

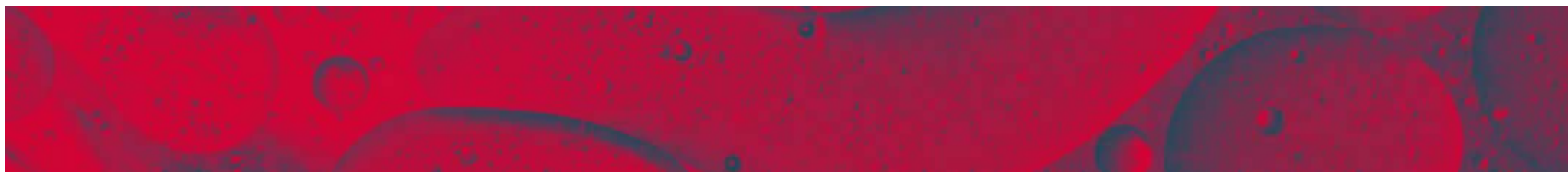
Foam control agents

Product portfolio

Excessive foam can be a problem in many types of food processing operations due to its negative impact to efficacy, productivity and cost. Foam control agents help to solve these challenges by reducing or eliminating foam. Regulation compliance plays a large role in the selection and use of foam control agents. Dow offers a variety of products that have global food regulations clearances coupled with technical support and new product development assistance, customer focused account management, responsive customer support, and flexible, reliable supply at a competitive industry price.

Applications include:

- Sugar production
- Potato processing and production of starch and starch derivatives
- Fruit and vegetable processing and washing
- Fermentation, including alcohol production, amino acids, antibiotics, citric acid, enzymes, yeast, vitamins, and nutritional additives (MSG, Xanthan Gum)
- Processing aids for production of food contact materials



Legend								
✓ GMP compliant	✓ Positively listed	✓ List A	✓ Compliant	✓ Compliant as defoamer		✓ Compliant	✓ Compliant as defoamer	
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Polypropylene Glycols																	
Product	Technical Information							Regulatory Clearances									
	Cloud Point			Average Pour Point (°C) ASTM D97	Viscosity			GMP	(EC) 10/2011	Swiss Ordinance 817.023.21	BfR XIV	BfR XXXVI	BfR LI	Warenwet Chapter I	Warenwet Chapter II	Warenwet Chapter X	French Order 19 October 2006 (annex IA and IB)
	Cloud Point 1% aqueous (°C) ASTM D 2024	Cloud Point 10% aqueous (°C) ASTM D 2024	Cloud Point 10% solvent (Surfactant in a solution of 25% diethylene glycol butyl ether in water) (°C) ASTM D 2024		Viscosity 25°C (cSt) ASTM 445/446	Viscosity 40°C (cSt) ASTM 445/446	Viscosity 100°C (cSt) ASTM 445/446										
Polyglycol P-400E	> 95	-	68	-49	68	31	5	✓	✓	✓	✓	✓	✓	✓	(✓)	(✓)	✓
Polyglycol P-600	65	-	57	-47	84	38	6	✓	✓	✓	✓	✓	✓	✓	(✓)	(✓)	✓
Polyglycol P-750E	42	-	45.5	<0	120	53	8	✓	✓	✓	✓	✓	✓	✓	(✓)	(✓)	✓
Polyglycol P-1000E	21	-	38	-43	143	71	11	✓	✓	✓	✓	✓	✓	✓	(✓)	(✓)	✓
Polyglycol P-1200E	20	-	32.5	-41	160	80	13	✓	✓	✓	✓	✓	✓	✓	(✓)	(✓)	✓
Polyglycol P-2000E	15	-	20	-31	320	143	24	✓	✓	✓	✓	✓	✓	✓	(✓)	(✓)	✓
Polyglycol P-3000E	10	-	12.2	-25	546	39	40	✓	✓	✓	✓	✓	✓	✓	(✓)	(✓)	✓
Polyglycol P-4000E	9	-	10.1	-20	1110	438	73	✓	✓	✓	✓	✓	✓	✓	(✓)	(✓)	✓

