

FOR USE AS A PRESERVATIVE IN MANUFACTURING  
LATEX PAINTS, RESIN EMULSIONS, ADHESIVES,  
DISPERSED COLORS, PIGMENT SLURRIES  
AND READY-MIXED CEMENTS.

# COSAN 101

## ACTIVE INGREDIENTS:

4,4-Dimethyloxazolidine .....74.7%

3,4,4-Trimethyloxazolidine.....2.5%

INERT INGREDIENTS: .....22.8%

TOTAL 100.0%

THIS PRODUCT CONTAINS 6.33 LBS. ACTIVE INGREDIENTS PER GALLON

**KEEP OUT OF REACH OF CHILDREN  
DANGER**

### STATEMENT OF PRACTICAL TREATMENT

IF SWALLOWED	Drink promptly a large quantity of milk, egg whites, gelatin solution or if these are not available, drink large quantities of water. Avoid alcohol. CALL A PHYSICIAN IMMEDIATELY
IF ON SKIN	Immediately remove contaminated clothing. Wash affected areas with soap and water. Wash contaminated clothing before reuse.
IF IN EYES	Flush with water for at least 15 minutes, and get medical attention.
NOTE TO PHYSICIAN	Probable mucosal damage may contraindicate the use of gastric lavage. Measures against circulatory shock, respiratory depression and convulsion may be needed.

SEE SIDE PANEL FOR ADDITIONAL PRECAUTIONARY STATEMENTS.

ACCEPTED  
JUN 25 1982  
Under the Federal Insecticide, Fungicide and Rodenticide Act, as amended for the pesticide registered under EPA Reg. No. 8489-25

**COSAN. CHEMICAL CORPORATION**

**PRECAUTIONARY STATEMENTS  
HAZARDS TO HUMANS AND ANIMALS**

**DANGER**

Causes eye damage and skin irritation. Do not get in eyes, on skin or clothing. **HARMFUL IF INHALED OR SWALLOWED.** Precautions should include the use of eye shields, rubber gloves and protective clothing. Avoid breathing vapor or mist. Use with adequate ventilation. Wash thoroughly after handling.

In case of severe burns medical attention should be obtained immediately. Remove and wash contaminated clothing before reuse.

**ENVIRONMENTAL HAZARDS**

This pesticide is toxic to fish and wildlife. Do not discharge into lakes, streams, ponds or public waters unless in accordance with a NPDES permit. For guidance contact your Regional Office of the EPA.

**DIRECTIONS FOR USE**

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling. See Technical Information Sheet No. 772 for use directions.

**STORAGE AND DISPOSAL**

**1. PROHIBITIONS**

Do not use or store near heat or open flame.  
Do not contaminate water, food or feed by storage or disposal. Open dumping is prohibited.

**2. PESTICIDE DISPOSAL**

Pesticide, spray mixture, or rinsate that cannot be used or chemically reprocessed should be disposed of in a landfill approved for pesticides or buried in a safe place away from water supplies.

**3. CONTAINER DISPOSAL**

- (a) Reseal container and offer for reconditioning, or
- (b) Triple rinse (or equivalent) and:  
Offer for recycling, reconditioning, or disposal in approved landfill, or bury in a safe place.

**4. GENERAL**

Consult federal, state or local disposal authorities for approved alternative procedures.



## TECHNICAL INFORMATION SHEET

### COSAN CHEMICAL CORPORATION

400 FOURTEENTH STREET • P.O. BOX 7 • CARLSTADT, NJ 07072 • (201) 460-9300

#### COSAN 101

E.P.A. Reg. No. 8489-25

**PRODUCT:** COSAN 101 is an effective preservative for resin emulsions, latex paints, adhesives, dispersed colors, pigment slurries, and ready-mix joint cements. This product is a 77.2% aqueous solution of 4,4-dimethyloxazolidine and its trimethyl homolog. This organic molecule contains only four elements: carbon, hydrogen, oxygen, nitrogen and when used at recommended levels will prevent bacterial deterioration of water-based systems.

