

## **DEYCID UMC**

Deycide UMC is a combination of CMIT/MIT, developed for the complete in-can protection of water based products. Deycide UMC is effective against a wide range of microorganisms including gram positive and gram negative bacteria, yeast and fungi.

Microorganisms grow at a rapid rate and without use of the correct biocide; numbers can increase dramatically. Deycide UMC refers to CMIT/MIT capable of inhibiting the growth of or controlling the growth of microorganisms at a locus; microbicides include bactericides, fungicides. The term "microorganism" includes, for example, fungi (such as yeast and mold), bacteria and algae. The term "locus" refers to an industrial system or product subject to contamination by microorganisms.

Contamination can have the following results :

- Discoloration
- Gassing
- Phase separation
- Viscosity Loss
- Ropiness
- Phase Separation

### **Composition / information on ingredients:**

Chemical characterization : biocidal preparation containing isothiazolinones

*Hazardous ingredients*

Total content of CMIT (5-Chloro-2-methylisothiazolin-3-one ) + MIT (2-Methylisothiazolin-3-one ) : Min. 1.0 %

*5-Chloro-2-methylisothiazolin-3-one*

Concentration : 0.5000 - 1.5000 %

CAS number : 26172-55-4

Hazard symbols C

R phrases 20/21/22 34 43 50

*2-Methylisothiazolin-3-one*

Concentration : 0.1000 - 0.5000 %

CAS number : 2682-20-4

Hazard symbols C

R phrases 20/21/22 34 43 50

### **Applications :**

Deycide UMC is recommended for preservation of a wide range of applications including shampoos, soaps, dishwashing liquids, detergent blends, water based /Latex/PVA adhesives, PVA / Acrylic polymer emulsions, water based decorative paints, printing inks, metal working fluids and construction admixtures.

Deycide UMC is effective against a wide range of common spoilage organisms. Thermal and pH stability for Deycide UMC is a critical consideration and it should not be use for products with pH >9 or production temperatures of > 45 °C. Great care should be taken

when using this material due to its corrosive nature and Deycide UMC should be a serious consideration for most applications as safer to handle, alternative.

Deycide UMC can also be used for reduction and elimination in microbial spoilage of;

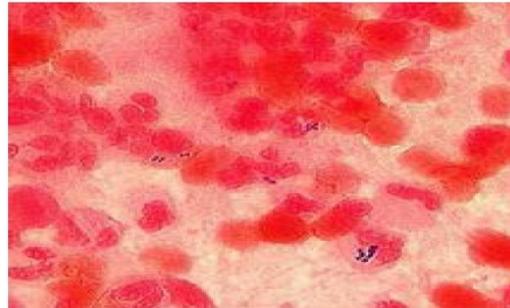
- Industrial water cooling systems
- Surfactant formulations
- Detergents, shampoos, dishwashing liquids, soaps, softeners
- Emulsion Paints, Adhesives, Pigment Pastes
- Glues, Emulsion adhesives
- Coatings for papers, textile and leather aux.
- Wax emulsions, oil emulsions
- Sealants, Glues, Fillers, Plasters

**MIC Levels**

**Organism MIC (ppm)**

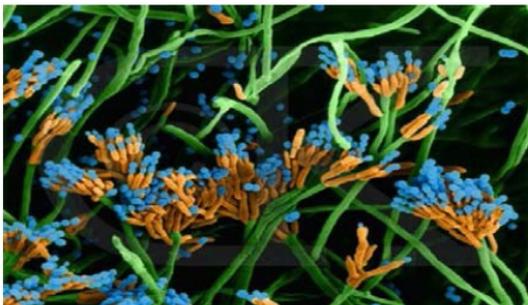
**Bacteria**

- Pseudomonas aeruginosa* 40
- Pseudomonas putida* 25
- Proteus vulgaris* 90
- Escherichia coli* 70
- Staphylococcus aureus* 110



**Fungi**

- Aspergillus niger* 15
- Penicillium mineoluteum* 15
- Fusarium solani* 15
- Geotrichum candidum* 30



**Yeast**

- Candida albicans* 50

### **Compatibility**

Deycide UMC is compatible with most raw materials used in microbiologically susceptible products. Compatibility of Deycide UMC with the application should always be checked before use.

### **Storage Conditions**

Deycide UMC should be stored at temperatures within the range 5- 40 °C. Containers containing Deycide UMC should not be exposed to direct sunlight. Storage conditions should also be in conformance with applicable legal, fire and insurance regulations.

### **Shelf Life**

Under correct storage conditions the normal shelf life for this product is 12 months.

### **Handling**

Where direct handling is necessitated, personnel should always wear protective clothing. This will include a rubber apron, suitable impervious full-length gloves and footwear. Protective chemical splash goggles should also be worn.

### **Containers**

Deycide UMC is available in 60 kg, 200 kg drums and 1 mton IBC containers.

### **Container disposal**

Prior to disposal, residual contents of containers of Deycide UMC should be drained into the product to be preserved. It is likely, however, that a small quantity of Deycide UMC will remain in the container and this should be deactivated and drained to waste. To ensure that containers are not reused, they should be pierced before disposal.