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Linear block copolymers (DOWFAX™ N-Series)

Product	Technical information							Regulatory Clearances									
	Cloud Point			Average Pour Point (°C) ASTM D97	Viscosity			GMP	(EC) 10/2011	Swiss Ordinance 817.023.21	BfR XIV	BfR XXXVI	BfR LI	Warenwet Chapter I	Warenwet Chapter II	Warenwet Chapter X	French Order 19 October 2006 (annex IA and IB)
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DOWFAX™ 50N30 Nonionic Surfactant	55	24	62	-10	364	190	35	✓	✓	✓	✓	✓	(✓)	✓		(✓)	(✓)
DOWFAX™ 63N10 Nonionic Surfactant	23	18	39	< - 20	294	140	22	✓	✓	✓	✓	✓	(✓)	✓		(✓)	✓
DOWFAX™ 63N13 Nonionic Surfactant	24	19	39	< - 20	300	160	29	✓	✓	✓	✓	✓	(✓)	✓		(✓)	✓
DOWFAX™ 63N30 Nonionic Surfactant	32	22	62	-5	441	215	30	✓	✓	✓	✓	✓	(✓)	✓		(✓)	✓
DOWFAX™ 63N40 Nonionic Surfactant	62	26/63	72	7	589	284	47	✓	✓	✓	✓	✓	(✓)	✓		(✓)	✓
DOWFAX™ 81N13 Nonionic Surfactant	20	14	41	< - 20	475	224	34	✓	✓	✓	✓	✓	(✓)	✓		(✓)	✓
DOWFAX™ 92N20 Nonionic Surfactant	15	15	53	-8	850	386	63	✓	✓	✓	✓	✓	(✓)	✓		(✓)	✓
DOWFAX™ 92N40 Nonionic Surfactant	79	78	77	40	Solid	633	52	✓	✓	✓	✓	✓	(✓)	✓		(✓)	✓
DOWFAX™ 100N15 Nonionic Surfactant	17	13	47	-17	630	392	48	✓	✓	✓	✓	✓	(✓)	✓		(✓)	✓

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Low foam surfactants (DOWFAX™ A-Series)

Product	Technical information							Regulatory clearances									
	Cloud Point			Average Pour Point (°C) ASTM D97	Viscosity			GMP	(EC) 10/2011	Swiss Ordinance 817.023.21	BfR XIV	BfR XXXVI	BfR LI	Warenwet Chapter I	Warenwet Chapter II	Warenwet Chapter X	French Order 19 October 2006 (annex IA and IB)
	Cloud Point 1 % aqueous (°C) ASTM D 2024	Cloud Point 10 % aqueous (°C) ASTM D 2024	Cloud Point 10% solvent (Surfactant in a solution of 25% diethylene glycol butyl ether in water) (°C) ASTM D 2024		Viscosity 25°C (cSt) ASTM 445/446	Viscosity 40°C (cSt) ASTM 445/446	Viscosity 100°C (cSt) ASTM 445/446										
DOWFAX™ 20A42 EB Nonionic Surfactant	<4	<4	52	< -10	52	32	7	✓	(✓)*	(✓)	(✓)	(✓)				(✓)	✓
DOWFAX™ 20A55 Nonionic Surfactant	28	24	43	-17	53	29	8	✓	(✓)*	(✓)	(✓)	(✓)				(✓)	✓
DOWFAX™ 20A612 Nonionic Surfactant	8	8	28	-21	120	61	12	✓	(✓)*	(✓)	(✓)	(✓)				(✓)	✓
DOWFAX™ 20A64 Nonionic Surfactant	30	28	51	-10	63	34	8	✓	(✓)*	(✓)	(✓)	(✓)				(✓)	✓
DOWFAX™ 25A414 Nonionic Surfactant	13	6	27	-7	110	65	12	✓	(✓)*	(✓)	(✓)	(✓)				(✓)	✓

