

Product Specification

TOMAMINE® Amphoteric SC Surfactant

Description

TOMAMINE® Amphoteric SC Surfactant is a unique 35 % active amphoteric designed for use in alkaline and acid cleaners. It offers excellent coupling, stability, foaming and wetting.

TOMAMINE® Amphoteric SC Surfactant has been specifically designed to compete with certain imidazoline amphoteric. Although chemically different, TOMAMINE® Amphoteric SC Surfactant provides similar coupling and foaming, with better wetting.

Advantages

- High foam
- Excellent wetting agent
- Improves detergency
- Compatible with anionic, non-ionic, and cationic systems
- Alkaline/acid stable

Applications

- Alkaline cleaners
- Acid cleaners
- Transportation cleaners
- Household and institutional cleaners

Typical Properties¹

Active, %	35
Average molecular weight	390
pH (5 % solution)	5 – 9
Appearance @ 20 °C	clear amber liquid
Flash Point, °F	> 212
Pour Point, °F	30
Specific gravity @ 77 °F	1.05
Surface tension (dynes/cm), 1 % solution	30
Gardner color, max.	7

Performance Advantages

Table 1: Ross–Miles Foam Height
Conditions: 25 °C, 0.1 % active, pH Neutral

Surfactant	Foam (cm) Initial	Foam (cm) 5 min.	Stability (Vol. %)
Water Hardness: 150 ppm			
TOMAMINE® Amphoteric SC	18.3	18.3	100.0
TOMAMINE® Alkali Surfactant	13.1	3.8	29.0
TOMAMINE® Amphoteric 400	2.6	0.0	0.0
TOMAMINE® Amphoteric L	17.8	17.6	98.9
TOMAMINE® Amphoteric N	18.0	18.0	100.0
Nonylphenol 9 EO	12.7	11.6	91.3
Alcohol sulfate	12.8	12.7	99.2
Water Hardness: 300 ppm			
TOMAMINE® Amphoteric SC	17.4	17.4	17.4
TOMAMINE® Alkali Surfactant	12.1	7.8	64.1
TOMAMINE® Amphoteric 400	2.0	0.0	0.0
TOMAMINE® Amphoteric L	17.7	17.5	98.9
TOMAMINE® Amphoteric N	16.5	16.5	100.0
Nonylphenol 9 EO	12.0	11.1	92.5
Alcohol sulfate	10.4	6.1	58.7

Foam Properties: The following data compares the foaming and coupling properties of TOMAMINE® Amphoteric SC Surfactant with those of an imidazoline amphoteric in two built formulations.

Each formula was diluted 10/100 with distilled water. 50 mL of liquid were shaken in a 250 mL graduated cylinder and the volume of the resulting foam was measured in mL.

Formula 1

Component	Weight %
Water	79.0
Sodium metasilicate pentahydrate	1.0
Sodium tripolyphosphate	10.0
Non-ionic surfactant	5.0
TOMAMINE® Amphoteric Surfactant	5.0
Total	100.0

Foam Profile

*TOMAMINE® Amphoteric Surfactant	TOMAMINE® Amphoteric SC	Imidazoline Amphoteric
Initial volume (ml)	150	150
1 min. (mL)	140	135

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Formula 2

Component	Weight %
Water	68.0
Na3 NTA	1.0
Sodium gluconate	1.0
45 % KOH	10.0
42° Silicate N	10.0
Glycol ether	5.0
Non-ionic surfactant	2.0
TOMAMINE® Amphoteric Surfactant*	3.0
Total	100.0

Foam Profile

*TOMAMINE® Amphoteric Surfactant	TOMAMINE® Amphoteric SC	Imidazoline Amphoteric
Initial volume (ml)	140	140
1 min. (mL)	135	125

Hazardous goods classification

Information concerning

- classification and labelling according to regulations for transport and for dangerous substances
- protective measures for storage and handling
- measures in case of accidents and fire
- toxicity and ecological effects

is given in our material safety data sheets.

07/2017

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