



**Dow Surfactants**  
Reference Chart



Surfactants



# A Broad Range of Anionic and Nonionic Products

Including...

- DOWFAX™ Anionic Surfactants
- ECOSURF™ Nonionic Surfactants
- TERGITOL™ Nonionic Surfactants
- TRITON™ Anionic and Nonionic Surfactants

Dow surfactants include some of the most familiar anionic and nonionic products in the industry. Dow surfactants are known worldwide for superior emulsification and dispersion. They increase the cleaning and wetting properties of household cleaners as well as industrial and institutional cleaning product formulations. They are used by formulators of paints, coatings, and inks for pigment wetting, film leveling, and pigment and dye stabilization. Dow surfactants contribute desired mechanical properties and storage stability to emulsion polymerization systems, including styrene-butadiene, vinyl, acrylic, and other copolymer latex resin systems. Dow surfactants are also broadly used in agricultural formulations, textile processing, paper manufacturing, and oilfield operations.

## An Overview of Dow Surfactants

This brochure provides an overview for Dow nonionic, anionic, and low foam surfactant products. We invite you to review the product features, physical and performance properties, and application information detailed in the following pages.

- ECOSURF™ Specialty Ethoxylates (Page 2)
- TERGITOL™ 15-S Secondary Alcohol Ethoxylates (Page 3)
- TERGITOL™ L and TERGITOL™ X EO/PO Copolymers (Page 3)
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## Total Support Capabilities

The total package of value that you get with Dow surfactants goes beyond our brand names. Our investments in surfactant products and technology have created a capabilities platform unsurpassed in the industry. With Dow surfactants, you receive...

- A wide range of available chemistries
- Extensive applications expertise
- The knowledge and resources to innovate
- Awareness of regulations and legislation
- A global sales, distribution, and technical support network
- Global supply from world-class manufacturing facilities
- Access to other Dow products for your application
- The strength and stability of Dow for confidence and peace of mind

Access to important additional information at [www.dowsurfactants.com](http://www.dowsurfactants.com)

# Surfactants



Product	Cloud Point <sup>(1)</sup>	HLB <sup>(2)</sup>	Moles EO	CMC <sup>(3)</sup> / Surface Tension <sup>(4)</sup>	Foam Height <sup>(5)</sup>	Pour Point <sup>(6)</sup>	Form <sup>(7)</sup>	Features	Applications
<b>ECOSURF™ Specialty Ethoxylates</b>									
EH-3	Disp	7.9	PRT	480 / 30	0 / 0	-24	L	Excellent oil-soluble emulsifier; low foam, low odor; good handling, very low aquatic toxicity	Cleaners and degreasers, textiles
EH-6	40	10.8	PRT	914 / 30	20 / 0	3	L	Exceptional wetting and hard surface cleaning. Low odor; excellent handling and formulation properties, very low aquatic toxicity	Concentrates, cleaners and detergents, paints & very low aquatic toxicity coatings, textile processing
EH-9	61	12.5	PRT	1066 / 31	60 / 0	12	L	Exceptional wetting and hard surface cleaning. Low odor; excellent formulation properties, very low aquatic toxicity	Concentrates, cleaners and detergents, paints & coatings, textile processing
EH-9 (90%)	61	12.5	PRT	1066 / 31	60 / 0	-5	L	Exceptional wetting and hard surface cleaning. Low odor; improved handling and formulation properties, very low aquatic toxicity	Concentrates, cleaners and detergents, prewash spotters, paints & coatings, textile processing
SA-4	Disp	7.5	PRT	Disp	Disp	-8	L	Based on seed oil, low odor; no gel range. Excellent wetting, oil soluble emulsifier	Concentrates, cleaners and detergents, prewash spotters, dry cleaning, paints & coatings, textile processing
SA-7	37	9.7	PRT	17 / 29	100 / 20	3	L	Based on seed oil, low odor; no gel range, rapid dissolution. Excellent wetting and detergency. Effective emulsifier	Concentrates, cleaners and detergents, prewash spotters, paints & coatings, textile processing, agrochemicals
SA-9	57	11.1	PRT	22 / 29	100 / 20	4	L	Based on seed oil, low odor; no gel range, rapid dissolution. Excellent wetting and detergency. Effective emulsifier	Concentrates, cleaners and detergents, prewash spotters, paints & coatings, textile processing
SA-15	>100	13.5	PRT	153 / 34	130 / 25	27	S	Based on seed oil, low odor; rapid dissolution. Excellent wetting and detergency especially at higher temperatures. Effective emulsifier	Concentrates, higher temperature cleaners and detergents, paints & coatings, textile processing

