

Product Information

ACTICIDE CMG

ACTICIDE[®] CMG is a glycol based chloromethyl/methyl isothiazolinone biocide for the wet state protection of a wide range of aqueous based formulations.

Chemical and Physical Characteristics

Composition:	A 1,5 % formulation of 5-chloro-2-methyl-4-isothiazolin-3-one (CIT) and 2methyl-4-isothiazolin-3-one (MIT) Colourless to pale yellow liquid
Appearance:	Mild
Odour:	1.050 - 1.060 g/cm ³
Density (20°C):	1.4390 - 1.4450
Refractive Index (20°C):	Fully soluble in water, most lower alcohols and glycols.
Solubility:	Stable in the presence of light, over the pH range 2 - 9 and up to 60° C
Stability in application*:	

ACTICIDE[®] CMG has a very broad activity spectrum against bacteria, yeasts and moulds. Typical MIC (Minimum Inhibitory Concentration) values against relevant spoilage organisms are as follows.

MIC Values For Typical Spoilage Organisms (as ppm active CIT/MIT)

Bacteria	MIC	Moulds	MIC	Yeasts	MIC
Corynebacterium sp.	2.5	Aspergillus niger	5.0	Saccharomyces cerevisiae	5.0
Escherichia coli	2.5	Penicillium funiculosum	1.0		
Klebsiella sp.	2.5				
Proteus penneri	2.5				
Pseudomonas aeruginosa	2.5				

Applications / Use Levels

ACTICIDE[®] CMG is suitable for the wet-state preservation of a wide range of aqueous products including paints, polymer emulsions, adhesives, ceramic glazes, fillers and sealants and as a tankside additive for ready-diluted metalworking fluids. It is particularly suitable for addition to products requiring a low water content biocide such as powder starches and adhesives and has applications in the preservation of fuels.

Normal use concentrations are in the range 0.05 - 0.40%, depending on the product to be protected and the environmental conditions to which it will be exposed. If added to concentrated products, subsequently diluted before use, addition rates must be adjusted accordingly. The precise level required by a specific formulation can be determined by the local **Thor Microbiological Technical Centre**.

Addition / Compatibility

ACTICIDE[®] CMG can be added at any time during manufacturing. However, it is advised to add it as early as possible to give protection throughout the production process. Care should be taken to ensure that temperature, pH and redox potential at the point of addition are suitable for stability of the product.

ACTICIDE[®] CMG is compatible with most formulations in which its application is recommended and it may be used in formaldehyde sensitive systems. Reducing agents, amines and other strong nucleophiles can cause degradation of the active ingredients. Users are therefore advised to carry out their own tests or seek further advice from **Thor** prior to initial application.

Packaging / Storage / Transport / Regulatory Approvals

Packaging:	30 and 200 kg plastic drums and 1,000 kg intermediate bulk containers
Shelf Life:	12 months from production date when stored at approximately 20°C. Ex
Availability:	stock in the above packaging
Storage:	Protect from extremes of temperature.
Transportation:	ACTICIDE[®] CMG is classified as hazardous for transportation
Regulatory Approvals:	The active substances of ACTICIDE[®] CMG have BfR chapters 14. and 36, FDA 21 CFRs 175.105, 176.170, 176.180 and 176.300 and a wide range of other regulatory approvals.

Safety / Labelling / Toxicology

For detailed information on the toxicology and handling of **ACTICIDE[®] CMG** and advice on the labelling of products in which it may be used, please refer to the separate Material Safety Data Sheet or seek specific advice from **Thor**.