



SASOL

# Low foaming nonionic surfactants and specialities

---

Sasol Chemicals





## About us

We at Sasol Chemicals innovate for a better world and deliver long-term value to our customers, communities and society.

Our broad portfolio of high-value products plays an integral role in the creation of numerous solutions that benefit the lives of millions of people.

Thousands of companies around the world leverage our technology, world-class facilities, expertise and collaborative approach to tackle their challenges.

## Contents

- 1. Foreword ..... 4
- 2. Product description ..... 4
- 3. Product range..... 5
- 4. Technical properties..... 6–13
  - 4.1 Low foaming wetting agents ..... 6
  - 4.2 Defoamer..... 8
  - 4.3 Foaming properties ..... 9
  - 4.4 Surface activity..... 12
  - 4.5 Phase behaviour in aqueous conditions ..... 13
- 5. Applications .....14–17
  - 5.1 Industrial cleaning & household ..... 15
  - 5.2 Textile auxiliaries ..... 16
- 6. Product safety and environmental impact..... 18
- 7. Storage and handling ..... 18
- 8. Registration..... 18

# 1. Foreword

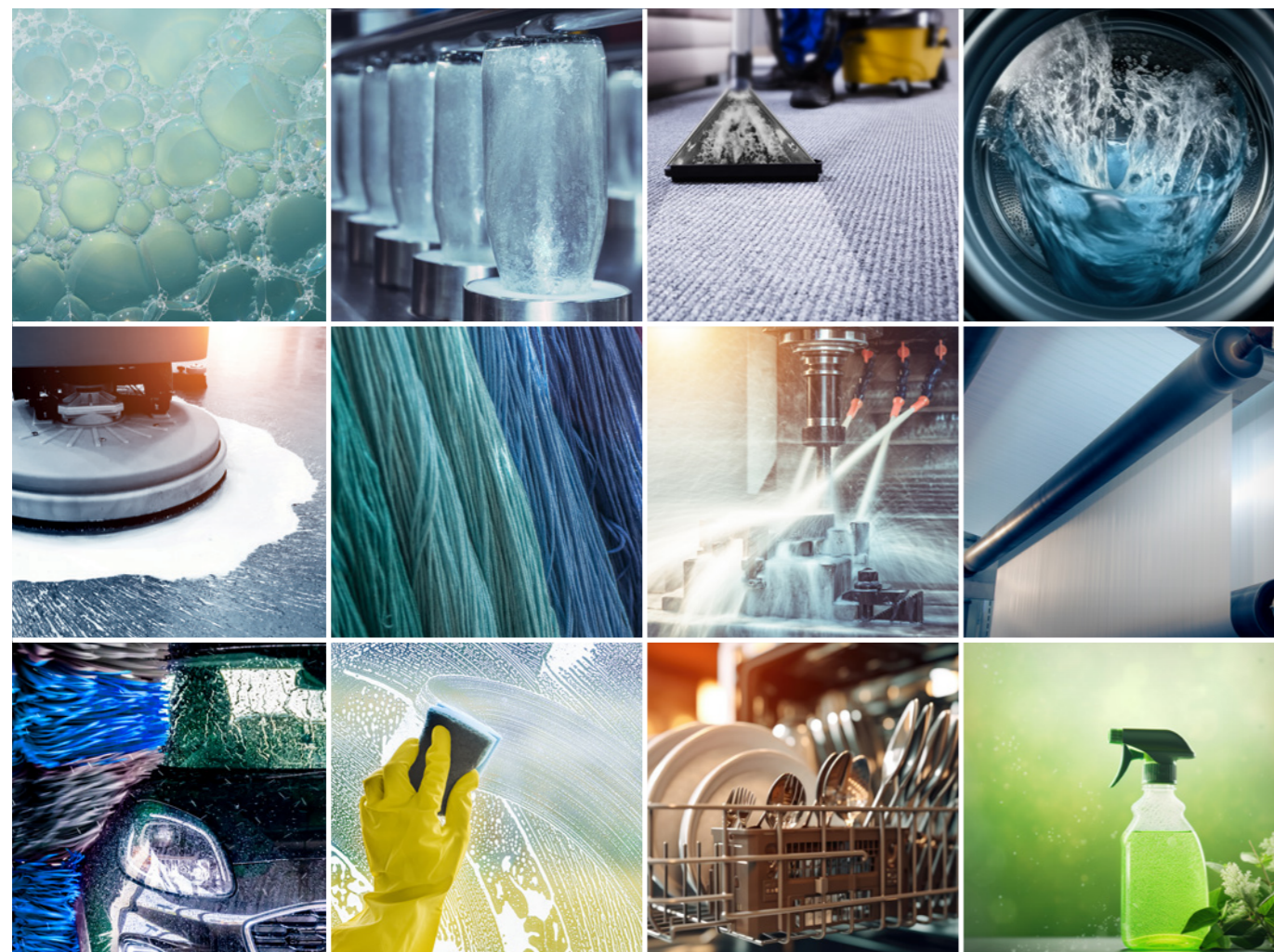
Sasol Chemicals products are based on our wide range of linear and semi-linear fatty alcohols. This brochure gives an overview of the range of speciality, low-foaming nonionic surfactants and defoamers which are produced by the alkoxylation of fatty alcohols with ethylene and propylene oxide. Our worldwide manufacturing network, together with our highly skilled people, are dedicated to helping you achieve your performance and formulation requirements.

# 2. Product description

Nonionic surfactants with low foaming behaviour are essential components for detergent and cleaning applications and important auxiliaries for various industrial processes.

Standard nonionic fatty alcohol ethoxylates are efficient, but relatively high foaming surfactants. In some applications they cannot be used, because even lower sudsing behaviour or the complete absence of foam is required. Partly use of propylene oxide for the alkoxylation of the fatty alcohol positively influences the foam suppression.

The low foaming alcohol EO/PO surfactants are produced by the alkoxylation of fatty alcohols. The alkyl chain length ranges from C<sub>6</sub> to C<sub>18</sub> and varying amounts of ethylene oxide and propylene oxide. By this means a portfolio of low foaming surfactants and defoamers with tailor made properties is received. MARLOX, BIODAC, NOVANIK, LORODAC and PLURODAC products are multipurpose low foaming nonionic surfactants which are applied in detergents, industrial cleaners, textile auxiliaries, metal working, pulp and paper and a variety of other technical applications.



