

Dimethicone 500

Specification Sheet

Description: Dimethicone 500 is a 100% active linear silicone polymer with a viscosity of 500 cps. Linear silicones are large high-molecular polymers (polydimethylsiloxanes) and usually are viscous and more oil-like.

CAS: 63148-62-9

INCI Name: Dimethicone

Composition: Dimethicone

Appearance: Clear, slightly viscous liquid, odorless.

Benefits:

- Used for its chemical stability in anti-foams, color cosmetics and hair care products.
- Takes out the whitening of creams and lotions when rubbed into the skin and gives a non-greasy, dry feel.
- Improves wet and dry combing, gives softness and silky gloss in hair care products.
- Makes colors more dispersible (solvent)

Use: Typical use level 1-20% (up to 50% possible), add to oil phase of formulas or at the end of formula. Do not heat over 50°C (125°F). For external use only.

Applications: Hair & skin conditioning products as shampoos, conditioners, creams, lotions, but also color cosmetics (e.g. lipsticks, lip balms, makeup). Skin protectant products.

Solubility: Insoluble in water, partly soluble in alcohol, dispersible in oils & fats.

Preservation: Preservative-free

Storage: Store in a closed container at a dry place at room temperature.

Country of Origin: USA

Raw material source: Dimethyldichlorosilane and water

Manufacture: Dimethicone is made from dimethyldichlorosilane which is produced by powdered silicon (silicone dioxide) and methyl chloride. Dimethyldichlorosilane is then hydrolyzed to give a hydrolysate of

polysiloxanes. In a polymerization reaction with water the polysiloxanes are then polymerized to linear silicone polymers with different chain length (dimethicones).

Animal Testing: Not animal tested.

GMO: GMO-free (does not contain plant-derived components)

Vegan: Does not contain animal-derived components.

HS Code: 3208100000

Regulatory Information: Dimethicone is registered as an OTC skin protectant drug with the FDA (Category I; allowed concentration 1-30%). This means that if you want to sell a finished product containing dimethicone and you make a skin protectant claim (incl. minor cuts, scrapes, burns, chapped skin and lips, poison ivy, poison oak, poison sumac, and insect bites), dimethicone must then be listed under 'Active Ingredients' on the label. Also, your facility and your product must be registered with the FDA and you must operate under cGMP guidelines. However, if no skin protectant drug claims are made on the label, dimethicone is not considered an OTC drug and no registration is needed.