



# ECOTAN AL

**NANO-PARTICLE SIZED TITANIUM DIOXIDE  
WITH PHOTOCATALYTIC ABILITY IN WATER DISPERSION**

**ECOTAN AL** is an aqueous dispersion of nanoparticle  $TiO_2$  anatase.

Its main feature is represented by a photocatalytic activity, stimulated by sunlight or by special lamps emitting UV rays.



# ECOTAN AL

## CHARACTERISTICS

The essential feature of **ECOTAN AL** is its capacity to emit electro-negative charges on the surface of its particles and into the surrounding environment when these latter are stimulated by UV rays from a direct light.

Surface electro-negativity fosters the oxidation (*photocatalysis*) of the organic and non-organic substances that are near the surface.

This action remains active forever, provided that the presence of **ECOTAN AL** persists and it is stimulated by sunlight or by special lamps emitting UV rays.

## USE

**ECOTAN AL** is employed for its self-cleaning effect in the preparation of skim plasters and fillers in paste form for external application, lime and silicate paints.

It can also be used for synthetic resin-based paints, provided that their durability to photocatalysis is tested in advance.

It is the same reason why it is not possible to use organic colorants, but only metallic oxides, in the formulation of water paints.

In order to obtain the best distribution of **ECOTAN AL** in the final mixture, it is advisable to pre-disperse it in a part of one of its components, adding some *Disperflow CL*.

**ECOTAN AL** is able to break down the polluting agents in the air: it destroys smog and makes particulate and the inorganic dirt fall.

*Note: ECOTAN AL is not a pigment and does not substitute for TiO<sub>2</sub> used as such. In the finished product, it has only a photocatalytic and self-cleaning action.*

## DOSAGE

The recommended dosage of **ECOTAN AL** is normally of 1,2–3,0% on the solid components of the mixtures.

*Anyway, it is advisable to carry out preventive tests on the specific mixtures in order to establish the most suitable and convenient dosage according to the expected results.*

## STORAGE AND VALIDITY

If **ECOTAN AL** is stored in a dry place at temperatures ranging between 0° and 4° C, in the original containers perfectly closed, it has 12-month validity.

*Before each collection, it is recommended to mix the product with a low-speed mixer to homogenize water, in case it has separated.*

The technical data reported in this bulletin were obtained with standardised tests or rules or their modifications or according to New Chemical Technology systems. Our technical service can be asked for the methods applied. What is reported in the present bulletin represents the best of our knowledge and experience. Anyway, we advise to carry out preventive tests when using the product differently from indicated. In any case, New Chemical Technology srl do not take any responsibility for any damage or defects caused by the use of their products, since using conditions of their products are not under their control. They also inform that their technical service is at the customers' disposal for any information concerning the right use of their products.

**NCT New Chemical Technology srl**

via Manzetti sn - Zona Industriale Casarola, - 47832 San Clemente (RN) - ITALY

tel. +39 0541 987658 - fax +39 0541 851289 - info@nctchemical.com - www.nctchemical.com

## SPECIFICATIONS

**COMPOSITION:** *TiO<sub>2</sub> anatase in aqueous dispersion*

**STATE:** *Fluid pasta*

**COLOUR:** *Ivory*

**APPARENT SPECIFIC WEIGHT:**  
*1,2 kg/dm<sup>3</sup>*

**GRANULOMETRY:**  
*min. 95% < 50 nm.*

**SOLUBILITY IN WATER:**  
*Insoluble*

**STORAGE:**  
*In a protected, dry place*

## RECOMMENDATION

In the present state of our knowledge there are no special recommendations for the manipulation of **ECOTAN AL**.

## PACKAGING

10 - 25 kg. plastic or metallic buckets.