Footnotes:

- (1) Cloud point: °C, 1 wt% actives aqueous solution  
 (2) HLB Range: <10 w/o emulsifier, >10 o/w emulsifier  
 10-15 good wetting, 12-15 detergents  
 (3) Critical micelle concentration: ppm at 25°C  
 (4) Surface tension: dynes/cm at 1% actives, 25°C

- (5) Ross-Miles foam height: mm at 0.1 wt% actives, 25°C, initial / 5 minute  
 (6) Pour point: °C  
 (7) Form at 25°C: L = Liquid, S = Solid  
 (8) PRT = Proprietary

- (9) MWF = Metalworking fluids  
 (10) Ins = Insoluble  
 (11) Disp = Dispersible

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Product	Cloud Point <sup>(1)</sup>	HLB <sup>(2)</sup>	Moles EO	CMC <sup>(3)</sup> / Surface Tension <sup>(4)</sup>	Foam Height <sup>(5)</sup>	Pour Point <sup>(6)</sup>	Form <sup>(7)</sup>	Features	Applications
<b>TERGITOL™ 15-S Secondary Alcohol Ethoxylates</b>									
15-S-3	Ins	8.0	3	Ins	Ins	-46	L	Excellent hydrocarbon compatibility and detergency	Defoamers, textile, pulp/paper, prewash spot removers, agrochemicals, dry cleaners
15-S-5	Disp	10.5	5	Disp	Disp	-25	L	Excellent emulsifier and detergent, enhances paint associative thickener efficiency, aids in rinseability of solvent-based systems	Paints & coatings, cleaners, prewash spot removers, agrochemicals, dry cleaners, textile, oilfield
15-S-7	37	12.1	7	38/30	117/28	1	L	Superior wetting and rinseability, excellent formulation and handling properties	Paints & coatings, cleaners, prewash spot removers, agrochemicals, textile, pulp/paper, oilfield
15-S-9	60	13.3	9	52/30	124/43	9	L	Superior detergency, rapid dissolution and good rinseability, low odor, excellent formulation and handling properties	High performance cleaners, paints & coatings, agrochemicals, textile, pulp/paper, oilfield
15-S-12	89	14.5	12	104/33	124/43	22	S	Excellent detergent & dispersant, good handling properties, higher temperature wetting	Dispersions, high-temperature systems
15-S-12 (90%)	89	14.5	12	107/34	130/28	-8	L	Excellent detergent & dispersant, good handling properties, higher temperature wetting	Dispersions, high-temperature systems
15-S-15	>100	15.4	15	162/36	126/24	29	S	High HLB emulsifier and dispersant, provides freeze/thaw and ionic stability	Emulsion polymerization, paper and textile processing, solid cleaners
15-S-20	>100	16.3	20	315/38	112/42	35	S	Excellent emulsion stabilizer with low reactor residue, provides freeze/thaw and ionic stability, good handling properties	Emulsion polymerization, paper and textile processing, solid cleaners
15-S-20 (80%)	>100	16.3	20	315/38	112/42	6	L	Excellent emulsion stabilizer with low reactor residue, provides freeze/thaw and ionic stability, good handling properties	Emulsion polymerization, paints & coatings, floor polish and wax emulsions
15-S-30	>100	17.4	31	558/43	115/30	39	S	Excellent emulsion stabilizer with low reactor residue, provides freeze/thaw and ionic stability	Emulsion polymerization, paints & coatings, floor polish and wax emulsions
