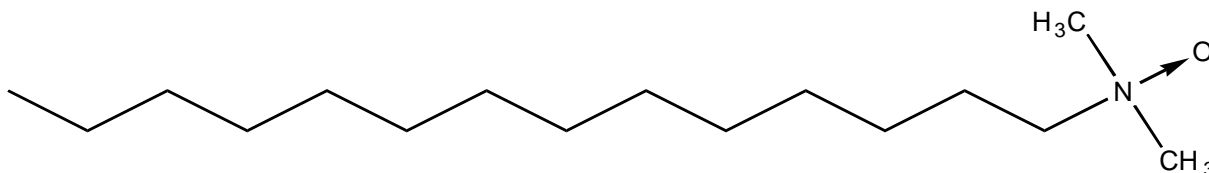


# Macat<sup>®</sup> AO-14



## Myristyl Dimethylamine Oxide

### Overview

MACAT AO-14 is a 30% active myristyl (C<sub>14</sub>) dimethylamine oxide in water. AO-14 provides viscosity control, and is an outstanding foam booster and grease cutter that is chlorine and acid stable.

The exceptional quality of MACAT AO-14 allows for use in a wide range of markets and applications. In **Personal Care**, AO-14 is used as a conditioning ingredient in creams and conditioners, and as a foam booster in shampoos. Quality **Dishwash Detergents** utilize AO-14 for its grease cutting and rinsing performance. **HI&I Cleaners** formulations commonly economically employ AO-14 for detergency, foam boosting and viscosity control. Combine viscosity building properties with exceptional hypochlorite stability for use in **Drain Openers and Cleaners**.

MACAT AO-14 is biodegradable, and contains no solvents or VOCs. AO-14 is an efficient lipid solubilizer and at 2.5% active, causes minimal eye irritation.

**INCI Name: Myristamine Oxide**  
**CAS#: 3332-27-2**

### Typical Properties

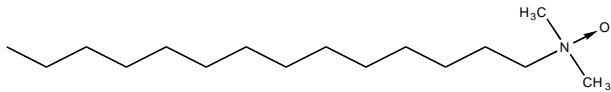
Water solubility.....	Complete
Physical form.....	Clear, pale yellow liquid
Viscosity @ 25°C/60°C .....	2,400/460 cps
Amine Oxide (m.w. 257).....	27-30%
Free Amine (m.w. 241).....	1.0% Maximum
Free Peroxide.....	0.3% Maximum
Specific gravity (25°C).....	0.98±0.04
Cloud Point .....	37°F(3°C)
pH (10% aq.) .....	7.0±1.0
Pour Point.....	39°F(4°C)
Flash point.....	>200°F (PMCC)
RVOC, U.S. EPA, % .....	0
Shipping .....	Non-Red Label

### Handling Information

Refer to the Material Safety Data Sheet (MSDS) available from Mason Chemical Company for information on the safe use, handling and disposal of this product.

*Macat, Maquat and Masurf are trademarks of Mason Chemical Company.*

# Macat<sup>®</sup> AO-14



MACAT AO-14 is a 30% active myristyl (C<sub>14</sub>) dimethylamine oxide in water. AO-14 is an effective foam booster and conditioning agent. The formulations below illustrate this effect.

## Conditioning Shampoo

Ingredient	Wt%
Water.....	q.s. to 100.0
<b>Macat Ultra CDO</b> .....	35.0
<b>Macat AO-14</b> .....	35.0
<b>Maquat SC18-25%</b> .....	1.5
<b>Enhansys M-110</b> .....	0.5
Citric acid.....	q.s.
Dye & Fragrance.....	q.s.
Ammonium Sulfate.....	q.s.
Sodium Citrate.....	q.s.

Note
Mix first 4 components, heat to 100-120°F. Cool, add Enhansys M-110. Adjust pH w/Citric acid to 5.5-6.5. Add remaining ingredients, adjust viscosity with Ammonium sulfate/Sodium citrate.
Enhansys M-110 fortifies the formulation to eliminate the need for preservatives.
Macat AO-14 contributes high lathering foam with conditioning properties.

## Household Drain Opener and Cleaner

Ingredient	Wt%
Water.....	q.s. to 100.0
Sodium Hydroxide (50%).....	5
Sodium Hypochlorite (active).....	5
Silicic acid.....	0.5
<b>Macat AO-14</b> .....	5
<b>Masurf FS-710</b> .....	0.05

Note
Macat AO-14 contributes detergency, degreasing and viscosity control with hypochlorite stability.

**INCI Names:** Macat Ultra CDO: Cocamidopropylamine Oxide, Macat AO-14: Myristamine Oxide, Maquat SC18-25%: Stearalkonium Chloride and Cetearyl Alcohol.

### US Toxic Substances Control Act (TSCA)/Inventory Status

Macat AO-14 complies with the requirements of the following chemical inventories: US (TSCA, FIFRA-EPA Pesticide Inert Ingredient), Canada (DSL), Australia (AICS), European Union (EINECS), Japan (ENCS), Korea (ECL), Philippines (PICCS), ASIA-PAC.

**Harmonized Tariff Schedule Code (United States 2005):** 3402.13.5000