# 3. Product range

	Product name	Alcohol basis	Cloud point, °C	
	DIONIL RT 23	Linear C6	61–64 <sup>1</sup>	
	MARLOWET 5056	1,4-Cyclohexandimethanol	70–74 <sup>3</sup>	
	MARLOX K 158	Linear C10	36–39 <sup>1</sup>	
	MARLOX FK 64	Linear C10/C12	54–56 <sup>1</sup>	
	MARLOX FK 86	Linear C10/C12	21–23 <sup>3</sup>	
	MARLOX FK 69	Linear C10/C12	42–44 <sup>3</sup>	
	BIODAC 2-32	Semi linear C11	34–36 <sup>2</sup>	
	MARLOX OP-1	Semi linear C11	36–38 <sup>2</sup>	
	MARLOX 11027	Semi linear C11	26–28 <sup>2</sup>	
	MARLOX 11009	Semi linear C11	9–11 <sup>2</sup>	
	MARLOX 40	Semi linear C11	60–62 <sup>1</sup>	
	MARLOX 50	Semi linear C11	38–44 <sup>2</sup>	
	MARLOX 80	Semi linear C11	55–57 <sup>2</sup>	
Low foaming wetting agents	MARLOWET L 409	ISOFOL 12	52–55 <sup>1</sup>	
	MARLOWET L 509	ISOFOL 12	59–62 <sup>1</sup>	
	MARLOWET L 609	ISOFOL 12	63–66 <sup>1</sup>	
	MARLOX MO 124	Linear C12/C14	38–40 <sup>1</sup>	
	MARLOX MO 154	Linear C12/C14	40–43 <sup>4</sup>	
	MARLOX N 92	Oxo C13	42–46 <sup>3</sup>	
	LORODAC L6-S-50	Semi linear C12/C15	37–41 <sup>2</sup>	
	NOVANI K 0633 A	Semi linear C12/C15	45–51 <sup>1</sup>	
	NOVANI K 1047 A	Semi linear C12/C15	46–52 <sup>1</sup>	
	NOVANI K 1018 A	Semi linear C12/C15	34–40 <sup>8</sup>	
	MARLOX LF 9353	Semi linear C12/C15	34–37 <sup>1</sup>	
	MARLOX LF 8530	Semi linear C12/C15	39–42 <sup>2</sup>	
MARLOX LF 9486	Semi linear C12/C15	49–53 <sup>1</sup>		
MARLOX M 606	Blend 68 % FK 64, 17 TEA, 10 % oleic, 5 % water	n.a.		
Defoamer	MARLOX ND 610	Methyl capped polyalkylenglycol ether		
	DIONIL P3	Linear C6		
	MARLOWET CPN	Oxo C13		
	MARLOWET CPO	Linear C12/C14		
	MARLOWET 4756	Linear C16/C18		
	MARLOWET G1628	Guerbet C16		
	Emulgator FAO	Coconut oil		
	EMULDAC 251 PE	Linear C16/C18		
	EO-PO block co-polymers	Product name	Molecular weight, g/mol	Cloud point, °C
		PLURODAC 44	2400	64–66 <sup>7</sup>
PLURODAC 61		2000	22–25 <sup>2</sup>	
PLURODAC 62		2200	25–18 <sup>2</sup>	
PLURODAC 64		3000	59–60 <sup>7</sup>	
PLURODAC F68		8000	70–75 <sup>6</sup>	
PLURODAC 81	2700	17–21 <sup>2</sup>		

