

HOME CARE SOLUTIONS

ECOSURFTM Bright 1 Surfactant



Consumers expect dishes, especially glassware, from automatic dishwashers to be sparkling clean without spotting and streaks.

ECOSURF™ Bright 1 Surfactant is a low-foaming, readily-biodegradable* surfactant for automatic dishwasher applications that delivers premium anti-spotting and shine performance in phosphate-free formulations. ECOSURF™ Bright 1 Surfactant can also reduce formulation costs by decreasing the use of expensive builders.

Benefits

- Enhanced shine performance
- Anti-spotting performance
- Reduced formulation costs
- Low foaming
- · Low odor

Typical properties*

These values are not intended for use in preparing specifications.

| Property | Unit | Result |
|--------------------------------|------------------------|---------|
| Cloud point(1) | °C | 20 – 25 |
| Melting point/range(2) | °C | 27 – 30 |
| Appearance | White to off-white wax | |
| рН | | 5 – 9 |
| Viscosity at 60°C(3) | cSt | 92 |
| Density at 60°C | g/cm³ | 1.016 |
| Flash point ⁽⁴⁾ | °C | > 160 |
| CMC ⁽⁵⁾ | ppm | 48.7 |
| Surface tension ⁽⁶⁾ | mN/m | 32.1 |

¹Cloud point: 1 wt% actives aqueous solution (ASTM 2024)

²Melting point: Differential Scanning Calorimetry (DSC)

³Viscosity: Cone and plate (ISO 3219)

⁴Flash point: Closed cup (ASTM D3278)

⁵CMC: Critical micelle concentration at 0.1 wt% actives aqueous solution at 25°C

⁶Surface tension: 0.1 wt% actives aqueous solution

Rinse performance on glass in citrate base

ECOSURF™ Bright 1 Surfactant outperforms the positive control, leaving behind minimal streaks and a spotless appearance.

Citrate base 5 wt.% surfactant, after 5 cycles



Citrate base 3.5 wt.% surfactant, after 5 cycles



Rinse performance on stainless steel in citrate base

Spotting reduction also can be observed on stainless steel.

Citrate base 5 wt.% surfactant, after 5 cycles



Learn more

To order a sample, read more literature, or talk with a Dow representative about ECOSURF™ Bright 1 Surfactant, please visit dow.com/contactus.

From North America From Asia Pacific dow.com

| Toll-free | 800-447-4369 | Toll-free** | + 800-7776-7776 |
|-----------|--------------|-----------------|------------------|
| Toll call | 989-832-1542 | Toll call | + 60-3-7965-5392 |
| Fax | 989-832-1465 | Toll-free fax** | + 800-7779-7779 |
| | | Toll fax | + 60-3-7958-5598 |

From Europe, India, Africa and the Middle East

Toll-free* 800-3-694-6367 From Latin America

 Toll call
 + 32-3-450-2240
 Toll call
 + 55-11-5188-9000

 Toll-free for Italy
 800-783-825
 Fax
 + 55-11-5188-9887

Toll-free for South Africa 800-99-5078 Fax + 32-3-450-2815

- * Toll-free from Austria, Belgium, Denmark, Finland (prefi x 990), France, Germany, Hungary, Ireland, The Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom
- * Toll-free from Korea, Japan, China, Taiwan, Hong Kong, Thailand, Malaysia, Singapore, Philippines, Australia and New Zealand

Images: AdobeStock_200514034

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.

[⊚]™ Trademark of The Dow Chemical Company ("Dow") or an affiliated company of Dow © 2019 The Dow Chemical Company. All rights reserved.

S2D 93261/E26985 Form No. 27-2339-01