15-S-40	>100	18.0	41	783/44	110/24	43	S	Emulsion stabilizer, provides freeze/thaw and ionic stability, good handling properties	Emulsion polymerization, paint & coatings, floor polish and wax emulsions
15-S-40 (70%)	>100	18.0	41	1314/45	103/28	5	L	Emulsion stabilizer, provides freeze/thaw and ionic stability, good handling properties	Emulsion polymerization, paint & coatings, floor polish and wax emulsions
<b>TERGITOL™ L and TERGITOL™ X EO/PO Copolymers</b>									
L-61	24	3	PRT	- /40	0/0	-32	L	Efficient foam control agent, wetting agent	Foam control for fermentation, food washing, water treatment, MWF, machine dishwash, food & dairy process cleaning
L-62	32	7	PRT	- /41	45/30	-2	L	Efficient foam control agent, wetting agent	Foam control for fermentation, MWF, machine dishwash, food & dairy process cleaning, paints & coatings
L-64	62	15	PRT	- /44	48/18	7	L	High-temperature foam control, good detergency	Fermentation, food processing, adhesives, paper processing, MWF, sanitizing solutions
L-81	20	2	PRT	- /36	Disp	-20	L	Low-temperature foam control	Fermentation, MWF, chemical intermediates
L-101	18	1	PRT	- /33	30/25	-24	L	Low-temperature foam control	Fermentation processes, MWF
XD	74	—	PRT	- /38	60/25	34	S	Excellent steric and freeze/thaw stabilizer, effective pigment & carbon black dispersant	Agrochemicals, paints & coatings dispersions, iodophors, emulsion polymerization
XH	95	—	PRT	- /41	80/40	40	S	Provides lubricity, effective steric and freeze/thaw stabilizer, solubilizes iodine	Fiber lubricants, emulsion polymerization, iodophors
XJ	49	—	PRT	- /36	53/13	27	S	Excellent emulsifier for aromatic and chlorinated solvents, steric and freeze/thaw stabilizer	Emulsion and dispersion systems, emulsion polymerization
<b>TERGITOL™ NP Nonylphenol Ethoxylates</b>									
NP-4	Ins	8.9	4	Ins	Ins	-28	L	Excellent oil-soluble surfactant, low HLB emulsifier	Cleaners and degreasers, dry cleaning, dispersant for petroleum oil
NP-6	Ins	10.9	6	Ins	Ins	-26	L	Excellent emulsifier, wetting agent, stabilizer, couples detergent range nonionics into hydrocarbon systems	Cleaners and degreasers, dry cleaning, adhesives, agrochemicals
NP-7	20	12.0	7	39/32	20/19	-19	L	Excellent detergency, outstanding wetting	Cleaners and degreasers, paper and textile processing, prewash spotters, agrochemicals, MWF, oilfield chemicals
NP-8	43	12.6	8	61/32	103/95	-6	L	Excellent detergency, outstanding wetting, good rinseability	Cleaners & detergents, paper & textile processing, paints & coatings, agrochemicals, MWF
NP-9	54	12.9	9	60/32	105/90	-1	L	Excellent detergency, outstanding wetting, good rinseability	Cleaners and detergents, paper & textile processing, laundry, paints & coatings, dust control, agrochemicals, MWF
NP-9.5	59	13.1	9.5	62/32	115/102	7	L	Excellent detergency, outstanding wetting	Cleaners & detergents, paper & textile processing, paints & coatings, agrochemicals, MWF