1) 10 % in 25 % BDG solution  
2) 1 % in deionised water

3) 2 % in deionised water  
4) 16.7 % in 25 % BDG solution

5) 0.5 % in deionised water  
6) 1 % in 10 % NaCl solution

7) 10 % in deionised water  
8) 5 % in 25% BDG solution

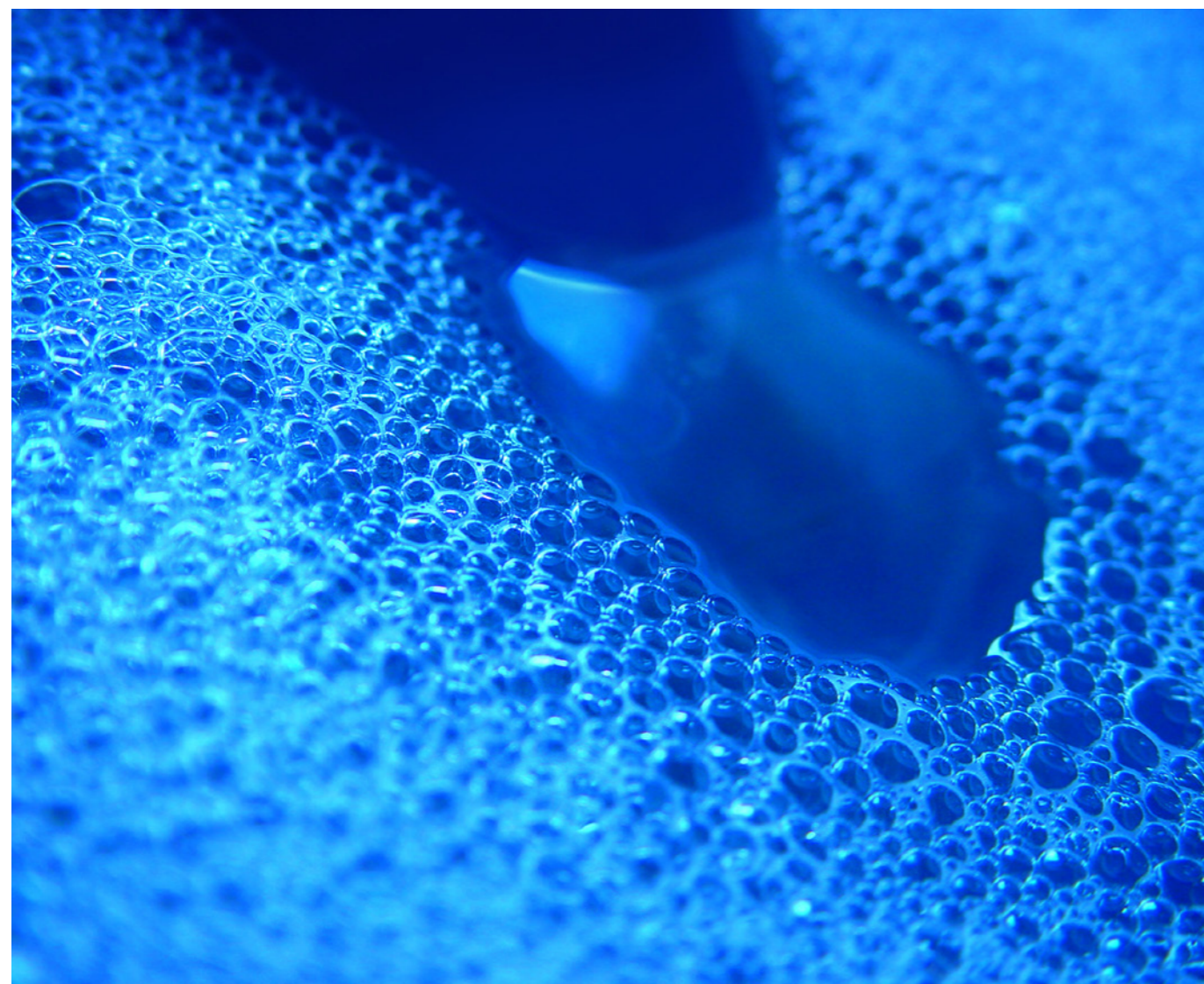
## 4. Technical properties

### 4.1 Low foaming wetting agents

Product name	Appearance at 25 °C	Concentration	pH, 5 % in water	Cloud point		Density at 20 °C	Solidification point	Kin. viscosity at 50 °C	Av. molecular weight	HLB (estimated)	CMC	Surface tension at CMC	Dynamic contact angle on PP after 9 s	Wetting value, cotton (DIN EN 1772)			SITA foam (1600U/min, 1g/l, demin. water)	
				BDG 1	Water 2									23 °C, water, 1 g/l	23 °C, water, 1 g/l, 1 % NaOH, 1 g/l	23 °C, water, 1 g/l, 3 % NaOH, 1 g/l	20 °C	40 °C
Unit		%		°C	°C	g/ml	°C	mm <sup>2</sup> /s (cSt)	g/mol		g/l	mN/m	°	s	s	s	ml	ml
DIONIL RT 23	Clear liquid	100	6–8	61–64	n.a.	0.977	ca. -15	25	364	10	3.7	28.6	68.7 +/- 1.7	> 300	>300	>300	39	23
MARLOWET 5056	Clear to turbid liquid	100	9–11	n.a.	70–74	1.068	<-30	433	1164	13	n.a.		77.4 +/- 1.6	> 300	>300	>300	58	34
MARLOX K 158	Clear to turbid liquid	100	6	38	17	0.98	<-20	22	844	11	0.13	31.5	43.9 +/- 3.4	20.47	n.a.	n.a.	3	0
MARLOX FK 64	Clear to turbid liquid	100	6	55	n.a.	1.05	<-20	14	690	12	0.05	29.3	46.9 +/- 1.5	21.44	153.00	>300	50	5
MARLOX FK 86	Clear to turbid liquid	100	6	39	21	1.00	<-10	34	910	12	0.15	31.6	45.3 +/- 4.0	18.16	41.80	>300	12	0
MARLOX FK 69	Clear to turbid liquid	100	6	51	43	1.01	ca. +2	28	900	12	0.16	33.0	47.2 +/- 4.1	22.33	57.80	58.86	703	11
BIODAC 2-32	Clear to turbid liquid	100	6	52	35	0.96	<-10	21	650	12	0.11	29.0	42.8 +/- 1.9	13.48	17.50	>300	274	19
MARLOX OP-1	Clear to turbid liquid	100	6	51	36	0.98	<-10	18	660	12	0.13	30.0	45.3 +/- 1.4	11.34	25.94	209.92	421	17
MARLOX 11027	Clear to turbid liquid	100	6	44	26	0.98	<-10	23	760	11	0.05	30.5	43.9 +/- 7.0	13.97	30.62	>300	57	0
MARLOX 11009	Clear to turbid liquid	100	6	31	11	1.00	<-10	34	970	9	n.a.		53.6 +/- 1.4	32.98	133.65	>300	5	0
MARLOX 40	Clear liquid	100	6	60	n.a.	0.96	ca. -5	16	445	10	0.05	27.9	42.6 +/- 1.4	21.90	31.64	75.83	76	7
MARLOX 50	Clear liquid	100	6	67	43	0.98	ca. +2	16	550	11	0.06	28.1	41.8 +/- 2.4	13.91	19.93	36.51	534	321
MARLOX 80	Clear liquid	100	6	75	56	1.00	ca.+8	18	650	13	0.09	28.4	46.0 +/- 1.0	19.28	30.19	47.31	811	622
MARLOWET L 409	Clear liquid	90	5–7	52–55	n.a.	0.97	<-10	67	377	10	0.11	26.8	n.a.	26.73	203.15	>300	0	4
MARLOWET L 509	Clear liquid	90	5–7	59–62	n.a.	0.98	<-10	81	421	11	0.07	26.4	40.2 +/- 4.9	12.80	120.89	>300	46	30
MARLOWET L 609	Clear liquid	90	5–7	63–66	n.a.	0.99	<-10	93	465	12	0.07	26.7	38.0 +/- 4.7	15.87	24.28	216.88	127	49
MARLOX MO 124	Clear to turbid liquid	100	6	39	n.a.	0.94	<-10	14	510	10	0.01	26.0	n.a.	208.61	>300	>300	2	0
MARLOX MO 154	Clear to turbid liquid	100	6	48	29	0.97	ca.-7	20	640	11	0.02	30.3	48.5 +/- 1.5	17.98	35.80	>300	339	1
MARLOX N 92	Clear liquid	100	5–7	n.a.	42–46	ca. 1.01	ca.-3	15	712	13	0.05	29.6	43.6 +/- 3.1	11.95	25.59	77.58	450	40
LORODAC L6-S-50	Clear to turbid liquid	100	6	60	39	0.98	ca.-3	38	580	12	n.a.		45.5 +/- 2.7	19.11	36.00	>300	474	28
NOVANIK 0633 A	Clear to turbid liquid	100	7	45–51	n.a.	0.97	ca.-6	24	670	123	0.01	29.4	44.3 +/- 2.6	19.73	43.02	>300	201	4
NOVANIK 1047 A	Clear to turbid liquid	100	7	46–52	n.a.	1.00	ca.0	58	1010	12	0.01	31.0	52.5 +/- 1.0	24.46	40.92	>300	444	9
NOVANIK 1018 A	Clear to turbid liquid	100	5–7	34–40	n.a.	0.97	<-20	40	1140	9	n.a.		n.a.	168.35	>300	>300	0	0
MARLOX LF 9353	Clear to turbid liquid	100	5–7	34–37	n.a.	0.95	<-20	15	550	10	n.a.		n.a.	134.10	>300	>300	3	0
MARLOX LF 8530	Clear liquid, colourless to slightly yellowish	100	5–8	52	39–42	0.993	ca. 1	94	849	13	0.01	29.8	57.9 +/- 1.7	21.04	34.89	>300	391	16
MARLOX LF 9486	Liquid	100	5–7	49–53	n.a.	0.956	ca. -20	68	607	8	n.a.		59.9 +/- 3.3	154.77	>300	>300	0	0
MARLOX M 606	Clear liquid	100	8–9	n.a.	n.a.	ca. 1.00	ca. -30	154	n.a.	n.a.	0.04	29.0	42.7 +/- 1.0	34.44	39.59	122.30	816	418

### 4.2 Defoamer

Product name	Appearance at 25 °C	Concentration	pH, 5 % in water	Density at 20 °C	Solidification point	Kin. viscosity at 50 °C
Unit		%		g/ml	°C	mm <sup>2</sup> /s (cSt)
<b>MARLOX ND 610</b>	Liquid, clear to slightly turbid	100	6–8	1.035	about -20	32
<b>DIONIL P3</b>	Clear liquid	100	5–7	0.927	> -30	5
<b>MARLOWET CPN</b>	Clear liquid	100	5–8	0.907	about -20	10
<b>MARLOWET CPO</b>	Clear liquid	100	n.a.	0.896	about -14	9
<b>MARLOWET 4756</b>	Liquid	100	5–7	about 1	> -20	86
<b>MARLOWET G1628</b>	Cloudy, inhomogeneous liquid	100	6–8	0.912	about 4	14
<b>Emulgator FAO</b>	Clear liquid	100	5–7	0.965	63	24
<b>EMULDAC 251 PE</b>	Clear liquid	100	4–6	about 0.98	about ca. -7	63

