

Lauryl-Myristyl Alcohol Ethoxylate (KELA)



KIMYAGARAN
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Chemical Industries Co.

Technical Data Sheet



Lauryl-Myristyl Alcohol Ethoxylates (KELA)

Chemical Name:

Lauryl-Myristyl Alcohol Polyethylene Glycol Ether

Trade Name:

KELA

Introduction:

Lauryl-Myristyl Alcohol Ethoxylates (KELAs) are alkyl polyglycol ethers derived from Lauryl-Myristyl Fatty Alcohols (C_{12} - C_{14}), which are mixed of varying in the number of repeating ethoxy groups. The digit which is appeared after the name of KELA shows the average number of ethylene oxide units in the Lauryl-Myristyl Alcohol molecule. For example, KELA7 means a Lauryl-Myristyl alcohol molecule which is reacted with average seven molecules of ethylene oxide.

Different Grades:

KELA 2, KELA 3, KELA 7, KELA 10, KELA 20

General Applications:

- Fatty Alcohol-2EO: Raw Material for the preparation of Ether Sulfate and Sulfosuccinate
- Fatty Alcohol-3EO: Raw Material for the preparation of Ether Sulfate and Sulfosuccinate
- Fatty Alcohol-7EO: Detergent
- Fatty Alcohol-10EO: Raw Material for the preparation of Carboxylate (An anionic surfactant)
- Fatty Alcohol-20EO: High HLB emulsifier in cosmetic and pharmaceutical products

**Packaging:**

Packaging Type	Net weight	Gross weight	No. of drums per pallet	No. of pallets in a 20 FLC	Shelf life	IMCO Class
New Steel Drums	220 Kgs	238 Kgs	4	20	2 yrs	Non-Imco

Notice:

We can produce other types of Lauryl-Myristyl Alcohol Ethoxylates (KELAs), moreover customized packaging will be available according to customer's request.

Safety, Handling & Storage:

Full information on the safety, handling and storage of KELAs is available in the corresponding Material Safety Data Sheet ([MSDS](#)).



Ethoxylated Lauryl-Myristyl Alcohol - 2EO

Trade Name: **KELA 2**

Specification

No.	Test	Standard	Reference
1	Appearance at 25°C	Colorless liquid	---
2	Color, pt-co	Max.50	ASTM D1209
3	Viscosity at 50°C, C.st	8-10	ASTM D445
4	Density at 50°C, g/cm ³	0.87-0.89	
5	pH (5% in water)	5-7	ASTM D1172
6	HLB, calculated	5.9-6.2	---
7	Average molecular weight, g/mol	274-290	---
8	Cloud point, °C (10% in 25% BDG)	47-54	ASTM D2024
9	Hydroxyl value, mg KOH/g	195-205	ASTM D4252
10	Water, percent	Max. 0.1	ASTM E203



Ethoxylated Lauryl-Myristyl Alcohol - 3EO

Trade Name: **KELA 3**

Specification

No.	Test	Standard	Reference
1	Appearance at 25°C	Colorless liquid	---
2	Color, pt-co	Max.50	ASTM D1209
3	Viscosity at 50°C, C.st	10-12	ASTM D445
4	Density at 50°C, g/cm ³	0.85-0.95	
5	pH (5% in water)	5-7	ASTM D1172
6	HLB, calculated	7.9-8.2	---
7	Average molecular weight, g/mol	322-334	---
8	Cloud point, °C (10% in 25% BDG)	60-63	ASTM D2024
9	Hydroxyl value, mg KOH/g	168 -174	ASTM D4252
10	Water, percent	Max. 0.1	ASTM E203



Ethoxylated Lauryl-Myristyl Alcohol - 7EO

Trade Name: **KELA 7**

Specification

No.	Test	Standard	Reference
1	Appearance at 25°C	Hazy Viscos Liquid	---
2	Color, pt-co	Max.50	ASTM D1209
3	Viscosity at 50°C, C.st	20±3	ASTM D445-03
4	Density at 25°C, g/cm ³	0.98 ± 0.02	
5	pH (5% in water)	5-7	ASTM D1172
6	HLB, calculated	12.1-12.5	---
7	Average molecular weight, g/mol	488-540	---
8	Cloud point (1% in water)	52-60	ASTM D2024
9	Hydroxyl value, mg KOH/g	104-115	ASTM D4252
10	Water, percent	Max. 0.1	ASTM E203



Ethoxylated Lauryl-Myristyl Alcohol - 10EO

Trade Name: **KELA 10**

Specification

No.	Test	Standard	Reference
1	Appearance at 25°C	White solid	---
2	Viscosity at 50°C, cP	25-32	ASTM D445-03
3	pH (5% in water)	5-7	ASTM E70
4	HLB, calculated	13.9	---
5	Average molecular weight, g/mol	610-650	---
6	Cloud point, °C (1% in 10% Sodium chloride)	58-66	ASTM D2024
7	Hydroxyl value, mg KOH/g	86-92	ASTM D4252
8	Water, percent	Max. 0.1	ASTM E203
9	Polyethylene glycol, percent	Max. 2	ASTM D4252



Ethoxylated Lauryl-Myristyl Alcohol - 20EO

Trade Name: **KELA 20**

Specification

No.	Test	Standard	Reference
1	Appearance at 25°C	White solid	---
2	pH (5% in water)	5-7	ASTM E70
3	HLB, calculated	16.4	---
4	Average molecular weight, g/mol	1000-1022	---
5	Hydroxyl value, mg KOH/g	50-56	ASTM D4252
6	Water, percent	Max. 0.1	ASTM E203
7	Polyethylene glycol, percent	Max. 2	ASTM D4252

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