COSAN 101 has antimicrobial activity against a broad spectrum of microorganisms. Listed below are some MINIMUM INHIBITORY CONCENTRATIONS (MIC) of COSAN 101 against various microorganisms. This list is provided to show the broad spectrum activity of COSAN 101 and is not to be construed as a listing of organisms associated with the spoilage of any water-based system. The minimum inhibitory ranges shown are the highest concentrations showing growth and the lowest concentrations showing no growth.

ORGANISM	MIC
<i>Pseudomonas aeruginosa</i>	125-250 ppm
<i>Pseudomonas fluorescens</i>	250-500 ppm
<i>Aerobacter aerogenes</i>	125-250 ppm
<i>Bacillus megaterium</i>	125-250 ppm
<i>Bacillus subtilis</i>	125-250 ppm
<i>Desulfovibrio desulfuricans</i>	10-25 ppm
<i>Escherichia coli</i>	250-500 ppm
<i>Proteus vulgaris</i>	125-250 ppm
<i>Staphylococcus aureus</i>	125-250 ppm
<i>Aureobasidium pullulans</i>	500-1000 ppm
<i>Aspergillus niger</i>	250-500 ppm
<i>Candida albicans</i>	500 ppm
<i>Fusarium graminearum</i>	500 ppm
<i>Fusarium moniliforme</i>	500-1000 ppm
<i>Penicillium species</i>	250-500 ppm

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Fungicide, and Rodenticide Act,  
as amended, for the pesticide  
registered under  
EPA Reg. No. 8489-25

**USE:** COSAN 101 will protect and preserve raw materials and finished products at use concentrations of 0.05% to 0.5% based on total weight of composition. When used at the recommended level, this product will remain effective in the unopened can or package and throughout the substrate's useful service life. COSAN 101 will maintain its antibacterial efficacy without adversely affecting the physical properties of the formulation in either the wet or dry state. COSAN 101 is non-yellowing and can be added at any point in the production cycle. Good operating procedure should require the incorporation of this preservative early in the manufacturing process. The point of addition will vary with the process being conducted. The only guideline to follow is that after biocide addition the product should not be subjected to temperatures in excess of 175°F.

**TO PROTECT**

**USE THE FOLLOWING CONCENTRATIONS  
BASED ON TOTAL WEIGHT OF SYSTEMS.**

### Resin Emulsions

**0.05 - 0.2%**

To protect and preserve resin emulsions, the recommended concentration is based on total weight of system. This level will prevent bacterial spoilage from occurring throughout the emulsion's useful service life, which includes transit and storage. The point of preservative addition should be in the cool-down cycle. Where added quantities of COSAN 101 are required, it can be safely post-added.

## Latex Paints

0.1 - 0.3%

COSAN 101 can easily be incorporated during any phase of paint manufacture. We recommend the addition immediately after the initial charge of water. At recommended use levels, no adverse physical paint properties have been observed.

## Adhesives

**0.05 - 0.5%**

## Dispersed Colors

**0.1 - 0.3%**

### Ready-mix Joint Cement

**0.1 - 0.25%**

In the manufacture of the above materials, preservative addition should come just after the addition of water or similar inert solvent. This will insure good product distribution and provide antibacterial activity to the product at an early stage of manufacture.

FOR SPECIFIC RECOMMENDATIONS, PLEASE CONTACT COSAN CHEMICAL CORPORATION. MICROBIOLOGICAL ASSAY CAN DETERMINE THE LEVEL REQUIRED FOR YOUR PARTICULAR FORMULA AND DESIRED END USE. THE COSAN LABORATORIES ARE READY TO SUPPLY THIS GUIDANCE.

**SPECIFICATIONS:**

Active Ingredients:	77.2%
4,4-dimethyloxazolidine	74.7%
3,4,4-trimethyloxazolidine	2.5%
Physical Appearance	Clear, Almost Colorless Liquid
Color, Gardner	2 max.
Specific Gravity (25/25°C)	0.98-0.99
Pounds Per Gallon	8.2
Viscosity (25°C)	app. 7.5 cp
pH	10.5-11.5
Freezing Point	below -20°C

[illegible]