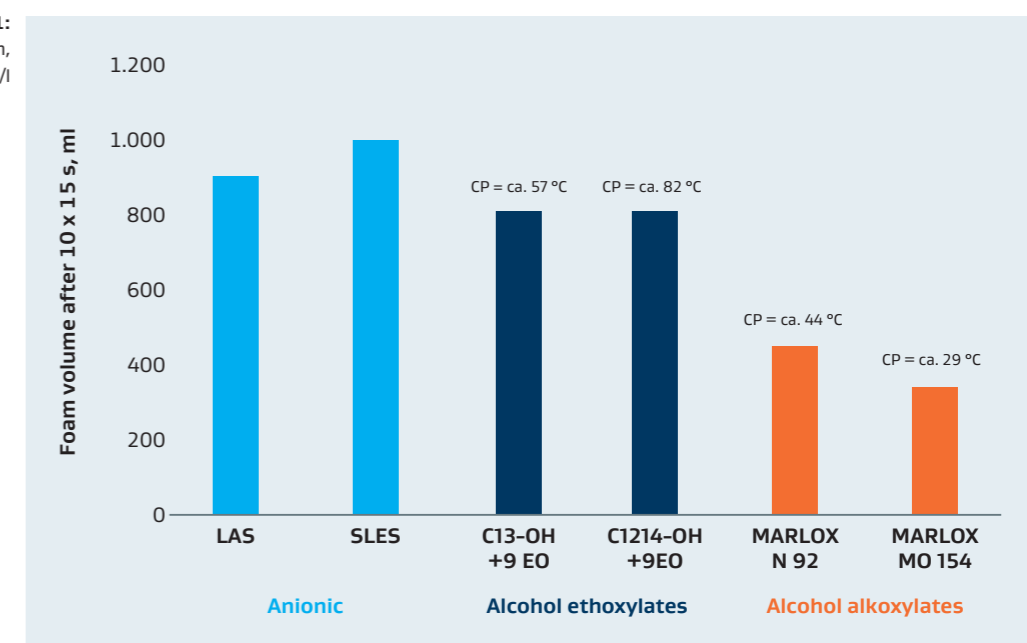


### 4.3 Foaming properties

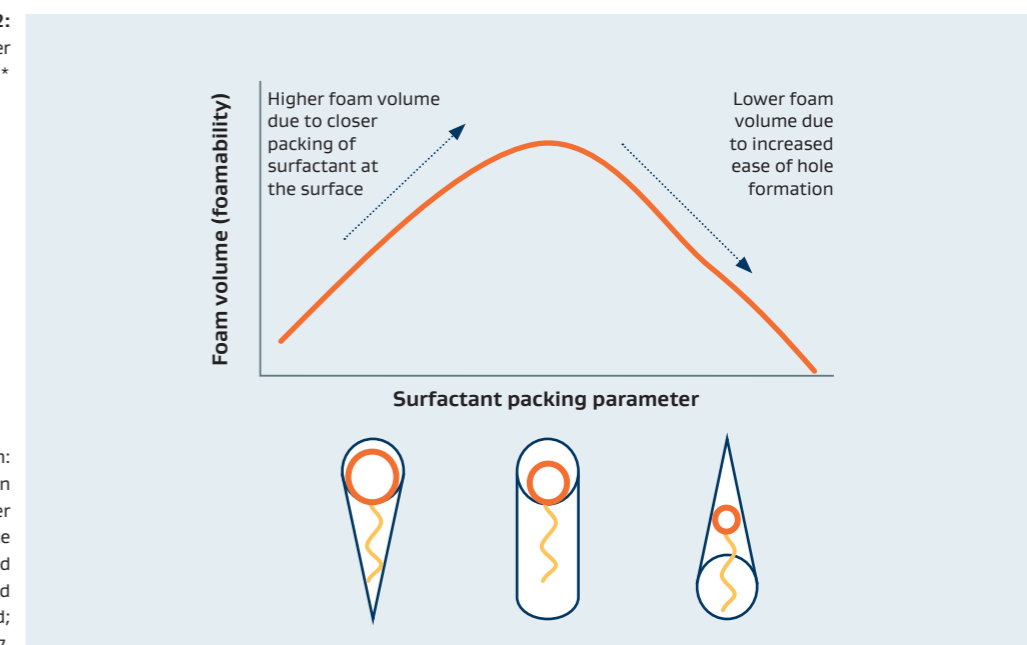
Alcohol EO/PO products are low-foaming surfactants.

Figure 1 shows an example of the foam volume of the alcohol EO/PO products **MARLOX N92** and **MARLOX MO 154** compared to standard anionic and nonionic surfactants. Linear alkylbenzene sulfonate (LAS) and alcohol ethersulfates (SLES) show higher foam volumes than nonionic surfactants. Even below the cloud point alcohol EO/PO products significantly reduced the foam volumes compared to pure alcohol ethoxylates using the same origin. In terms of hydrophilicity/hydrophobicity, the PO behaves “neutral” (in fact closer to an alkyl than to an EO) and it is used to alter the cloud point and the so-called critical packing parameter (CPP). The CPP is a useful concept to better understand foaming behavior as depicted in Figure 2.

**Figure 1:**  
SITA foam test at 20 °C, 1600 rpm,  
10 x 15 s, deionised water, 1 g/l



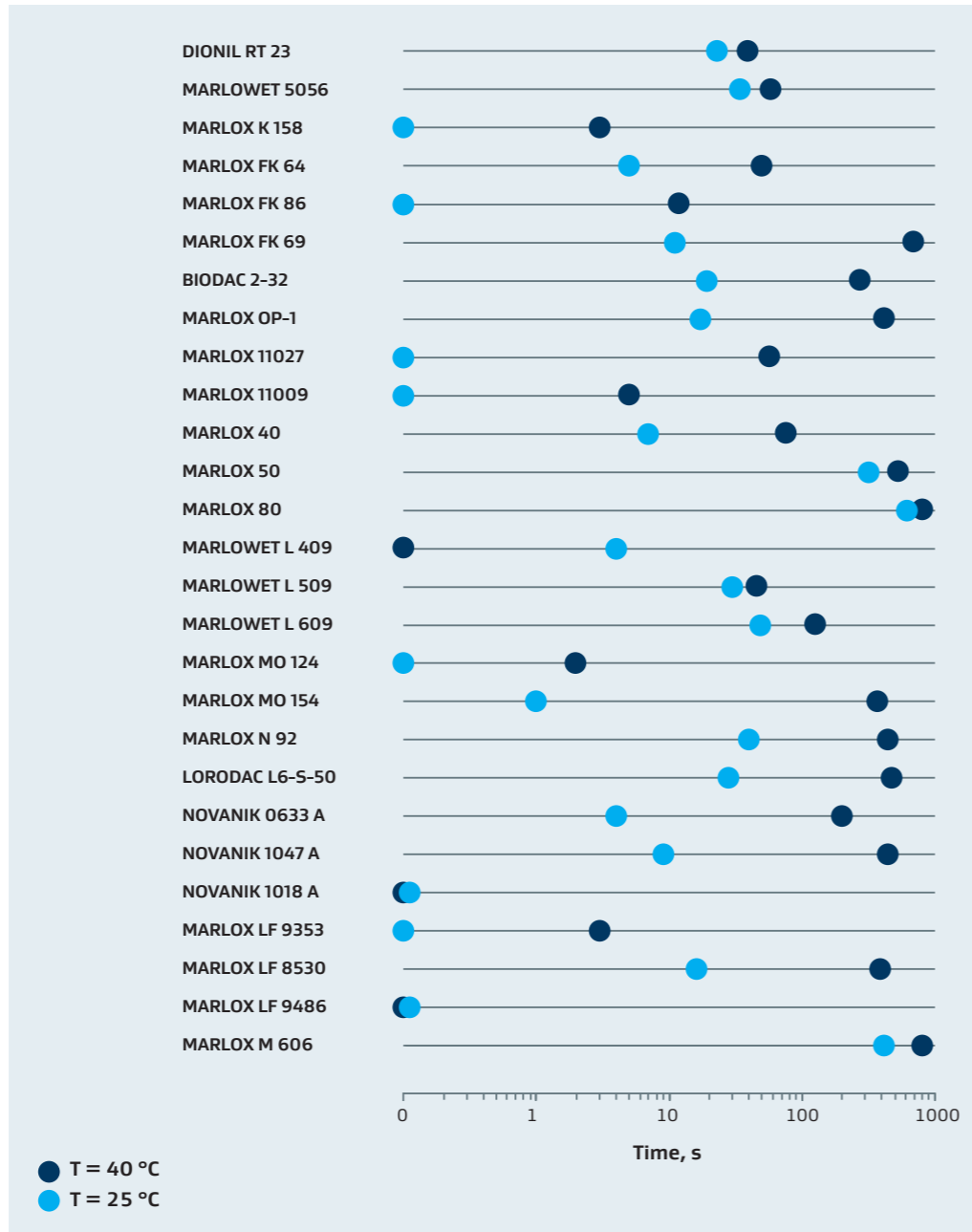
**Figure 2:**  
Packaging parameter and foamability\*



\*further information:  
Kronberg B, Holmberg K, Lindman B. The Critical Packing Parameter Concept is a Useful Tool. Surface Chemistry of Surfactants and Polymers. Chichester, United Kingdom: John Wiley & Sons, Ltd; 2014. p. 424-427.

Foaming tests have been carried out using a SITA foam tester. Foam is generated by stirring a 1 g/l surfactant solution in deionised water 10 times for 15 seconds at 1600 rpm at 20 °C and 40 °C.

