

#### **Technical Data Sheet**

#### DOWSIL™ 2-8566 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.

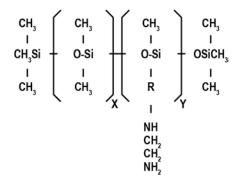
| CTM <sup>1</sup> | ASTM <sup>2</sup> | Property                        | Unit                      | Result                               |
|------------------|-------------------|---------------------------------|---------------------------|--------------------------------------|
| 0176             |                   | 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                                 |
| 0001A            | D1298             | Specific Gravity at 25°C (77°F) |                           | 0.98                                 |
|                  |                   | Refractive Index at 25°C (77°F) |                           | 1.407                                |
|                  |                   | Flash Point                     | °C<br>°F                  | 149<br>300.2                         |
|                  |                   | Amine Neutral Equivalent        |                           | 1600                                 |
|                  |                   | Nitrogen                        | %                         | 0.875                                |

<sup>1.</sup> CTM: Corporate Test Method, copies of CTMs are available on request.

<sup>2.</sup> ASTM: American Society for Testing and Materials.

### Description

DOWSIL™ 2-8566 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.



## Figure 1:

Chemical formula for DOWSIL 2-8566 Amino Fluid.

#### How To Use

Conditioners can be prepared by including DOWSIL 2-8566 Amino Fluid in the oil phase of a conditioner or by blending it with the refatting agent contained in a shampoo.

DOWSIL 2-8566 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 24 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.

UNRESTRICTED – May be shared with anyone ®™Trademark of The Dow Chemical Company ("Dow") or an affiliated company of Dow DOWSIL™ 2-8566 Amino Fluid

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  |  |

C = compatible, NC = not compatible

http://www.consumer.dow.com

#### LIMITED WARRANTY INFORMATION - PLEASE READ CAREFULLY

The information contained herein is offered in good faith and is believed to be accurate. However, because conditions and methods of use of our products are beyond our control, this information should not be used in substitution for customer's tests to ensure that our products are safe, effective, and fully satisfactory for the intended end use. Suggestions of use shall not be taken as inducements to infringe any patent.

Dow's sole warranty is that our products will meet the sales specifications in effect at the time of shipment.

Your exclusive remedy for breach of such warranty is limited to refund of purchase price or replacement of any product shown to be other than as warranted.

TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, DOW SPECIFICALLY DISCLAIMS ANY OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE OR MERCHANTABILITY.

DOW DISCLAIMS LIABILITY FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES.

