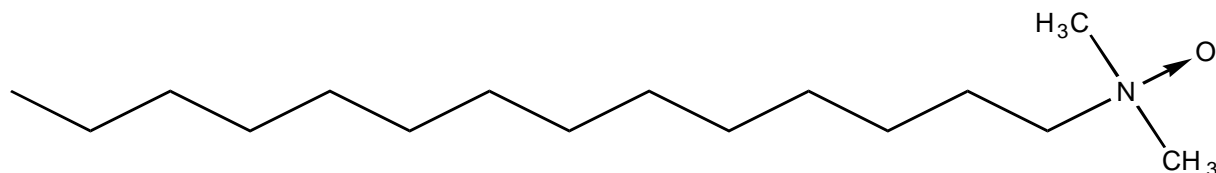


Macat[®] AO-14



Myristyl Dimethylamine Oxide

Overview

MACAT AO-14 is a 30% active myristyl (C₁₄) 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.

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.

Typical Properties

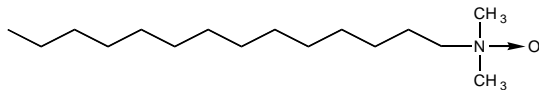
Water solubility	Complete
Physical form	Colorless liquid
Viscosity @ 25°C/60°C	2,400/460 cps
Amine Oxide (m.w. 275)	29.0% Minimum
Free Amine (m.w. 259)	1.0% Maximum
Free Peroxide	0.15% Maximum
Specific gravity (25°C)	0.98±0.04
Cloud Point	37°F(3°C)
pH (10% aq.)	7.0±1.0
Pour Point	39°F(4°C)
Flash point	>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.

Maquat is a trademark of Mason Chemical Company.

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MACAT AO-14 is a 30% active myristyl (C₁₄) 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.....	28.0
Macat Ultra CDO	35.0
Macat AO-14	35.0
Maquat SC18-25%	1.5
Citric acid	q.s.
Ammonium Sulfate.....	0.5
Sodium Citrate	q.s.
Dye, Fragrance & Preservative.....	q.s.

Note

Mix first 4 components, heat to 100-120°F. Adjust pH w/Citric acid to 6-7. Cool, adjust viscosity w/Ammonium sulfate, sodium citrate. Add remaining ingredients.

Macat AO-14 contributes high lathering foam with conditioning properties.

Premium Conditioner

Ingredient	Wt%
Macat AO-14	20.0
Maquat CETAC-30%	10.0
DEA-Oleth-3-Phosphate	4.0
Masurf FS-425	0.005
Water.....	q.s. to 100.0
Citric acid	q.s.
Dye, Fragrance & Preservative.....	q.s.

Note

Pre-Mix first 4 components, heat to 100-120°F, add to Water. Adjust pH w/Citric acid to 6-7. Cool, add remaining ingredients.

Macat AO-14 contributes wetting and conditioning. Very small additions of Masurf FS-425 significantly improves wet comb performance.