**Figure 3:**  
Foam behaviour of alcohol EO/PO products according SITA foam tests



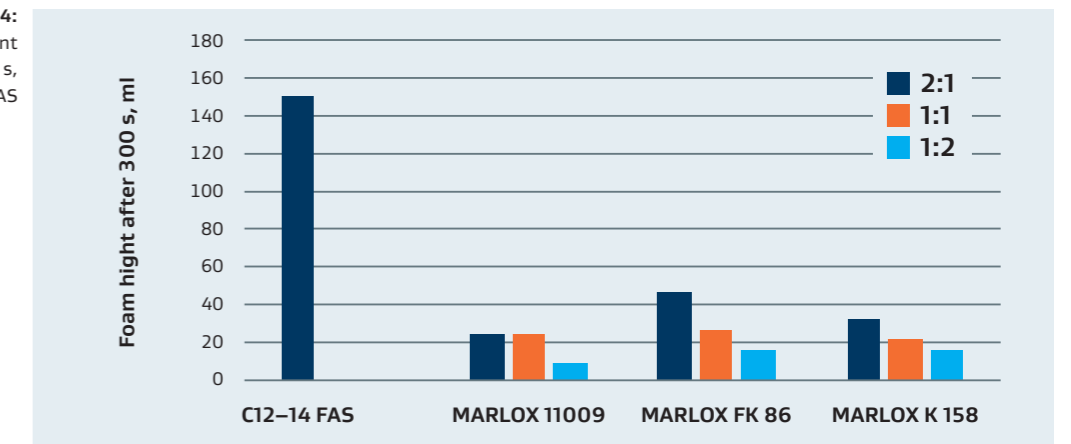
In general, the foam volume of nonionic surfactants is reduced at elevated temperatures and disappears for those products with cloud points below the test temperature. The multipurpose wetting agents **MARLOX K158**, **MARLOX 11009** and **NOVANIK 1018 A** show very low foam volumes at 20 °C and no foam volume at 40 °C. These surfactants can even be used at turbulent processes with high air entry (Figure 3).

When comparing the foam values, it is important to remember that the best product for an application can only be found by considering all the application requirements in the different formulations. Alkoxylated products based on short chained alcohols will perform best in applications requiring fast wetting, high electrolyte content or compatibility with other formulation ingredients.

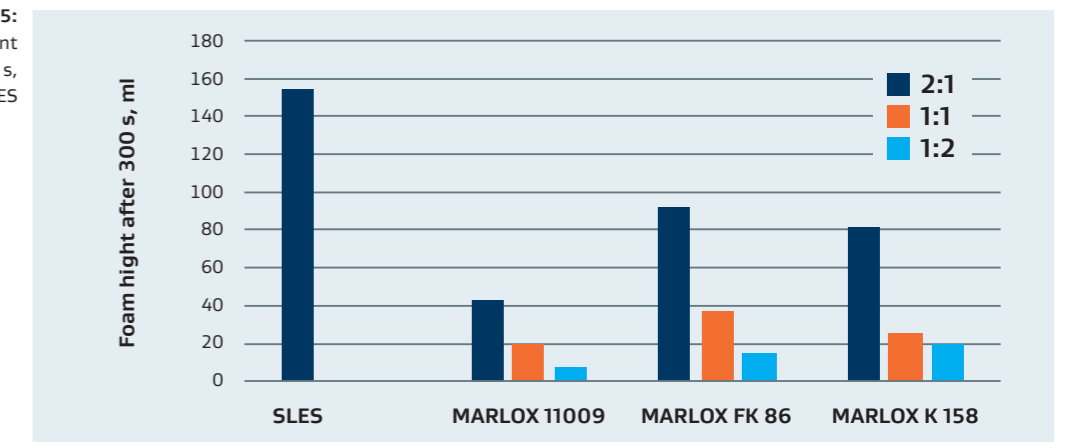
Low-foaming products with low cloud points are often used as co-surfactants to control the foaming behaviour of high-foaming anionic surfactants. Foam stability was measured according to Ross Miles at a foaming agent concentration of 1g/l in deionised water after 300 s with different foamer/defoamer ratios at a temperature of 40 °C.

**MARLOX 11009**, **MARLOX FK 86** and **MARLOX K 158** significantly reduce the foam stability of LAS, SLES (**MARLINAT 242/70**) and AS (**DACPON 27-23AL**) (Figure 4-6).

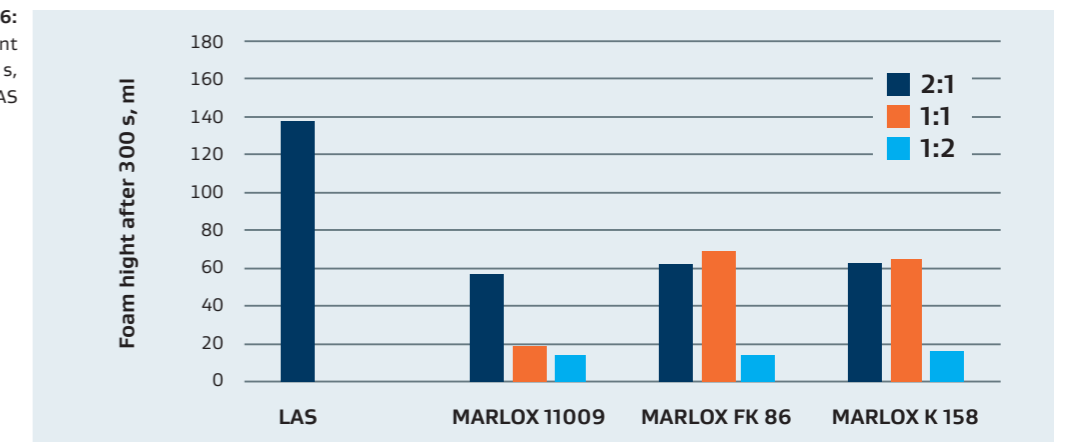
**Figure 4:**  
Ross Miles measurement of foam stability after 300 s, C12-14 FAS



**Figure 5:**  
Ross Miles measurement of foam stability after 300 s, SLES



**Figure 6:**  
Ross Miles measurement of foam stability after 300 s, LAS

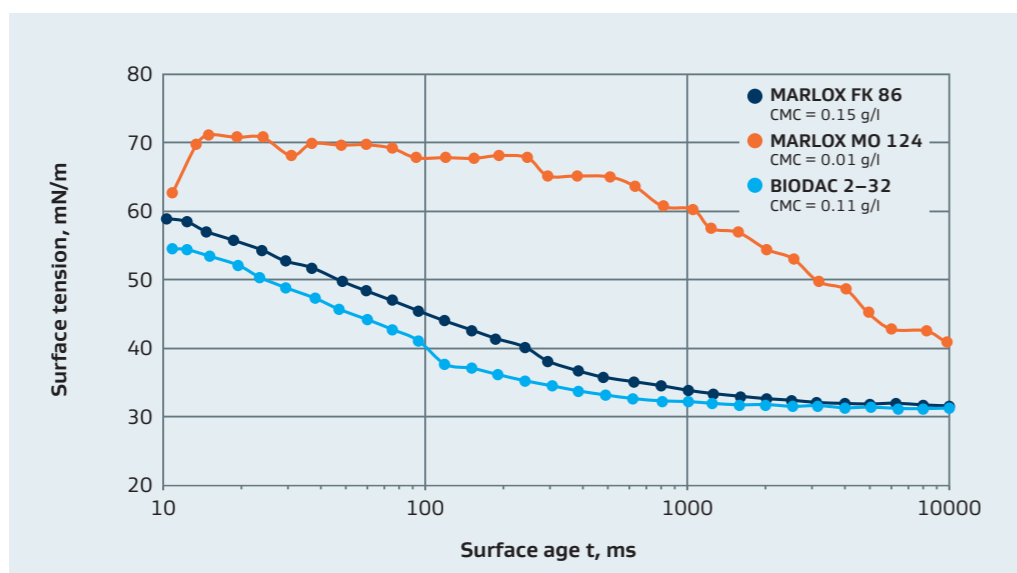


### 4.4 Surface activity

The alcohol EO/PO products are surface active in water when the degree of ethoxylation and propoxylation is chosen appropriately. All products show surface tensions in the range of 0.01 and 0.2 g/l with exception of **DIONIL RT 23**. This product has a CMC of 3.7 g/l.

