

Nonylphenol Ethoxylate (KENON)



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Technical Data Sheet



Nonylphenol Ethoxylates (KENON)

Chemical Name:

Nonylphenol polyethylene Glycol Ether

Trade Name:

KENON

Introduction:

Nonylphenol Ethoxylates (NPEs) are nonionic surfactants which are such as all kinds of other nonionic surfactants mixtures varying in the number of repeating ethoxy groups. The digit which is appeared after the name of KENON shows the average number of ethylene oxide units in the Nonylphenol Ethoxylate molecule. For example, KENON4 means a nonylphenol molecule which is reacted with average four molecules of ethylene oxide

Different Grades:

KENON 4, KENON 6, KENON 9, KENON 10, KENON 20, KENON 30, KENON 40

General Applications:

Nonylphenol Ethoxylates are used in a wide variety of applications, for instance detergent formulations, emulsifiers in many industries, paints and coatings, emulsion polymerization, and many others. Nonylphenol Ethoxylates surfactants are used anywhere there is a need for increased surface activity, and provide excellent all-purpose detergency and wetting, as well as solubilization and emulsification.

- Nonylphenol ethoxylate-4EO: Excellent oil-soluble surfactant, low HLB emulsifier.

Uses: Cleaners & degreasers, dry cleaning

- Nonylphenol ethoxylate-6EO: Excellent emulsifier, wetting agent, stabilizer, couples detergent range nonionics into hydrocarbon systems.

Uses: Cleaners & degreasers, dry cleaning, adhesives, agrochemicals



- Nonylphenol ethoxylate-9EO: Excellent detergency, outstanding wetting, good rinseability.

Uses: Cleaners & detergents, paper & textile processing, laundry, paints & coatings, dust control, agrochemicals, metalworking fluids

- Nonylphenol ethoxylate-10EO: excellent detergency, outstanding wetting, versatile solubility characteristics, and exceptional handling properties.

Uses: paints and coatings, paper and textile processing, cleaners and detergents, agrochemicals, and metalworking fluids, oilfield drilling and production formulations.

- Nonylphenol ethoxylate-30EO: Highly water soluble emulsifier & stabilizer, effective at high temperatures.

Uses: Wetting agents & stabilizers, emulsifiers & dispersants, agrochemicals, cleaners & detergents

- Nonylphenol ethoxylate-40EO: excellent detergency, outstanding wetting, versatile solubility characteristics and low odor.

Uses: This product is suggested for use in paper & textile processing, paints & coatings and agrochemicals.

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 Nonylphenol ethoxylates (KENONs), moreover customized packaging will be available according to customer's request.

Safety, Handling & Storage:

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



Ethoxylated Nonylphenol -4EO

Trade Name: **KENON 4**

Specification

No.	Test	Standard	References
1	Appearance at 20°C	Clear liquid	---
2	Color, pt-co	Max. 50	ASTM D1209
3	Viscosity @ 50°C, cP	45-55	ASTM D445-03
4	pH (5% in water)	5-7	ASTM D1172
5	HLB, calculated	8.9	---
6	Cloud point, °C (10% in 25% BDG)	54 - 60	ASTM D2024
7	Hydroxyl value, mg KOH/g	135 - 144	ASTM D4252
8	Water, percent	Max. 0.5	ASTM E203
9	Average Molecular Weight	397-417	---
10	HLB	8.4-8.9	---



Ethoxylated Nonylphenol - 6EO

Trade Name: **KENON 6**

Specification

No.	Test	Standard	Reference
1	Appearance at 20°C	Clear liquid	---
2	Color, pt-co	Max. 50	ASTM D1209
3	Density @ 25°C, g/cm ³	1.03 – 1.09	ASTM D1298
4	Viscosity at 25°C, cP	210-240	ASTM D445
5	pH (5% in water)	5-7	ASTM D1172
6	HLB	10.8-11.3	---
7	Cloud point, °C (10% in 25% BDG)	67 - 70	ASTM D2024
8	Hydroxyl value, mg KOH/g	115 - 120	ASTM D4252
9	Water, percent	Max. 0.5	ASTM E203
10	Average Molecular Weight	467-488	---



