MANTA

Technical Data Sheet

Version: 1.0

Manta F1030A Amino Silicone Fluid

Description

Manta F1030A is a refined, reactive amino-modified polysiloxane fluid. It is engineered with an optimized amine content to balance strong substantivity with ease of emulsification.

Distinct from heavy conditioning gums, Manta F1030A leverages its reactive polar groups to form a unique elastic polymeric film upon drying. This cross-linked network provides a protective shield that is remarkably lightweight and flexible. It restores hydrophobicity to the hair cuticle without the weigh-down effect, making it the ideal choice for fine, limp, or easily greasy hair types that require free-flowing movement and bounce.

Typical Physical Properties

INCI/CTFA	Amodimethicone
Chemical Name:	Reactive Amino-Functional Silicone (Optimized for Lightweight Feel)
CAS NO.:	68554-54-1
Appearance	Colorless to slightly yellow transparent liquid
Refractive index (25°C)	1.4000-1.4150
Specific gravity (25°C)	0.960-0.990
Viscosity (cSt, 25°C)	2500-6000
Amine Value (mmol.g-1)	0.2

Features

1. Delivers exceptional targeted adsorption to damaged hair, significantly improving both wet and dry combing.
2. Readily emulsified using standard surfactants for seamless incorporation into various formulations.
3. Imparts long-lasting softness and velvety smoothness while maintaining the hair's natural bounce and volume.
4. Functions as a superior conditioning agent, forming a lightweight, elastic, and breathable protective film on the hair shaft.
5. Restores the hydrophobic barrier of the hair cuticle, protecting it from environmental stressors.

Applications

Manta F1030A is an additive for specialized hair care and salon products, including:

1. Daily Hair Care: Shampoos, conditioners, and leave-in sprays.
2. Intensive Treatments: Deep conditioning masks and hot oil treatments.
3. Chemical Processing: Perming lotions and hair colorants (as a structural protectant).

How to Use

1. Chemical Protection: Incorporate into perming and hair dyeing systems as a structural protectant to mitigate the physical and chemical damage caused by thioglycolic acid, its salts, and various oxidants. Note: It does not function as an alkali and cannot replace ammonia.
2. Emulsion Systems: When formulating hair care products, melt the oil phase first, then slowly incorporate Manta F1030A into the oil phase at temperatures strictly below 50°C. Stir until completely homogeneous before emulsification.
3. Recommended Dosage: 0.1% - 2.0% of the total formulation, depending on the desired level of conditioning and the specific hair type targeted.

Packing

In 25L pail, 200L drum

Safety and Storage

Keep away from heat and open flame. Prevent from the exposure of moisture, acid, alkalis and other impurities. When stored in the original unopened containers, this product has a usable life of 24 months from the date of production.

Contact Information

Nanjing Manta New Material Co., Ltd
Add: Room 102-247, Building 17, No. 1 Qiliqiao North Road, Nanjing Area of the China (Jiangsu) Pilot Free Trade Zone, Nanjing, China
Factory: Miaoguan Town Industrial Park, Sishui County, Jining City, Shandong Province, China
Mob: 0086 18962800162
Mail:sales@mantasil.com Web:www.mantasilicone.com