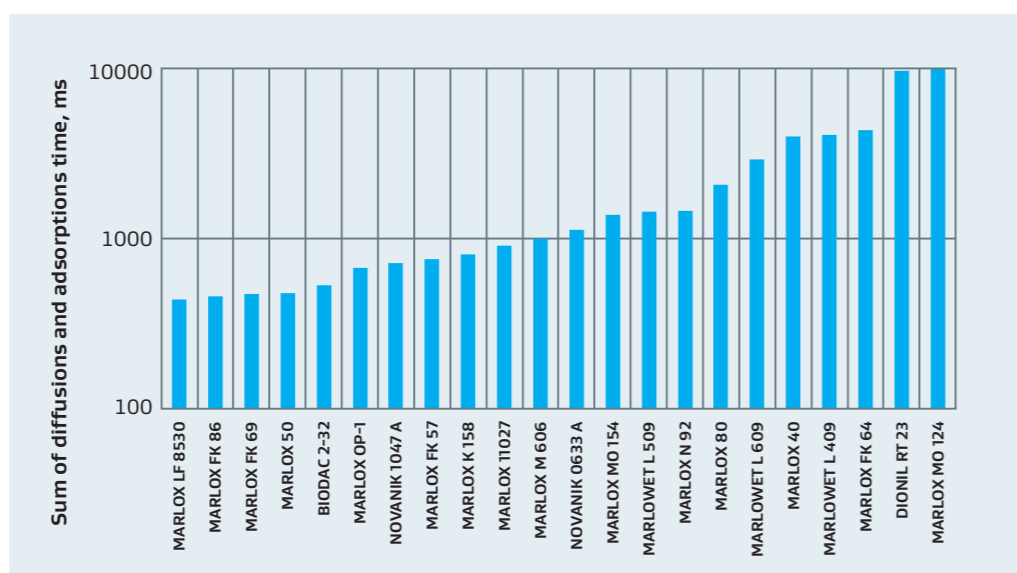
To best select a surfactant for fast wetting processes the dynamic surface tension of the surfactant solution is decisive. Figure 7 shows the dynamic surface tension measured over time. Fast wetting products like **BIODAC 2-32** and **MARLOX FK 86** reduce the surface tension of the air/water surface already after a few milliseconds.

**Figure 7:** Dynamic surface tension of selected products (1 g/l at 25 °C)



To compare the dynamic surface properties of all EO/PO products, the diffusion and adsorption coefficients are typically determined according to Joos-Rillaerts and Ward-Tordai respectively. These equations take into account the limiting surface concentration of a surfactant at interface saturation. An elegant way of representing effects due to differences in diffusion- and adsorption coefficients is the derived characteristic wetting time according to Stebe as shown in Figure 8. The characteristic wetting time is an indication of the time at which most of the reduction in surface tension takes place.

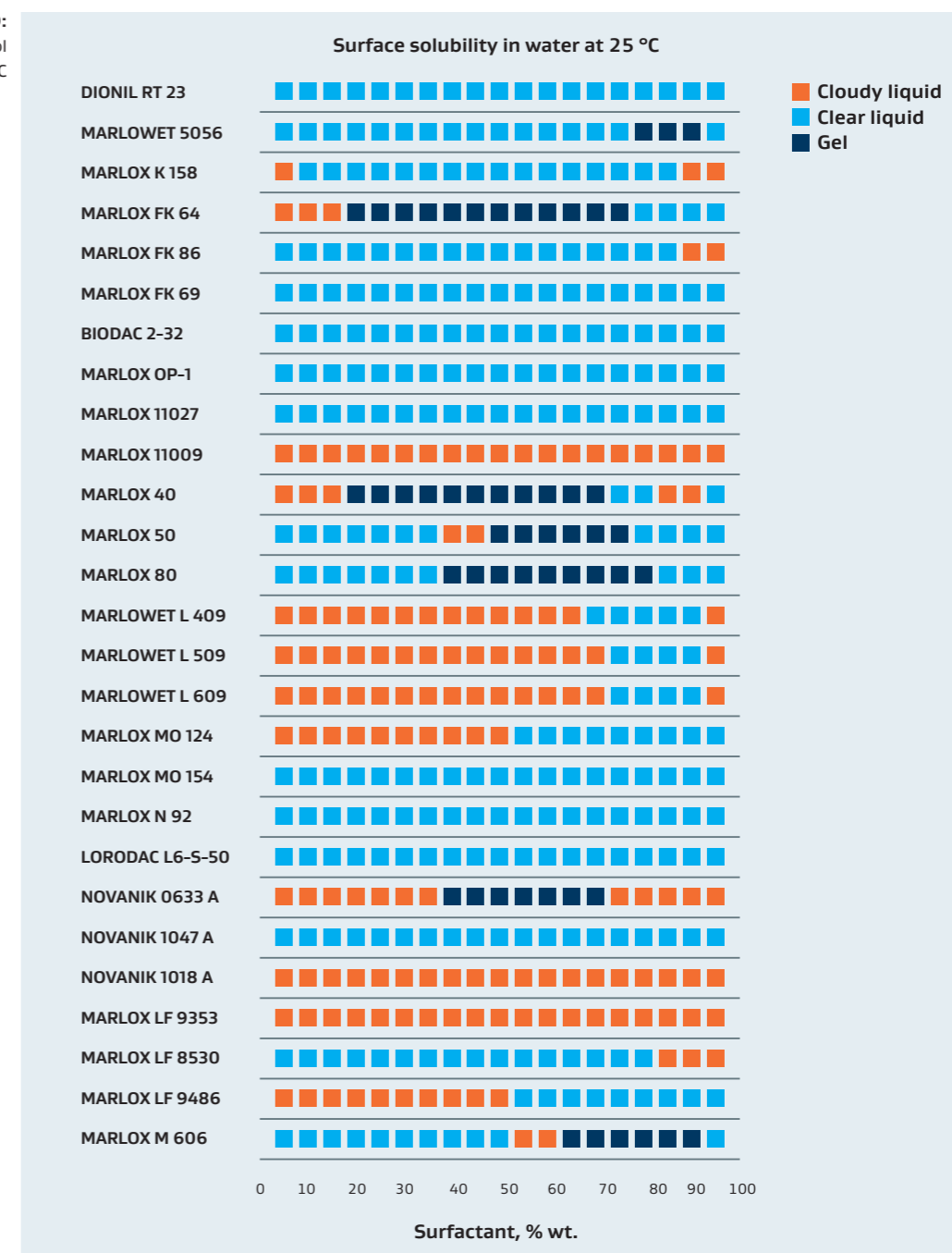
**Figure 8:** The characteristic wetting time of alcohol EO/PO surfactants as an indication of the time at which most of the reduction in surface tension takes place.



### 4.5 Phase behaviour in aqueous conditions

The solubility of the alcohol EO/PO products increases with the degree of ethoxylation and decreases using longer hydrophobic alcohol chains and additionally with the degree of propoxylation. Compatibility with other active ingredients and solvents is important when preparing liquid formulations. Figure 9 shows the aqueous solubility over the whole concentration range. The outstanding property of alcohol EO/PO products is their low tendency to form gel phases. Several products like **MARLOX OP-1**, **MARLOX 11027**, **MARLOX FK 69** or **BIODAC 2-32** dissolve clear over the whole concentration range. Even in the case of cloudy aqueous liquids, the dispersions are often very stable against separation. An example is **MARLOX FK 64**, which is advantageous for use in dispersions as an aqueous lubricant or release agent for technical applications in concentrations below 15 %.

