

#### **Technical Data Sheet**

#### **DOWSIL™ AP-8568 Amino Fluid**

#### INCI NAME: Amodimethicone

# Features & Benefits

- Stable in a wide range of cosmetic formulations
- Enable clear shampoo formulations
- Enables cold process manufacturing
- · Provides smooth, feel to dry hair
- Improves wet and dry combing
- Decreases fly-away
- Improves shine in shampoos
- Improve color depth and longevity when used in semi-permanent color product
- Protects hair from heat damage

#### **Applications**

- Clear and opaque conditioning shampoos
- Rinse-off and leave-on conditioners (hot oil treatments, pomades and ethnic care products)
- Styling aids (mousses, gels, lotions and pomades)
- Colorants, perms and relaxers

#### **Typical Properties**

Specification Writers: These values are not intended for use in preparing specifications.

Test*	Property	Unit	Result
CTM 0176	Appearance		Clear to slightly hazy
	Color		Colorless to pale yellow
	Content		Aminofunctional polydimethylsiloxane
	Viscosity at 25°C (77°F)	mm <sup>2</sup> /s or cSt	3500
CTM 001A D1298	Specific gravity at 25°C (77°F)		0.98
	Refractive index at 25°C (77°F)		1.407
	Flash point	°C	149
	°F	300.2	
	Amine neutral equivalent		1600
	Nitrogen	%	0.875
	Typical D4 and D5	%	< 0.1

\*CTM: Corporate Test Method, copies of CTMs are available on request. ASTM: American Society for Testing and Materials.

### **Description**

DOWSIL™ AP-8568 Amino Fluid is an aminofunctional polydimethylsiloxane. The organic-like nature of the primary amine groups on amodimethicone causes this silicone polymer to have affinity for hair, resulting in a product with benefits such as conditioning and feel.

$$\begin{array}{c} \text{CH}_{3} \\ \text{CH}_{3} \text{Si} \\ \text{CH}_{3} \text{Si} \\ \text{CH}_{3} \end{array} \begin{array}{c} \text{CH}_{3} \\ \text{O-Si} \\ \text{CH}_{3} \end{array} \begin{array}{c} \text{CH}_{3} \\ \text{O-Si} \\ \text{NO-Si} \\ \text{R} \\ \text{Y} \end{array} \begin{array}{c} \text{CH}_{3} \\ \text{OSiCH}_{3} \\ \text{CH}_{3} \end{array}$$

Figure 1: Chemical formula for DOWSIL AP-8568 Amino Fluid.

#### **How to Use**

Conditioners can be prepared by including DOWSIL AP-8568 Amino Fluid in the oil phase of a conditioner or by blending it with the refatting agent contained in a shampoo.

DOWSIL AP-8568 Amino Fluid is compatible with a variety of typical hair care formulation ingredients, including quaternary ammonium salts, cyclopentasiloxane, isododecane and partially with alcohol.

# Handling Precautions

Care has to be taken. Similar products have shown to have a high degree of aerosol toxicity.

PRODUCT SAFETY INFORMATION REQUIRED FOR SAFE USE IS NOT INCLUDED IN THIS DOCUMENT. BEFORE HANDLING, READ PRODUCT AND SAFETY DATA SHEETS AND CONTAINER LABELS FOR SAFE USE, PHYSICAL AND HEALTH HAZARD INFORMATION. THE SAFETY DATA SHEET IS AVAILABLE ON THE DOW WEBSITE AT WWW.CONSUMER.DOW.COM, OR FROM YOUR DOW SALES APPLICATION ENGINEER, OR DISTRIBUTOR, OR BY CALLING DOW CUSTOMER SERVICE.

# Usable Life and Storage

When stored at or below 25°C (77°F) in the original unopened containers, this product has a usable life of 18 months from the date of production.

## Packaging Information

This product is available in 20 kg pails and 200 kg drums.

Samples are available in 1 kg bottles.

#### Limitations

This product is neither tested nor represented as suitable for medical or pharmaceutical uses.

## Health And Environmental Information

To support customers in their product safety needs, Dow has an extensive Product Stewardship organization and a team of product safety and regulatory compliance specialists available in each area.

For further information, please see our website, www.consumer.dow.com or consult your local Dow representative.

Table 1: Compatibility with various cosmetic ingredients

Ingredient	Silicone to ingredient ratio		
	9:1	1:1	1:9
Isopropyl laurate	С	С	С
Isopropyl myristate	С	С	С
Isopropyl palmitate	NC	С	С
Mineral oil (light)	NC	NC	NC
Ethanol 200 proof	NC	NC	NC
Propylene glycol	NC	NC	NC
Water	NC	NC	NC
Isododecane	С	С	С
Isopar H	С	С	С
Polydecene	С	NC	NC
Cyclopentasiloxane (and) dimethiconol	С	С	С
Dimethicone, 350 cSt	С	С	С
Phenyltrimethicone	С	С	С
Lanolin oil	С	NC	NC

http://www.consumer.dow.com

#### LIMITED WARRANTY INFORMATION - PLEASE READ CAREFULLY

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