NP-10	63	13.2	10	55/33	115/110	6	L	Excellent detergency, outstanding wetting	Cleaners & detergents, paper & textile processing, paints & coatings, agrochemicals, MWF
NP-11	72	13.5	11	71/34	112/92	11	L	Excellent detergency, outstanding wetting	Cleaners & detergents, paper & textile processing, paints & coatings, agrochemicals, MWF
NP-12	78	13.8	12	85/35	117/115	13	L	Excellent detergency, outstanding wetting	Cleaners & detergents, paper & textile processing, paints & coatings, agrochemicals, MWF
NP-13	82	13.9	13	66/35	118/97	14	L	Excellent detergency, outstanding wetting	Cleaners & detergents, paper & textile processing, paints & coatings, agrochemicals, MWF
NP-15	>100	15.0	15	90/41	128/95	25	S	Excellent detergency, outstanding wetting, suitable for higher temperatures	Cleaners & detergents, paper & textile processing, paints & coatings, agrochemicals, MWF
NP-30	>100	17.1	30	157/46	125/77	37	S	Highly water-soluble emulsifier and stabilizer, effective at high temperatures	Wetting agents and stabilizers, emulsifiers and dispersants, agrochemicals
NP-30(70%)	>100	17.1	30	160/42	125/77	-8	L	Highly water-soluble emulsifier and stabilizer, effective at high temperatures	Wetting agents and stabilizers, emulsifiers and dispersants, agrochemicals
NP-40	>100	17.8	40	230/50	123/115	48	S	Effective at high temperatures, highly water-soluble emulsifier and stabilizer, wetting	Paper and textile processing, paints & coatings, agrochemicals
NP-40 (70%)	>100	17.8	40	232/50	123/115	2	L	Effective at high temperatures, highly water-soluble emulsifier and stabilizer	Paper and textile processing, paints & coatings, agrochemicals
NP-50 (70%)	>100	18.2	50	256/53	115/110	2	S/L	Effective at high temperatures, highly water-soluble emulsifier and stabilizer	Paper and textile processing, paints & coatings, agrochemicals
NP-70 (70%)	>100	18.7	70	287/51	105/100	15	S	Effective at high temperatures, highly water-soluble emulsifier and stabilizer	Paper and textile processing, paints & coatings, agrochemicals
<b>TERGITOL™ TMN Branched Secondary Alcohol Ethoxylates</b>									
TMN-3	Ins	8.1	3	Ins	Ins	-49	L	Excellent oil soluble emulsifier, hydrocarbon compatibility	Low HLB emulsifier for textiles and paper applications, degreasers
TMN-6 (90%)	36	13.1	8	800/27	130/22	<-40	L	Superior wetting agent, penetrant and dispersant, silicone emulsifier, narrow gel range	Paper and textile processing, pigment and wax/resin dispersants, hard surface cleaners, agrochemicals, paints & coatings
TMN-100X (90%)	65	14.0	9	830/27	150/24	-6	L	Non-APE alternative for TRITON™ X-100, excellent wetting, penetrant & dispersant, superior emulsification	Paints & coatings, paper and textile processing, pigment & wax/resin dispersants, cleaners
TMN-10 (90%)	76	14.4	11	1313/30	118/28	-19	L	High-temperature penetrant and dispersant, high HLB emulsifier, narrow gel range	Paper & textile processing, pigment & wax/resin dispersants, cleaners, paints & coatings