**Figure 9:** Physical states of aqueous alcohol EO/PO solutions at 25 °C



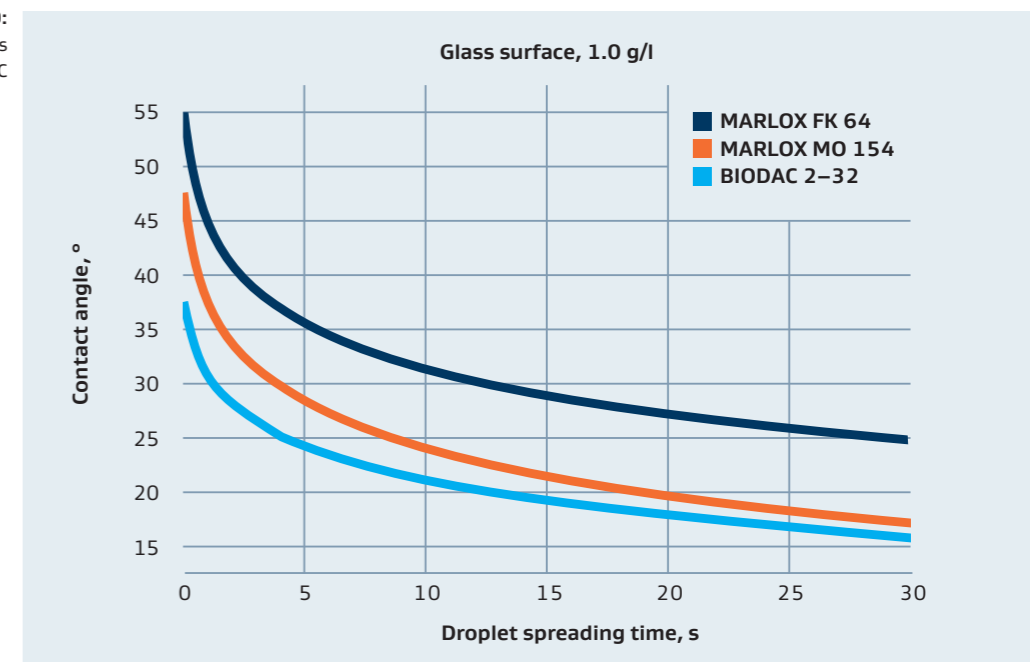
# 5. Applications

Product name	Function				Application				
	Wetting	Foam regulation	Degreasing	Non gelling	Emulsification	I&I and household	Textile auxiliaries	Metal working/lubricant	Technical application
<b>Low foaming wetting agents</b>									
DIONIL RT 23		●		●				●	●
MARLOWET 5056								●	●
MARLOX K 158	●	●		●			●		●
MARLOX FK 64	●		●			●	●	●	●
MARLOX FK 86	●	●		●		●	●	●	●
MARLOX FK 69		●		●			●		●
BIODAC 2-32	●	●	●	●		●	●	●	●
MARLOX OP-1	●	●	●	●		●	●	●	●
MARLOX 11027	●	●		●		●	●	●	●
MARLOX 11009	●	●		●		●	●		●
MARLOX 40	●	●			●	●	●	●	●
MARLOX 50	●	●			●	●	●	●	●
MARLOX 80	●	●				●	●	●	●
MARLOWET L 409	●		●	●		●			
MARLOWET L 509	●		●	●		●			
MARLOWET L 609	●		●	●		●		●	
MARLOX MO 124		●		●			●	●	●
MARLOX MO 154	●	●	●	●		●	●		●
MARLOX N 92	●	●	●	●	●		●		●
LORODAC L6-S-50	●	●	●	●	●		●	●	●
NOVANIK 0633 A	●	●	●			●	●		●
NOVANIK 1047 A		●	●	●		●	●		●
NOVANIK 1018 A		●	●	●		●	●		●
MARLOX LF 9353			●	●		●			
MARLOX LF 8530		●		●		●	●		●
MARLOX LF 9486		●		●			●	●	●
MARLOX M 606	●							●	●
<b>Defoamer</b>									
MARLOX ND 610		●							
DIONIL P3		●					●		●
MARLOWET CPN		●					●		
MARLOWET CPO		●			●			●	
MARLOWET 4756		●							
MARLOWET G1628		●			●				
Emulgator FAO		●							●
EMULDAC 251 PE		●							

## 5.1 Industrial cleaning & household

Alcohol EO/PO products are essential components of industrial cleaners and household products. Machine dishwashing powders and tablets comprise MARLOX and BIODAC grades to achieve optimal cleaning results even on tough food traces. In rinse aids the products cause fast water removal achieving shining glass ware. **BIODAC 2-32** and **MARLOX MO 154** have excellent wetting properties on hard surfaces with low foam formation under standard conditions. Other application examples are industrial bottle cleaning for the beverage industry, floor cleaners and disinfectants. Products like **MARLOX OP-1**, **MARLOX 11027**, **MARLOX FK 86** possess good detergency properties on difficult oily stains like solid natural fats or lipstick

