

ECO AB-05

Micro and nanoparticles of silver ions

Technical Data Sheet January 2018

PRESENTATION **ECO AB-05** is very fine powder of micro and nano particles of **silver salts**. It has a strong and permanent bactericidal and fungicidal effect.

FEATURES It is well established that silver and some of the silver salts have a good bactericidal effect already at the condition of microparticles, but economic reasons from one side and some skin problems on the other have limited and discouraged its use. On the contrary, some of silver salts together with ionizing minerals, at the condition of micro and nanoparticles, overcome seamlessly these problems. **ECO AB-05** can be used at a very low dosage, thus with a lower price than many bactericidal products used in water-based paints, and it removes the handling problems caused by those. While the effect of the traditional bactericidal products is limited in time, the effect of **ECO AB-05** lasts for a practically unlimited period without harming the environment. Moreover, since it is effective by contact with many bacteria and molds, it protects the coatings in both their vases and when they are dry after the application. When used together with **Ecotor B**, **ECO AB-05** allows sanitizing humid environments enhancing their liveability with its ionizing action. (To check its bactericidal effect please request the related certificates).

USE **ECO AB-05** is generally used in the construction field in all the surface products to be applied in humid environments at risk of molds (i.e. skim plaster in powder and paste form, in water paints based on synthetic resins, hydrated lime, silicates, etc.). To obtain a better distribution of **ECO AB-05** in the final mixture, it is advisable to pre-disperse the mixture in a part of one of the component of the mixture and then to add **Pentaflow PC 5** if the mixture is in powder form or **Pentaflow PCL** if the mixture is in liquid or in paste form.

	Data	Method
Composition:	Stabilized silver salts	
State:	Powder	Visual
Colour:	White	Visual
Specific gravity:	Max. 0.8 kg/dm ³	IST. 10.06
Granulometry:	Min. 95.0% < 30 nm	IST. 10.09
Humidity:	Max. 4.0%	IST.10.04
Thermal solubility:	> 800°C	
Water solubility:	Insoluble	IST. 10.21

DOSAGE

The suggested dosage for **ECO AB-05** is normally 0.1% on the total weight of solid components, particularly if it is used together with **Ecotor B**, whose dosage is 0.5 – 1.0%.

In any case, the range of dosage of **ECO AB-05** is 0.1 – 0.5% on the solid components of the mixture.

It is advisable to carry out preliminary tests on the specific mixtures in order to establish the optimum dosage depending on the expected results.

STORAGE AND VALIDITY

If it is stored in a dry place and in its original bags kept perfectly closed, **ECO AB-05** has a 12 months validity.

Should moisture be absorbed by the product, this does not affect its efficaciousness, but it makes its dosage difficult and it causes a non-homogeneous distribution in the finished mixture.

It is therefore advisable to close the bags carefully after each collection.

PRECAUTIONS

In our present state of knowledge, there are no specific requirements in handling **ECO AB-05**.

In any case, taking into account the particle size of ECO AB-05, it is advisable to adopt all the precautions needed for the use of powdery products and to avoid direct contact with wet or sweaty skin.

PACKAGING

5 kg cans.
10 kg cans.
25 kg paper bags.

The specifications stated in this report have been got either through standardized tests and rules or their modifications following NCT systems. The methods applied can be requested to our technical service.

All the data stated in this technical sheet are based on our knowledge and experience. However, before using the item differently from indicated, it is advisable to carry out preventive tests. In any case, NCT does not assume any responsibility for any damage or defect caused by the use of our products, as the employment conditions are not under our control. We also inform that our technical service is at our customers' disposal for any information concerning the correct employment of our products