## Footnotes:

(1) Cloud point: °C, 1 wt% actives aqueous solution  
(2) HLB Range: <10 w/o emulsifier, >10 o/w emulsifier  
10-15 good wetting, 12-15 detergents  
(3) Critical micelle concentration: ppm at 25°C  
(4) Surface tension: dynes/cm at 1% actives, 25°C

(5) Ross-Miles foam height: mm at 0.1 wt% actives, 25°C, initial / 5 minute  
(6) Pour point: °C  
(7) Form at 25°C: L = Liquid, S = Solid  
(8) PRT = Proprietary

(9) MWF = Metalworking fluids  
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Product	Cloud Point <sup>(1)</sup>	HLB <sup>(2)</sup>	Moles EO	CMC <sup>(3)</sup> / Surface Tension <sup>(4)</sup>	Foam Height <sup>(5)</sup>	Pour Point <sup>(6)</sup>	Form <sup>(7)</sup>	Features	Applications
<b>TRITON™ X Octylphenol Ethoxylates</b>									
X-15	Ins	4.9	1.5	Ins	Ins	3	L	Oil soluble emulsifier, solubilizer	Defoamers, dye solubilizer, chemical intermediate
X-35	Ins	7.8	3	Ins	Ins	-9	L	Excellent compatibility with aliphatic or aromatic hydrocarbons and polar organic solvents	Defoamers, pulp/paper, textile, dry cleaning, MWF, chemical intermediate
X-45	Disp	9.8	4.5	136/29	23/9	-24	L	Excellent emulsifier with good wetting, aids in rinseability of solvent-based systems	Defoamers, cleaners, MWF, agrochemicals, paints & coatings, textile, pulp/paper, oilfield
X-114	25	12.3	7.5	120/31	55/40	-14	L	Excellent wetting and detergency pale yellow	Cleaners, paints & coatings, pulp/paper, textile, agrochemicals, MWF, oilfield
X-100	66	13.4	9.5	189/33	128/107	1	L	Excellent detergent, dispersant, and emulsifier for oil-in-water systems	Household and industrial cleaners, paints & coatings, pulp/paper, textile, agrochemicals, MWF, oilfield
X-102	88	14.4	12	267/36	124/75	13	L	Excellent detergent and dispersant	Dispersions, high temperature systems
X-165 (70%)	>100	15.5	16	570/39	124/68	22	L	Excellent emulsion stabilizer and dispersant	Paints & coatings, dispersions
X-305 (70%)	>100	17.3	30	1916/49	103/25	-7	L	Excellent emulsion stabilizer, provides freeze/thaw and ionic stability	Emulsion polymerization, paints & coatings, floor polish, wax emulsions
X-405 (70%)	>100	17.6	35	2442/52	93/22	-6	L	Excellent emulsion stabilizer, provides freeze/thaw and ionic stability	Emulsion polymerization, paints & coatings, floor polish, and wax emulsions
X-705 (70%)	>100	18.4	55	3585/44	80/55	2	L	Excellent emulsion stabilizer	Emulsion polymerization

#### TRITON™ Alkyl Polyglucosides

BG-10	>100	—	0	1591/28	112/115	-5	L	Soluble in highly alkaline solutions, good detergency and wetting properties, mild	Bottle washing, metal cleaners, highly alkaline detergents, paint strippers, aluminum brighteners
CG-50	>100	—	0	150/29	112/112	0	L	Soluble in highly alkaline solutions, mild, good detergent and wetter, high stable foam	Glass cleaners, highly alkaline detergents
CG-110	>100	—	0	1748/27	105/100	-15	L	Soluble in highly alkaline solutions, mild, low skin drying effects, good detergent and wetter, high-stable foam	Glass cleaners, highly alkaline detergents, personal care products

#### TRITON™ Specialty Alkoxyates

CA	Disp	10-12	PRT	-/32	10/0	-20	L	Improves color acceptance and prevents agglomeration of pigments, oil-in-water emulsifier	Paints & coatings, textile printing & fiber finish, pigment dispersions
N-57	Disp	10	5	-/31	18/12	-28	L	Emulsifier, enhance associative thickener efficiency, improves colorant acceptance	Pigment wetting agent & stabilizer, defoamer, paints & coatings, MWF, agrochemicals
X-207	Disp	10.7	PRT	-/32	20/16	-14	L	Emulsifier for refined paraffinic and white oils, forms stable brine-in-oil emulsions	Pigment dispersions, textile finishes and coning oils, oilfield

Footnotes:

- (1) Cloud point: °C, 1 wt% actives aqueous solution  
(2) HLB Range: <10 w/o emulsifier, >10 o/w emulsifier  
10-15 good wetting, 12-15 detergents  
(3) Critical micelle concentration: ppm at 25°C  
(4) Surface tension: dynes/cm at 1% actives, 25°C  
(5) Ross-Miles foam height: mm at 0.1 wt% actives, 25°C, initial / 5 minute  
(6) Pour point: °C  
(7) Form at 25°C: L = Liquid, S = Solid  
(8) PRT = Proprietary  
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## Dow Anionic Surfactants