Figure 10: Dynamic contact angle of aqueous solution on glass at 25 °C

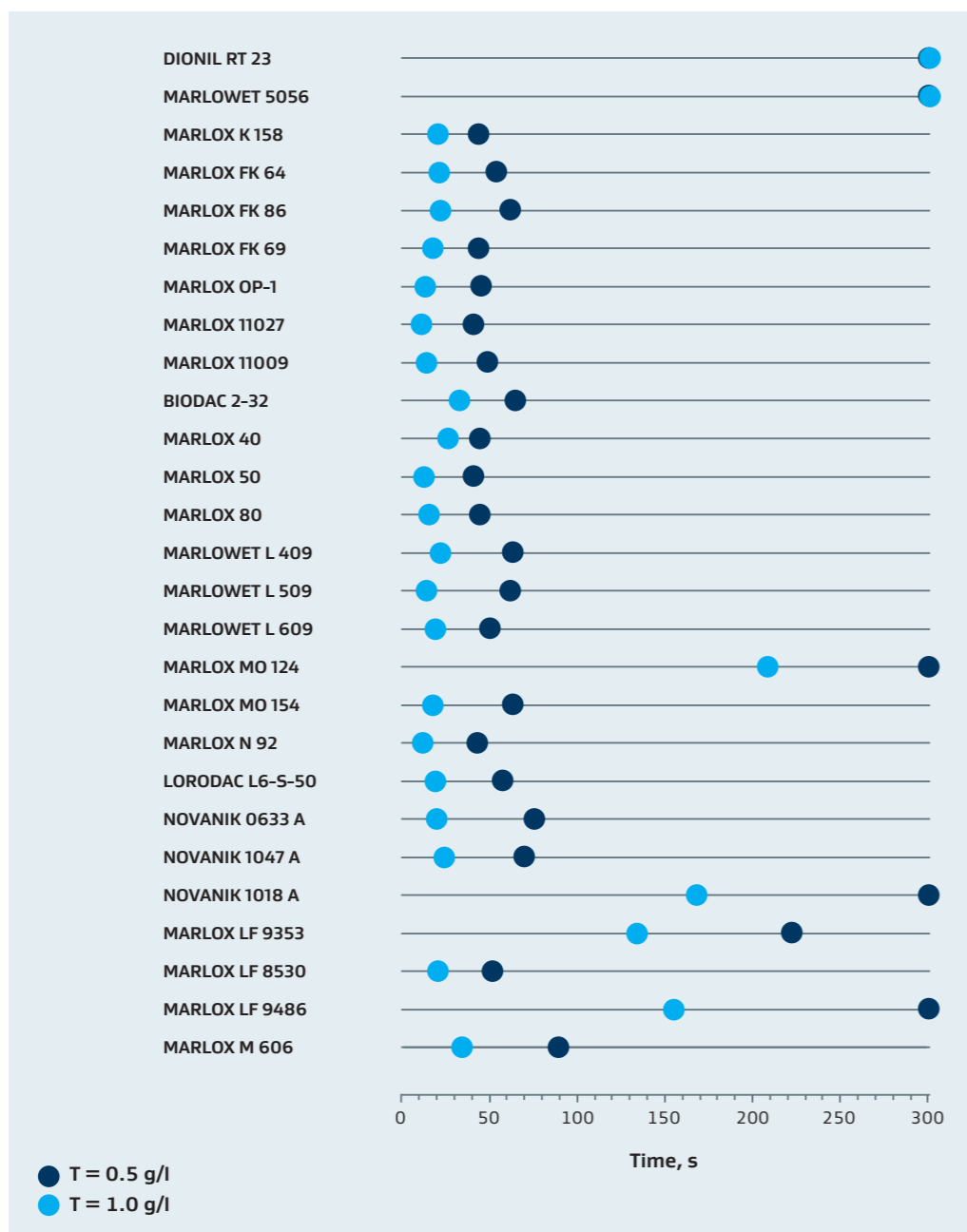




### 5.2 Textile auxiliaries

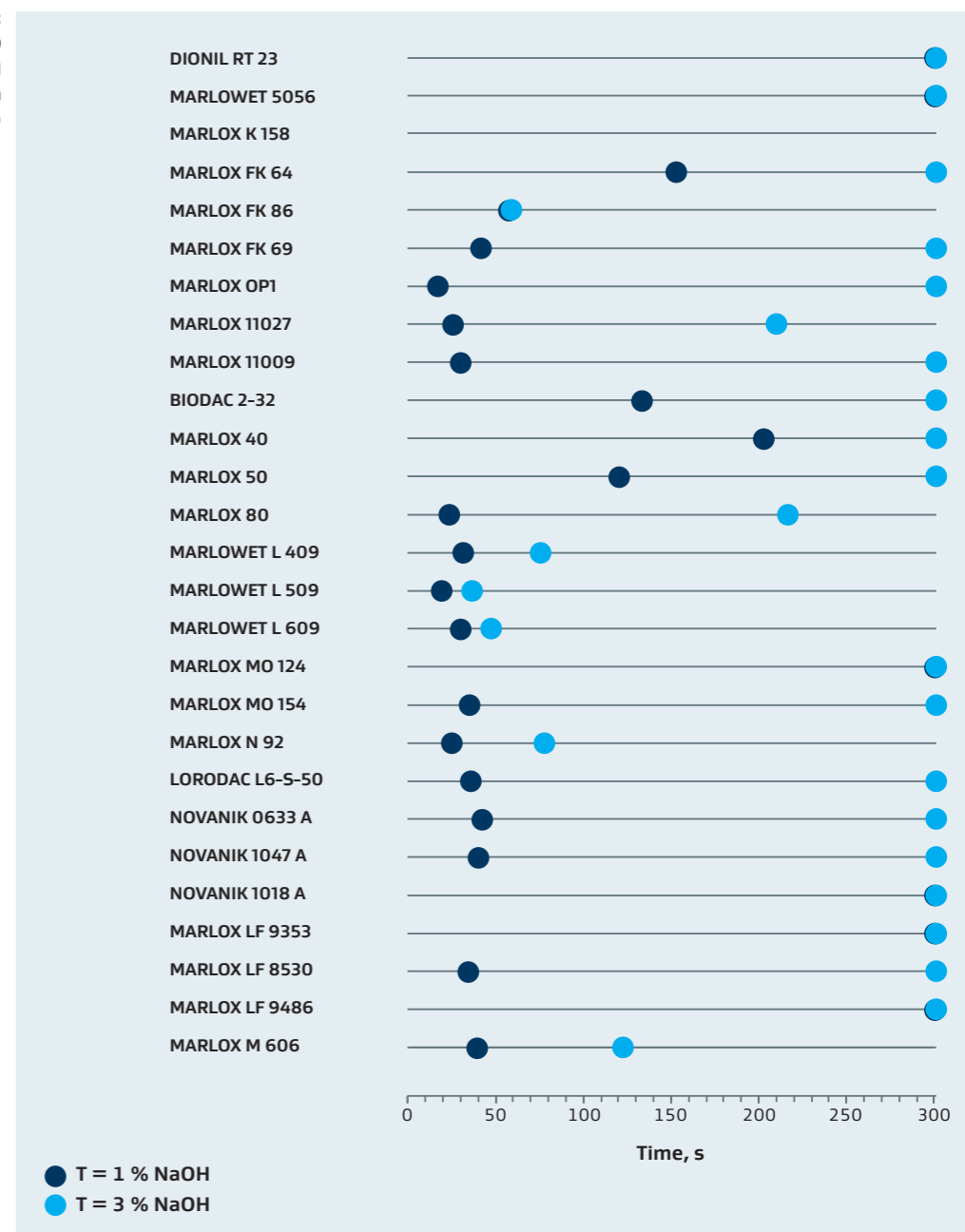
Nonionic surfactants are used as wetting agents in a variety of textile applications like scouring, bleaching and dyeing. Sasol offers a wide portfolio of nonionic surfactants for these applications.

**Figure 11:** Wetting values of alcohol EO/PO products on cotton at 22 °C in demineralised water at the concentration of 1 g/l and 0,5 g/l (EN1772)



A good wetting performance under alkaline conditions is necessary for scouring and washing formulations. **LORODAC L6-5-50** and **MARLOX OP-1** show the highest alkaline stability among those alcohol EO/PO's. **LORODAC L6-5-50** generates advantages in the wetting while **MARLOX OP-1** shows better performance in low foam behaviour. For jet dyeing applications under rigorous turbulent conditions, **MARLOX K 158** would be the best choice.

**Figure 12:** Wetting values of alcohol EO/PO products at the concentration of 1 g/l on cotton at 22 °C in aqueous sodium hydroxide solution (EN1772)



## 6. Product safety and environmental impact

The alcohol EO/PO products have low to moderate oral toxicities. Regarding the skin and eye irritation, safety precautions, such as skin and eye protection, have to be observed when handling alcohol alkoxyates.

The impact of Sasol alcohol EO/PO products on the aquatic environment has been investigated in various tests according to OECD principles. On the basis of these data, the majority of the products is not classified as hazardous to the environment.

For further information on handling as well as toxicological and environmental characterization of the individual grades please see our safety data sheets that are available on request. According EC 1907/2006 (Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)) all alcohol EO/PO products are polymers. Polymers don't have to be registered as they are exempt from the REACH registration. The corresponding monomers have been registered already.

## 7. Storage and handling

The BIODAC, MARLOX, NOVANIK and LORODAC products can be stored in stainless steel tanks, which must be heatable in case of melting points closed to the outside temperature. If the products are stored at low temperature they may turn cloudy, solidify or form layers. It is therefore advisable to heat and thoroughly mix the contents of drums or containers before partially draining some of the contents in order to obtain a homogeneous product.

## 8. Registration

For registration status, please refer to the material safety data sheet or contact:

**Sasol Chemicals**  
**info@de.sasol.com**  
**Telephone +49 40 63684-1000**

## Our global footprint

● Sasol Chemicals' business locations, e.g. offices, production sites, JVs, laboratories, etc.



### Source reference:

Cover: Adobestock/frank peters, Adobestock/Yaroslav Pavlov, Adobestock/Katarina, Adobestock/top images; p. 2: Adobestock/FRANK, Adobestock/gumpapa, Adobestock/Andrey Popov, Adobestock/top images, istockphoto/baona, Adobestock/pixarno, Adobestock/Sasint, Adobestock/alephcom01, Adobestock/monticellio, Adobestock/Milan, Adobestock/didiksaputra, Adobestock/LaxmiOwl; p. 8: Adobestock/Nik Frey; p. 15: Adobestock/Pixel-Shot

**Sasol is a registered trademark of Sasol Ltd. Product trademarks displayed in this document are the property of the Sasol Group of companies, except where it is clear from the context that not. Users of this document are not permitted to use these trademarks without the prior written consent of their proprietor. All rights not expressly granted are reserved. Reference to trademarks used by other companies is neither a recommendation, nor should it give the impression that products of other companies cannot be used.**

The information contained in this document is based on Sasol's knowledge and experience at the time of its creation. We reserve the right to make any changes to this document or the products described therein, as a result of technological progress or developments. This information implies no liability or other legal responsibility on our part, including with regard to existing third-party patent rights. In particular, no guarantee or warranty of properties in the legal sense is implied. The customer is not exempted from the obligation to conduct careful inspection and testing of incoming products. All our business transactions are governed exclusively by our General Business Terms.



**SASOL**

# CONTACT US

**Sasol Chemicals**

Fabric Home Care, Institutional & Industrial Cleaning



[www.chemicals.sasol.com](http://www.chemicals.sasol.com)