Ethoxylated Nonylphenol - 9EO

Trade Name: **KENON 9**

Specification

No.	Test	Standard	Reference
1	Appearance at 25°C	Clear liquid	---
2	Viscosity at 25°C, cP	225-255	ASTM D445-03
3	Density @ 25°C, g/cm ³	1.04-1.06	ASTM D1298
4	pH (5% in water)	4.5-7.5	ASTM E70
5	Acid Value, mgKOH/g	Max 0.2	USP 38-NF 33
6	HLB	12.9	---
7	Cloud point, °C (1% in water)	52 - 56	USP 38-NF 33
8	Hydroxyl value, mgKOH/g	86 - 95	ASTM D4252
9	Water, percent	Max. 0.5	ASTM E203
10	Polyethylene glycol, percent	Max. 1	USP 38-NF 33
11	Average Molecular Weight	590-650	---



Ethoxylated Nonylphenol - 10EO

Trade Name: **KENON 10**

Specification

No.	Test	Standard	Reference
1	Appearance @ 25°C	Clear liquid	---
2	Color, pt-co	Max. 50	ASTM D1209
3	Viscosity @ 25°C, c.st	230-260	ASTM D445-03
4	Density @ 25°C, g/cm ³	1.05 -1.07	ASTM D1298
5	pH (5% in water)	5-7	ASTM D1172
6	HLB	13.3-14.0	---
7	Cloud point (1% in DM water), °C	64 - 67	ASTM D2024
8	Hydroxyl value, mgKOH/g	85 - 89	ASTM D4252
9	Average Molecular Weight, g/mol	630-660	----
10	Moisture Content, %wt	Max. 0.5	ASTM E203



Ethoxylated Nonylphenol - 20EO

Trade Name: **KENON 20**

Specification

No.	Test	Standard	Reference
1	Appearance at 20°C	White Paste	---
2	Viscosity at 50°C, cP	ca. 110	ASTM D445-03
3	Density @ 50°C, g/cm ³	1.06 ±0.02	---
4	pH (5% in water)	5-7	ASTM E70
5	HLB	16	---
6	Cloud point, °C (1% in 10% Sodium Chloride)	70- 75	ASTM D2024
7	Hydroxyl value, mg KOH/g	48 - 54	ASTM D4252
8	Water, percent	Max. 0.5	ASTM E203
9	Average Molecular Weight, g/mol	1038-1168	---



Ethoxylated Nonylphenol - 30EO

Trade Name: **KENON 30**

Specification

No.	Test	Standard	Reference
1	Appearance at 25°C	White Solid	---
2	Viscosity at 50°C, cP	ca. 155	ASTM D445-03
3	Density @ 50°C, g/cm ³	1.07±0.02	
3	pH (5% in water)	5-7	ASTM E70
4	HLB	17.1	---
5	Cloud point, °C (1% in 10% Sodium Chloride)	74 – 78	ASTM D2024
6	Hydroxyl value, mg KOH/g	34 – 39	ASTM D4252
7	Water, percent	Max. 0.5	ASTM E203
8	Average Molecular Weight, g/mol	1438-1650	---



Ethoxylated Nonylphenol - 40EO

Trade Name: **KENON 40**

Specification

No.	Test	Standard	Reference
1	Appearance at 20°C	White Solid	---
2	Color, pt-co	Max. 50	ASTM D1209
3	Viscosity at 50°C, cP	ca. 220	ASTM D445-03
4	Density @ 50°C, g/cm ³	1.07±0.02	
5	pH (5% in water)	5-7	ASTM E70
6	HLB	17.8	---
7	Cloud point, °C (1% in 10% Sodium Chloride)	76 – 80	ASTM D2024
8	Hydroxyl value, mg KOH/g	26 – 30	ASTM D4252
9	Water, percent	Max. 0.5	ASTM E203

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