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# Exolit® OP 560

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## Highly effective reactive, non-halogenated phosphorus polyol

### Product Description

Exolit® OP 560 is a flame retardant that can be used for flexible polyurethane foams. It is a medium-viscosity liquid and it is based on a non-halogenated phosphorus polyol. The product is a reactive flame retardant which can be chemically reacted into the polymeric matrix. Therefore, very low fogging values can be achieved which meet the most stringent emission standards for PU flexible foams in the automotive industry.

Watch how our Exolit® OP 560 can make the first trip to Mars safer.

### Benefits

- Designed to be chemically reacted into the polymeric matrix
- Characterized by a high phosphorus content and high flame retardancy performance
- Very low fogging values can be achieved which meet the most stringent emission standards for PU flexible foams in the automotive industry
- Non-halogenated flame retardant with favourable environmental and health profile

### Specifications

| Characteristics | Unit | Target value | DS[1]) | TD[2]) | Test method |
|---|---|---|---|---|---|
| **Phosphorus** | %(w/w) | 10 - 13 | ☑ | ☐ | Photometry after oxidizing dissolution; (11/17) |
| **Density** | g/cm³ | 1.20 | ☐ | ☑ | at 25 °C |
| **Viscosity** | mPa*s | max. 500 | ☑ | ☐ | Brookfield viscosimeter, 25 °C; (11/30) |
| **pH Value** | - | 4.5 | ☐ | ☑ | (10 g/l) |
| **Color Number (Hazen, APHA)** | - | max. 800 | ☑ | ☐ | Spectrophotometry; (11/22) |
| **Acid Number** | mg KOH/g | max. 2 | ☑ | ☐ | Titration using alkali; (11/11) |
| **Hydroxyl Number** | mg KOH/g | 400 - 500 | ☑ | ☐ | Double Karl-Fischer-titration; (11/14) |

[1]) Delivery specification: The product is monitored on a regular basis to ensure that it adheres to the specified values. Test methods: Clariant method numbers 11/xx in brackets.
[2]) Technical data: The technical data are used solely to describe the product and are not subject to regular monitoring.

### Applications

Exolit OP 560 is primarily designed for use in the production of special low fogging flexible polyurethane foams. The product is characterized by a high phosphorus content and high flame retardancy performance.

Exolit OP 560 is a reactive flame retardant, designed to be chemically reacted into the polymeric matrix. When properly incorporated into the foam, very low fogging values can be achieved which meet the most stringent emission standards for PU flexible foams in the automotive industry.

Exolit OP 560 should be added separately because it is only partially soluble in polyols with low hydroxyl numbers. As a reactive flame retardant it will hydrolyze slowly in the presence of water.

### Packaging and Handling

**Delivery form**
Liquid

**Packaging**
Exolit OP 560 is supplied in following packaging units:
1 kg sample bottle
60 kg net drums (540 kg net pallets)

1,000 kg net non-returnable IBC

**Storage**
In the presence of water Exolit OP 560 hydrolyses slowly and should therefore be stored and handled with exclusion of moisture.

Minimum shelf life is 12 months from the date of shipping when stored according to the said conditions.

## Safety

For regulatory details such as the classification and labelling as dangerous substances or goods please refer to our corresponding Material Safety Data Sheet.

**Contact Us;**
Please contact us for safety and regulatory details or the Material Safety Data Sheet (MSDS).

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