



# **Product Information**

# Preventol® next A 6-D

Dry film algicide based on slow release diuron







#### Uses

For the manufacture of coatings, e.g. exterior paints and plasters, with film protection against algae.

# Chemical and physical data

Composition:	aqueous dispersion based on approx. 17 % N'-[3,4-dichlorophenyl]-N,N-dimethyl urea (diuron)
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#### **Specification**

The specification parameters can be found in the currently valid product specification

#### Characteristic data\*

Density (20 °C):	1.10 kg/l
Solubility:	miscible in water
pH (20 °C):	approx. 6 - 8 at 100 g/l water

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

# **Storage**

If correctly stored and kept in the original sealed package, its shelf life is at least 12 month. Avoid direct sunlight and temperatures below 0 °C and above 40 °C for longer time period. The dispersion should be homogenised by stirring before use.





#### **Application**

Preventol® next A 6-D is a broad-spectrum algicide which is highly effective against algae found on the surface of coatings, e.g. exterior paints and plasters. The product provides good toxicological properties and very low ecotoxicity in the matrix.

These favorable properties could be achieved by using an encapsulation technology. This enables diuron to prolong the efficacy of a coating as well as minimize the leaching of the active from the coating. These facts make it ideal for use in exterior paints and plasters.

Since coatings for exterior applications are subject to both algal attack and fungal infestation, Preventol® next A 6-D is often combined with an effective fungicide. Possible fungicidal combination partner is Preventol® MP 400-D containing the active substance 3-iodo-2-propinylbutyl carbamate (IPBC).

The excellent effectiveness of Preventol® next A 6-D generally allows its implementation at low dosages. A homogeneous incorporation into the coating to be protected is indispensable in order to ensure a reliable and uniform action. Typically, formulations containing Preventol® next A 6-D do not influence the color shade of a coating.

Due to the delivery form of Preventol<sup>®</sup> next A 6-D as an aqueous dispersion it can easily be incorporated into the product to be preserved at the end of the production process with gentle agitation. By all means please make sure that Preventol<sup>®</sup> next A 6-D is homogenously dispersed before use in order to avoid non-uniform distribution of the preservative in the finished product which all compromise the desired biocidal effect.

Moreover, LANXESS in-can preservatives should be additionally incorporated into the aqueous formulation to inhibit microbial degradation during shelf storage.

**Important note:** Coatings containing Preventol<sup>®</sup> next A 6-D must not be applied by spraying or processed under high shearing forces in order to avoid loss of product properties.

# **Suggested Dosages**

Depending on the coating to be protected as well as on the application area and the exposure, conventional dosages range from 0.07 % to max. 0.50 % of Preventol® next A 6-D (respectively 125 - 1250 ppm active ingredient diuron), calculated on finished product.

Exterior Paints	
0.15 % - 0.70 % Preventol® next A 6-D	approx. 250 ppm - 1250 ppm active ingredient diuron
Exterior wet plasters	
0.07 % - 0.30 % Preventol® next A 6-D	approx. 125 ppm - 500 ppm active ingredient diuron

In case of new products or applications and given the wide variety of paints and plasters/renders in use, we generally recommend preliminary investigations as to compatibility, biological effectiveness and optimum concentration of active ingredients. Our Technical Service Centre's microbiological laboratories will be glad to provide comprehensive assistance with such experiments.





## **Performance**

Due to our new technology the efficacy of Diuron could be enhanced. Compared to Preventol<sup>®</sup> A 6-D Preventol<sup>®</sup> next A 6-D shows a better algicidal performance in different paint systems:

	Preventol <sup>®</sup> A 6-D (50 % diuron)	Preventol® next A 6-D (17 % diuron - slow release)
Exterior acrylic paint	400 ppm <sup>*</sup>	200 ppm <sup>*</sup>
Exterior vinylic paint	500 ppm <sup>*</sup>	200 ppm <sup>*</sup>

calculated on active ingredient content

In addition to the enhanced efficacy we could also show that the ecotoxicity of diuron was reduced due to slow release technique.

#### Acute toxicity to algae

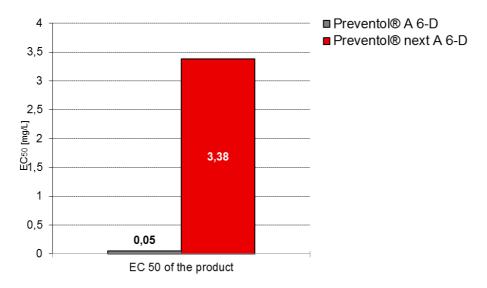


Figure 1: In this example the acute toxicity to algae was determined for Preventol<sup>®</sup> next A 6-D. The resulting  $EC_{50} = 3.38$  mg/l (EC = effective concentration) shows that the ecotoxicity is much lower in comparison with the ecotoxicity of Preventol<sup>®</sup> A 6-D ( $EC_{50} = 0.05$  mg/l) OECD 201, *Desmodesmus subspicatus* 

#### Registration / Approval / Recommendations

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

LANXESS Deutschland GmbH Business Unit Material Protection Products Regulatory Affairs 50569 Cologne / Germany

E-Mail: Regulatory-Support-Biocides@lanxess.com





#### **Precautions**

Preventol® next A 6-D is an aqueous dispersion. Skin contact must be avoided and care must be taken to prevent the liquid being splashed. The precautions generally recommended for handling chemicals must be observed, e.g. wearing of protection clothing, safety goggles and protective gloves.

If the product comes into contact with the skin, the affected area must be washed immediately with soap and plenty of water; splashes in the eyes must be rinsed out immediately with plenty of water. If irritation persists, medical attention must be obtained. Contaminated clothing must be changed immediately.

Effective ventilation must be provided during and after use of protected coatings containing biocidal film preservation. Eating, drinking and smoking must be prohibited during work. Do not breathe in product fumes or aerosols.

The use of coatings containing this biocidal product is for outdoor application only. Do not use this biocidal product for indoor applications!

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.

#### Labelling

This product information must be used in conjunction with the currently valid safety data sheet for the product which indicates labelling according to the EU Regulation on classification, labelling and packaging of substances and mixtures.

This information and our technical advice - whether verbal, in writing or by way of trials - are given in good faith but without warranty, and this also applies where proprietary rights of third parties are involved. Our advice does not release you from the obligation to verify the information currently provided - especially that contained in our safety data and technical information sheets - and to test our products as to their suitability for the intended processes and uses. The application, use and processing of our products and the products manufactured by you on the basis of our technical advice are beyond our control and, therefore, entirely your own responsibility. Our products are sold and our advisory service is given in accordance with the current version of our General Conditions of Sale and Delivery.

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