Product	Actives	Diluent	Form <sup>(1)</sup>	Surface Tension <sup>(2)</sup> Neutral <sup>(4)</sup>	Alkaline <sup>(5)</sup>	Foam <sup>(3)</sup> Neutral <sup>(4)</sup>	Alkaline <sup>(5)</sup>	Features	Applications
<b>DOWFAX™ Alkyldiphenyloxide Disulfonates</b>									
2A1	45	water	L amber	34	35	140/130	145/145	Excellent solubility & stability in acidic, alkaline, bleach and other oxidizing systems, dispersant, emulsion stabilizer, rinses easily from surfaces	Cleaners, textile, pulp/paper, agrochemicals, oilfield, emulsion polymerization, fragrance solubilization
3B2	45	water	L yellow/lt brown	37	38	135/135	140/120	Excellent stability in alkaline, acid, bleach and oxidizing systems, hard water tolerant, rinses easily from surfaces	Textile and pulp/paper processing, agrochemicals, oilfield, cleaners
8390	35	water	L light brown	44	46	120/25	140/25	Emulsion stabilizer, excellent solubility, stable in oxidizing systems, high level of particulate soil detergency, excellent rinseability	Emulsion polymerization, cleaners & detergents oil-field chemicals, textile, pulp and paper
C6L	45	water	L light brown	34	34	145/140	145/130	Reduces gelation, provides coupling, excellent solubility and stability, bleach stable, low visible residue, rinses easily from surfaces	Cleaners and detergents, oilfield chemicals
C10L	45	water	L yellow/brown	35	37	135/125	130/115	Low streaking and low visible residue, rapid dissolution, excellent stability	Glass and all-purpose cleaners and other detergents
30599	45	water	L yellow/brown	33	34	154/145	130/125	Emulsion stabilizer with low reactor waste, stable in acidic, alkaline and oxidizing systems	Emulsion polymerization

#### TRITON™ GR Dioctyl Sulfosuccinates

GR-5M	60	IPA <sup>(6)</sup> /water	L colorless	26	NR <sup>(7)</sup>	190/180	NR	Excellent wetting, emulsifying and dispersing ability	Paints & coatings, paper and textile, agrochemicals, cleaners, oilfield
GR-7M	64	petroleum distillate <sup>(8)</sup>	L amber	Ins <sup>(9)</sup>	Ins	Ins	Ins	Excellent emulsifying and dispersing ability, oil soluble	Dry cleaning, paints & coatings, agrochemicals, oilfield chemicals

#### TRITON™ Phosphate Esters

H-55	50	water	L amber	45	53	8/0	25/0	Hydrotrope, stable in acidic & alkaline conditions	Solubilizer for surfactants into highly built detergents
H-66	50	water	L yellow	45	41	50/8	105/25	Hydrotrope, stable in acidic & alkaline conditions, uniquely effective with low foam surfactants	Solubilizer for surfactants into built detergents and other formulated systems
QS-44	80	water	L amber	38	39	130/65	150/140	Hydrotrope with surface activity, good solubility in alkali, stable on solid caustic, hypochlorite stable	Cleaners, emulsion polymerization, agrochemicals, solubilizer for low built detergents
XQS-20	70	water	L amber	46	46	145/130	130/120	High HLB emulsifier and stabilizer	Emulsion polymerization

#### TRITON™ Sulfates and Sulfonates

QS-15	100	none	L amber	33	36	95/70	150/15	Excellent detergent, soluble and stable in hot alkaline solutions, uniquely effective in high soil loads	Highly alkaline metal cleaners, bottle washing, zinc plating brightener, gas well cleaning
W-30 Conc	27	IPA/water	L amber	28	28	170/150	160/150	Excellent wetting with minimal rewetting, hypochlorite stable	Textile processing, water-repellent finishes for fabrics and carpets
X-200	28	water	L opaque white	28	29	182/182	180/175	Excellent detergent with lathering properties, mild, hypochlorite stable	Personal care, emulsion polymerization, cleaners
XN-45S	60	ethanol/water	L amber	33	32	170/165	170/170	Excellent wetting, emulsifying and dispersing ability, hypochlorite stable	Emulsion polymerization, wax emulsification, cleaner