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Legend								
✓ GMP compliant	✓ Positively listed	✓ List A	✓ Compliant	✓ Compliant as defoamer		✓ Compliant	✓ Compliant as defoamer	
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Specialty defoamers (DOWFAX™ DF-Series)																	
Product	Technical information							Regulatory clearances									
	Cloud Point			Average Pour Point (°C) ASTM D97	Viscosity			GMP	(EC) 10/2011	Swiss Ordinance 817.023.21	BfR XIV	BfR XXXVI	BfR LI	Warenwet Chapter I	Warenwet Chapter II	Warenwet Chapter X	French Order 19 October 2006 (annex IA and IB)
	Cloud Point 1% aqueous (°C) ASTM D 2024	Cloud Point 10% aqueous (°C) ASTM D 2024	Cloud Point 10% solvent (Surfactant in a solution of 25% diethylene glycol butyl ether in water) (°C) ASTM D 2024		Viscosity 25°C (cSt) ASTM 445/446	Viscosity 40°C (cSt) ASTM 445/446	Viscosity 100°C (cSt) ASTM 445/446										
DOWFAX™ DF-101 Defoamer	20	8	30	< -20	490	232	45	✓	✓	✓	✓	✓	(✓)	✓		(✓)	✓
DOWFAX™ DF-107 Nonionic Surfactant	22	15.5	29	< -30	465	216	35	✓	✓	✓	✓	✓	(✓)	✓		(✓)	✓
DOWFAX™ DF-109 Defoamer	20	14	41	< -20	475	224	34	✓	✓	✓	✓	✓	(✓)	✓		(✓)	✓
DOWFAX™ DF-111 Defoamer	20.5	15	26	< -20	790	372	54	✓	(✓)*	(✓)	(✓)	(✓)				(✓)	✓
DOWFAX™ DF-112 Defoamer	49	34	48	-13	680	286	54	✓	(✓)*	(✓)	(✓)	(✓)				(✓)	✓
DOWFAX™ DF-113 Defoamer	14	11	40	< -20	752	500	49	✓	(✓)*	(✓)	(✓)	(✓)				(✓)	✓
DOWFAX™ DF-114 Defoamer	40	8	42	< -20	810	321	51	✓	(✓)*	(✓)	(✓)	(✓)				(✓)	✓
DOWFAX™ DF-117 Defoamer	10	8	35	< -20	710	313	46	✓	(✓)*	(✓)	(✓)	(✓)				(✓)	✓
DOWFAX™ DF-122 Defoamer	18	10	40	< -20	791	368	58	✓	(✓)*	(✓)	(✓)	(✓)				(✓)	✓

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Specialty defoamers (DOWFAX™ DF-Series)

Product	Technical information							Regulatory clearances									
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DOWFAX™ DF-123 Defoamer	16	<4	20.5	< -30	500	220	32	✓	(✓)*	(✓)	(✓)	(✓)					✓
DOWFAX™ DF-124 Defoamer	<4	<4	31	< -20	559	255	40	✓	(✓)*	(✓)	(✓)	(✓)					✓
DOWFAX™ DF-125 Defoamer	19	10	40	< -20	490	220	30	✓	(✓)*	(✓)	(✓)	(✓)				(✓)	✓
DOWFAX™ DF-126 Defoamer	22	16	32	< -20	750	360	61	✓	(✓)*	(✓)	(✓)	(✓)					✓
DOWFAX™ DF-127 Defoamer	26.7	17	33	-13	561	680	40	✓	(✓)*	(✓)	(✓)	(✓)					✓
DOWFAX™ DF-141 Defoamer	13.5	6	28	< -20	193	96	19	✓	(✓)*	(✓)	(✓)	(✓)				(✓)	✓
DOWFAX™ DF-142 Defoamer	10	10	28	< -20	193	103	19	✓	(✓)*	(✓)	(✓)	(✓)				(✓)	✓
DOWFAX™ DF-143 Defoamer	12	<4	13	< -30	142	72	14	✓	(✓)*	(✓)	(✓)	(✓)				(✓)	✓
DOWFAX™ DF-144 Nonionic Surfactant	12	<4	28	< -20	320	180	30	✓	(✓)*							(✓)	✓

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Specialty defoamers (DOWFAX™ DF-Series)

