellent adhesion on different surfaces, anti-fouling properties and high chemical resistance.

船舶涂料通常暴露于恶劣的条件下。Thioplast®EPS 聚硫 兼有多硫化物和环氧化物的优点，对不同表面具有优异的附着力，因而具有良好的耐腐蚀稳定性、防污性和高耐化学性。



## 用于涂料和粘合剂的环氧改性多硫化物 聚合物

EPS型Thioplast®是环氧基团封端的低粘度多硫化物树脂。多硫化物结构中的环氧末端赋予Thioplast® G 聚硫 优异的环氧树脂性能，结合Thioplast®G 聚硫 自身的优异性能，使EPS型Thioplast® 聚硫 成为一款独一无二的聚合物：

- 对大多数表面有优异的附着力
- 对许多稀酸、碱和溶剂有化学耐受性
- 机械稳定性和耐久性
- 在大气环境中固化速度快

Thioplast® EPS树脂适用于钢、铝、混凝土和汽车用粘合剂。同时，也可作为防腐涂料和船舶涂料、化工设备涂料、机械和化学性能强化涂料的重要成分。根据应用的不同，Thioplast® EPS 聚硫 能单独使用，也可以与传统的芳香族A/F缩水甘油醚、酚醛树脂及其他环氧树脂结合使用。



# Thioplast® Polysulfides

## The business

Thioplast®, the liquid polysulfide polymers of Nouryon, are key ingredients in the manufacture of sealants, coatings and adhesives. The products show excellent resistance to weathering, water, oils, fats, fuels and numerous others chemicals and solvents.

Because of these unique properties, Thioplast® polysulfides is ideally suited for the production of sealing compounds and protective coatings, for a variety of applications in construction, aircraft and marine industries and in the manufacture of insulating glass.

Our Thioplast® liquid polysulfide resins are produced in Greiz (Thuringia, Germany). The Greiz site is a leading center for liquid polysulfide polymers with an annual production capacity of more than 18.000 tons. Nouryon is the global market leader in liquid polysulfides.

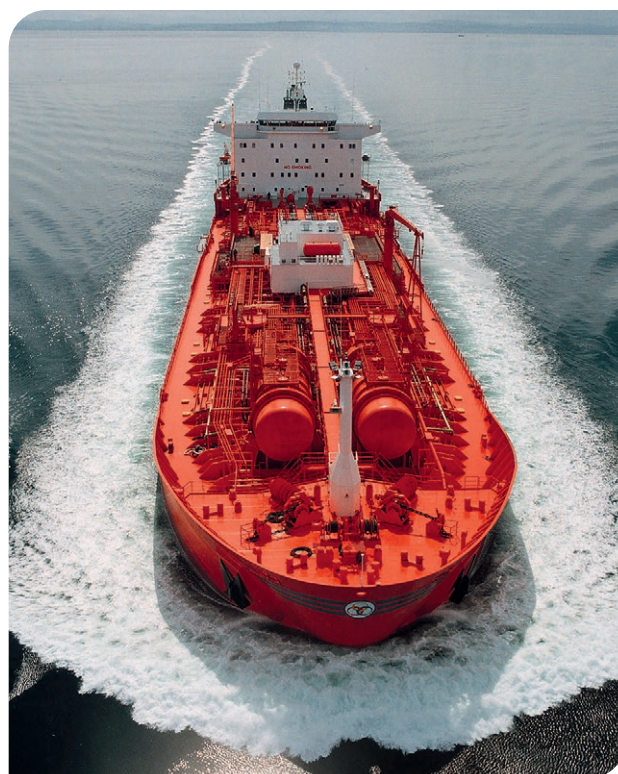
The production site in Greiz is certified according to EN ISO 9001 and EMAS/EN ISO 14001.

## 业务

诺力昂的液态聚硫胶Thioplast®是制造密封胶、涂料和粘合剂的重要成分。该产品对气候、水、油、脂肪、燃料以及许多其他化学物质和溶剂具有良好的耐受性。

由于这些独特的特性，Thioplast®聚硫非常适用于密封材料和保护性涂料，可用在建筑、航空、航洋工业以及中空玻璃制造业等诸多领域。

诺力昂的液体聚硫胶Thioplast®在德国图林根州格赖茨生产。格赖茨基地是生产液体聚硫胶的中心，年产能超过18000吨。诺力昂是液体聚硫胶的全球市场领导者。格赖茨生产基地通过了EN ISO 9001和EMAS/EN ISO 14001认证。








Good gas tightness and excellent adhesion to steel and concrete make Thioplast® EPS products ideal candidates for heavy duty corrosion protection, such as pipelines and sewages.

良好的气密性以及对于钢材和混凝土优异的附着力使 Thioplast® EPS 产品成为管道和下水道等重型防腐保护的理想原料。

The floor coating has to withstand organic solvents, diluted alkali and acids and large changes in ambient as well as spot temperatures.

地面涂料必须能经受住有机溶剂、稀碱、酸以及环境温度，点温的巨大变化。



Thioplast® polysulfides helps sealant manufacturers fully meet and exceed the uncompromising standards of the aerospace industry. You'll also find polysulfide based sealants performing exceptionally in other demanding construction sealant applications such as gas stations, bridges, facades and runways. Thioplast® polysulfides is also used in the production of printing blankets, grinding systems and coatings.

**Thioplast® 聚硫** 能够帮助密封胶制造商满足甚至超过航天工业的严格标准。聚硫密封胶在其他许多要求严格的建筑用密封胶应用中也有优异的表现，如天然气站、桥梁、房屋、跑道等。**Thioplast® 聚硫** 还能用于生产印刷橡皮布、研磨系统和涂料。



To find out more about our polysulfides,  
visit our website:  
[nouryon.com/products/thioplast-polysulfides](https://nouryon.com/products/thioplast-polysulfides)

or contact us at:  
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Thioplast® polysulfides is a trademark of Nouryon in a number of territories worldwide.

# Nouryon

Nouryon is a global, specialty chemicals leader. Markets and consumers worldwide rely on our essential solutions to manufacture everyday products, such as personal care, cleaning goods, paints and coatings, agriculture and food, pharmaceuticals, and building products. Furthermore, the dedication of more than 9,700 employees with a shared commitment to our customers, business growth, safety, sustainability and innovation has resulted in a consistently strong financial performance. We operate in over 80 countries around the world with a portfolio of industry-leading brands. Visit our website and follow us @Nouryon and on LinkedIn.

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