Footnotes:

- (1) Form at 25°C: L = Liquid, S = Solid  
(2) Surface Tension: dynes/cm at 1 wt% actives, 25°C  
(3) Ross-Miles foam height: mm at 1 wt% actives, 25°C, initial / 5 minute  
(4) Actual pH = 7 (distilled water)  
(5) Actual pH = 12.5 (sodium hydroxide solution)  
(6) IPA = Isopropanol  
(7) NR = Not recommended; can hydrolyze under some alkaline conditions  
(8) Blend of ethanol, naphtha, propylene glycol and naphthalene  
(9) Ins = Insoluble  
(10) PG = Propylene glycol

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## Dow Low Foam Surfactants

	TRITON™ CF-10/CF-10 (90%)	TRITON™ CF-21	TRITON™ CF-32	TRITON™ CF-76	TRITON™ CF-87	TRITON™ DF-12	TRITON™ DF-16	TRITON™ DF-20	TERGITOL™ MinFoam 2X	TERGITOL™ MinFoam 1X
<b>Typical Physical Properties</b>										
Active Ingredient, wt %	100	100	95	100	90	100	100	100	100	100
Cloud Point, 1% aq. soln., °C (°F)	28 (82)	40 (104)	25 (77)	31 (88)	32 (90)	17 (63)	36 (97)	—	21	40
HLB (calculated)	12.6	12.9	11	12.6	12.7	10.6	11.6	—	12.1	12.6
Surface Tension <sup>(1)</sup>	36	32	37	33	34	34	30	30	31	30
Critical Micelle Concentration (CMC), ppm	75	130	—	25	80	290	530	180	24	34
Viscosity at 25°C (77°F), cP	250	250	550	295	240	60	35	630	56	61
Pour Point, ASTM D97, °C (°F)	15 (59) / -1 (30)	-27 (-16)	2 (35)	7 (45)	0 (32)	16 (61)	-6 (22)	-25 (-13)	<-40 (<-40)	-34 (-20)

### Performance Characteristics

Stability on Solid Caustic	Fair	Poor	Poor	Excellent	Good	Good	Poor	NR <sup>(2)</sup>	Poor	Poor
Stability in Nonoxidizing Acids	Good	Excellent	Excellent <sup>(3)</sup>	NR	Good	Good	Excellent	NR	Excellent	Excellent
Chlorine Stability in Dry-Blended Powders <sup>(4)</sup>	Good	NR	Fair	Good	NR	NR	NR	NR	NR	NR
Food Soil Defoaming	Fair	Poor	Excellent	Good	Fair	Good	Poor	—	Poor	Poor
Soap Soil Defoaming	Fair	Poor	Good	Good	Poor	Fair	Poor	—	Fair	Poor
Foaming Performance Minimum Water Temp. for Low Foam, °C (°F)	38 (100)	43 (110)	29 (85)	35 (95)	38 (100)	16 (60)	38 (100)	43 (110)	27 (80)	43 (110)

### Applications

Food & Dairy Cleaners			•	•		•				
Ion Exchange Resin Cleaners		•					•			
Machine Dishwash	•		•			•				
Metal Cleaners	•	•		•		•	•	•	•	•
Pigment Dispersions	•	•					•		•	•
Pulp & Paper	•	•				•	•		•	•
Rinse Aids	•	•	•		•	•	•			
Textile Processing	•	•					•			•
Wetting Agent	•	•			•	•	•		•	•

(1) 1 wt% actives, dynes/cm

(2) NR = Not Recommended

(3) Excellent stability; however, moderate foaming in acid systems. Use in combination with TRITON™ CF-10 or another low foam surfactant for improved low foaming performance in acid systems.

(4) With organic chlorine releasing agent

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Europe: call toll-free: +800-3-694-6367\* • call: (+32) 3-450-2240 • fax: +32 3-450-2815

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