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MIRECIDE - TF/100.M

BIOCIDES OF FUNGICIDAL AND ALGICIDAL EFFECTS FOR WATER-BASED PAINTS MANUFACTURING

PROPERTIES

MIRECIDE-TF/100.M is a product based on a blend of a non-halogenated isothiazolone, an organic carbamate and an aromatic chlorinated derivative, specially indicated to provide all sort of water-based paints fungicide-algicide properties. **MIRECIDE-TF/100.M** is highly resistant to leaching once the paint has been applied and has dried, what makes it specially indicated for this purpose.

INSTRUCTIONS FOR USE AND RECOMMENDED DOSES

It is recommended to add **MIRECIDE-TF/100.M** at the initial phases of the manufacturing process, during the dispersion of charges, ensuring its total incorporation by an adequate and efficient stirring.

The usual doses in order to obtain a fungicide-algicide paint by means the use of **MIRECIDE-TF/100.M** is of 0,3 to 0,6% of the weight of finished paint for indoors-use paint, and from 0,6 to 2% for outdoors-use paint. In cases of extreme rain doses can exceed 2%. Doses depend on the wished level of protection or on the weather conditions. Nevertheless, it is always recommended to verify previously in the laboratory the efficacy of the product at different doses in order to select the optimal dose, as well as, to verify the good compatibility of the product in the media where it will be used.

PRODUCT DATA

Appearance	:	Aqueous dispersion.
Colour	:	White.
Density (20°C)	:	1,10 ± 0,02 gr/cc (ASTM/D981-59.C)
Viscosity (20°C)	:	300 - 2.500 cPs (Brookfield RVsp4, 50 rpm) (ASTM-D/1084 Meth.B)
Particle size	:	Refusal by a 50-micron mesh: Not greater than 1%.
Freezing point	:	Lower than 0°C
Boiling point	:	94 - 96°C
Flash point	:	Greater than boiling point value.
Solubility	:	Non-soluble in water and in organic solvents. Dispersible in water.
V.O.C.	:	80.000=85.000 (mg./kg.)

MICROBIOLOGICAL ACTIVITY

The minimum inhibitory concentration data (m.i.c.) of **MIRECIDE-TF/100.M** against different bacteria and fungi strains (laboratory essays) are the next

<u>Microorganism</u>	<u>M.I.C.</u> (ppm)
<i>Staphylococcus aureus</i>	768
<i>Bacillus megaterium</i>	1.536
<i>Citrobacter intermedium</i>	1.023/1.536
<i>Enterobacter aerogenes</i>	2.049
<i>Pseudomona aeruginosa</i>	>3.072
<i>Aspergillus niger</i>	2,5/5
<i>Penicillium caseicollum</i>	2,5/5
<i>Aureobasidium pullulans</i>	5/7,5
Algae blend	1

END-PRODUCTS LABELLING

According to the current Directives on labeling danger, at higher concentrations of 0,13 % and until 1,03 %, the product must be labeled with the phrase R52/53. At higher concentrations or equal to 1,03 %, the product must be labeled with the symbol and the phrase T:R46 R52/53. At higher concentrations or equal to 1,30 %, the product must be labeled with the symbol and the phrase T, N:R46 R51/53. At higher concentrations or equal to 1,80 %, the product must be labeled with the symbol and the phrase T, N R46, R43, R51/53.

HANDLING AND STORAGE

Industrial product. **MIRECIDE-TF/100.M** must be handled following the safe measures which are contained on the safety data sheet of the product.

According to the chemistry of the product the contact with oxidizing agents must be avoided. During storage period, keep containers tightly closed, away from direct sunlight at temperatures ranging from 5°C to 40°C. Observing this storage conditions the shelf life of the product is 1 year. The product freezes at temperatures lower than 0°C, but in case of freezing, it goes back to normal state when temperature raises.

As time goes by might appear a slight separation of water in the upper part. The product recovers perfectly by stirring.