Product	Technical information							Regulatory clearances									
	Cloud Point			Average Pour Point (°C) ASTM D97	Viscosity			GMP	(EC) 10/2011	Swiss Ordinance 817.023.21	BfR XIV	BfR XXXVI	BfR LI	Warenwet Chapter I	Warenwet Chapter II	Warenwet Chapter X	French Order 19 October 2006 (annex IA and IB)
	Cloud Point 1% aqueous (°C) ASTM D 2024	Cloud Point 10% aqueous (°C) ASTM D 2024	Cloud Point 10% solvent (Surfactant in a solution of 25% diethylene glycol butyl ether in water) (°C) ASTM D 2024		Viscosity 25°C (cSt) ASTM 445/446	Viscosity 40°C (cSt) ASTM 445/446	Viscosity 100°C (cSt) ASTM 445/446										
DOWFAX™ DF-146 Defoamer	<4	<4	20	< -20	240	120	20	✓	(✓)*	(✓)	(✓)	(✓)				(✓)	✓
DOWFAX™ DF-147 Defoamer	18	10	37	7	520	200	40	✓	(✓)*							(✓)	✓
DOWFAX™ DF-148 Defoamer	<10	-	21	-45	327	170	28	✓	(✓)*							(✓)	✓
DOWFAX™ DF-161 Defoamer	44	20	43	< -20	780	346	50	✓	(✓)*		(✓)	(✓)				(✓)	✓
DOWFAX™ DF-162 Nonionic Surfactant	15	<4	20	< -30	1340	617	92	✓	(✓)*		(✓)	(✓)				(✓)	✓
DOWFAX™ DF-163 Nonionic Surfactant	32	17.5	35	4	1510	775	129	✓	(✓)*		(✓)	(✓)				(✓)	✓

The graphic representations are presented here for illustrative purposes only and should not be construed as product specifications.

Abbreviations list

GMP: Regulation (EC) 2023/2006 on good manufacturing practice for materials and articles intended to come into contact with food, as amended
 (EU) 10/2011: Regulation (EU) 10/2011 on plastic materials and articles intended to come into contact with food as amended (latest amendment: Regulation (EU) No 2020/1245)
 BfR XIV-A: German BfR Recommendation XIV on Polymer Dispersions (BfR-Empfehlungen XIV zu Polymer-Dispersionen) - Part A
 BfR XXXVI: German BfR Recommendation XXXVI on Paper and Board for Food Contact (up to 90°C) (BfR-Empfehlungen XXXVI zu Papiere, Kartons und Pappen für den Lebensmittelkontakt)
 BfR LI: German BfR Recommendation LI on Temperature Resistant Polymer Coating Systems for Frying, Cooking and Baking Utensils (BfR-Empfehlungen LI zu Temperaturbeständige Beschichtungssysteme aus Polymeren für Brat-, Koch- und Backgeräte)
 Swiss Ordinance 817.023.21: Swiss Ordinance 817.023.21 on materials and articles intended to come into contact with food (updated on 1 December 2020) – Section 12. Packaging inks
 Warenwet Chapter I: Dutch Commodities Act Regulation on packagings and consumer articles (Warenwetregeling verpakkingen en gebruiksartikelen) of 14 March 2014, as amended - Chapter I Plastics
 Warenwet Chapter II: Dutch Commodities Act Regulation on packagings and consumer articles (Warenwetregeling verpakkingen en gebruiksartikelen) of 14 March 2014, as amended - Chapter II Paper and board
 Warenwet Chapter X: Dutch Commodities Act Regulation on packagings and consumer articles (Warenwetregeling verpakkingen en gebruiksartikelen) of 14 March 2014, as amended - Chapter X Coatings
 French Order 19 October 2006 on the use of processing aids in the manufacture of certain foodstuffs: Annex 2 of decree 2011-509 of May 10, 2011 setting the conditions of authorization and use of processing aids that may be used in the manufacture of foodstuffs intended for human consumption, deals with defoamers subject to authorization and registration in Annex IA (authorized food processing aids) and Annex IB (temporarily authorized food processing aids) of the Order of 19 October 2006, as amended.



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