

Product Information

PREVENTOL® D 6

PREVENTOL® D 6

Uses

For the preservation of aqueous coatings, polymer dispersions, filler suspensions, pigment slurries, solutions and dispersions of adhesives and thickeners, concrete additives, detergents, cleaning agents, polishes etc.

Chemical and physical data

Composition:	synergistic, aqueous formulation of isothiazolinones and glycol/formaldehyde
Description:	nearly colourless to yellowish liquid

Specification*

Assay:	min. 23.8 % total assay of isothiazolinones (HPLC) and glycol/formaldehyde (titration)
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*Specification values are subject to constant monitoring. Only data given in the current edition of the "Specification" are binding.

Characteristic data**

Density (20 °C):	approx. 1.06 g/cm ³
Vapour pressure (20 °C): Vapour pressure (50 °C):	approx. 21 mbar approx. 160 mbar
Solidification point:	approx. -14 °C
Boiling point:	approx. 100 °C
Flash point:	no flash point below temperature at which boiling starts (DIN 51758)
Ignition temperature:	approx. 415 °C (DIN 51794)
Solubility:	miscible with water and lower alcohols
pH:	approx. 5 (1 % in water)
Stability range:	pH 2.5 - 9.0 (below 40 °C)

**Characteristic data provide further information about the product and are not subject to constant monitoring. They are therefore not binding.

Storage

If correctly stored (not above 40 °C) and kept in the original sealed package, the shelf life is 1 year. Avoid high temperatures.

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Spectrum of activity

Minimum inhibitory concentrations (MIC) of Preventol D 6 in nutrient agar

Test organisms	MIC in mg/l	Test organisms	MIC in mg/l
<i>Alternaria alternata</i>	500	<i>Rhizopus nigricans</i>	750
<i>Aspergillus niger</i>	500	<i>Sclerophoma pityophila</i>	500
<i>Aureobasidium pullulans</i>	350		
<i>Chaetomium globosum</i>	500	<i>Escherichia coli</i> ATCC 11 229	500
<i>Coriolus versicolor</i>	500	Formaldehyde-resistant bacteria	450
<i>Fusarium culmorum</i>	500	<i>Proteus vulgaris</i>	500
<i>Fusarium moniliforme</i>	200	<i>Pseudomonas aeruginosa</i> ATCC 15 442	500
<i>Lentinus tigrinus</i>	500	<i>Pseudomonas fluorescens</i>	500
<i>Penicillium glaucum</i>	500	<i>Staphylococcus aureus</i> ATCC 6538	750

Applications

With its broad spectrum of activity, good solubility in water and biodegradability after adequate dilution, Preventol D 6 is a multipurpose preservative which is easy to use in the recommended addition.

The spectrum of activity of Preventol D 6 covers bacteria, including formaldehyde-resistant species, mould fungi and yeasts. Preventol D 6 is a preservative which, because of its low viscosity, can be used undiluted or diluted with water. The temperature should, where possible, not exceed 40 °C.

The product can also be predissolved in alcohols or alcohol/water mixtures. As a rule, the use of Preventol D 6 as a preservative for aqueous formulations does not result in any undesirable side-effects. However, this Preventol grade is not suitable for the preservation of protein-based products (e. g. those containing casein) or cosmetic products. We recommend to carry out a compatibility test with the product being preserved before Preventol D 6 is used.

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Suggested additions

in % (calculated on total formulation)

Examples:	
Polymer dispersions	0.05 – 0.20
Emulsion paints	0.10 – 0.25
Adhesive dispersions	0.05 – 0.20
Plasters and mortars	0.05 – 0.20
Oil- and alkyd-containing emulsion paints	0.15 – 0.20
Cleaning agents	0.05 – 0.20
Filler dispersions, pigment slurries	0.05 – 0.15
Thickener stock solutions	0.10 – 0.20
Glues (starch, dextrin and cellulose derivatives)	0.10 – 0.20
Concrete additives	0.10 – 0.30
Detergents	0.05 – 0.15

Registration / Approval / Recommendation

Preventol D 6 is part of Recommendation XXXVI of the Plastics Commission of the BgVV* as a preservative for raw materials for the production of paper and cardboard for food packaging.

The active ingredients used to manufacture Preventol D 6, isothiazolinones and formaldehyde, are listed:

– in Recommendation XIV (plastics dispersions) of the Plastics Commission of the BgVV* as production aids

– in the following FDA approvals:

§175.105 – polymer-based adhesives in indirect contact with foodstuffs

§176.170 – paper and cardboard in contact with moist and greasy foodstuffs

§176.180 – paper and cardboard in contact with dry foodstuffs

* German Federal Institute for Consumer Health and Veterinary Medicine, previously the BGA

Up-to-date information on the registration status of our products can be obtained from:

LANXESS Deutschland GmbH
Business Unit Material Protection
51369 Leverkusen / Germany
Fax: (+49 214) 30-6 29 95

PREVENTOL® D 6**Precautions**

Preventol D 6 is a clear, lowviscosity solution. Skin contact and vapour inhalation should be avoided. The precautions generally recommended for handling chemicals should be observed, e.g. wearing of protective clothing, safety goggles and protective gloves. If the product comes into contact with the skin, the affected area should be washed immediately with large amounts of soap and plenty of water; splashes in the eyes should be rinsed out immediately with plenty of water. If irritation persists, medical attention should be obtained. Contaminated clothing should be changed at once.

The current safety data sheet should be observed. This contains further information on labelling, transport and storage as well as information on handling, product safety, toxicity and ecology.

Use biocides safely. Always read the label and product information before use.

Toxicity and Labelling

Acute toxicity:	
LD ₅₀ oral, rat	2733 mg/kg

The Product Preventol D 6 is classified as harmful (Xn).

Hazard description and R-phrases:

R 20 / 21 / 22: Harmful by inhalation, in contact with skin and if swallowed.

R 37: Irritating to respiratory system.

R 40: Limited evidence of a carcinogenic effect.

R 41: Risk of serious damage to eyes.

R 43: May cause sensitization by skin contact.