

Sorbitan Ester Ethoxylate (KEPS)



KIMYAGARAN
Emrooz
Chemical Industries Co.

Technical Data Sheet



Sorbitan Ester Ethoxylates (Polysorbates) (KEPS)

Chemical Name:

Sorbitan Ester Polyethylene Glycol Ether

Trade Name:

KEPS

Introduction:

Polysorbates are oily liquids produced by ethoxylation of sorbitan esterified with fatty acids. All of them have 20 ethylene oxide units in the molecule. The number following the name of polysorbate is related to the type of fatty acid associated with the polyoxyethylene sorbitan part of the molecule.

Different grades:

KEPS 20, KEPS 60, KEPS 80

General Applications:

Polysorbates are a class of emulsifiers used in pharmaceuticals and food formulations. They are often used in cosmetics to solublize essential oils into water-based products. KEPS 60 is used in many skin care products, skin cleansing products, makeup bases and foundations, shampoos, permanent waves and fragrance powders. KEPS 80 is used in many skin care products, skin cleansing products, makeup bases and foundations, shampoos, permanent waves and fragrance powders.

Packaging:

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

Notice:



We can produce other types of Polysorbates (KEPSs), moreover customized packaging will be available according to customer's request.

Safety, Handling & Storage:

Full information on the safety, handling and storage of KEPSs is available in the corresponding Material Safety Data Sheet ([MSDS of KEPS 60](#) or [MSDS of KEPS 80](#)).



Polysorbate 20

Trade Name: **KEPS 20**

Specification

No.	TEST	STANDARD	Unit	Ref
1	Identification	Infrared Absorption	-	USP41-NF36
2	Acid value	Max. 2.0	mg KOH/g	USP41-NF36
3	Hydroxyl Value	96-108	mg KOH/g	USP41-NF36
4	Saponification value	40-50	mg KOH/g	USP41-NF36
5	Water (on 1.0 g sample)	Max. 3.0	% Wt	USP41-NF36
6	Residue on Ignition	Max. 0.25	% Wt	USP41-NF36



Polysorbate 60

Trade Name: **KEPS 60**

Specification

No.	TEST	STANDARD	Unit	Ref
1	Identification	Infrared Absorption	–	USP41-NF36
2	Acid value	Max. 2.0	mg KOH/g	USP41-NF36
3	Hydroxyl value	81-96	mg KOH/g	USP41-NF36
4	Saponification value	45-55	mg KOH/g	USP41-NF36
5	Water (on 1.0 g sample)	Max. 3.0	% Wt	USP41-NF36
6	Residue on Ignition	Max. 0.25	% Wt	USP41-NF36
7	Heavy Metals	Max. 10	ppm	USP41-NF36
8	Ethylene Oxide & Dioxane	Max. 1 & 10	ppm	USP41-NF36



Polysorbate 80

Trade Name: **KEPS 80**

Specification

TEST	STANDARD	Unit	Ref
Identification	Complies for composition of fatty acids	–	USP41-NF36
Viscosity @ 25 °C	300 – 500	CSt	USP41-NF36
Specific Gravity	1.06 – 1.09	–	USP41-NF36
Acid value	Max. 2.0	mg KOH/g	USP41-NF36
Hydroxyl Value	65-80	mg KOH/g	USP41-NF36
Saponification value	45-55	mg KOH/g	USP41-NF36
Water (on 1.0 g sample)	Max. 3.0	% Wt	USP41-NF36
Residue on Ignition	Max. 0.25	% Wt	USP41-NF36
Heavy Metals	Max. 10	ppm	USP41-NF36
EO &Dioxane	Max. 1 & 10	ppm	USP41-NF36
Assay	Myristic acid NMT 5.0 Palmitic acid NMT 16.0 Palmitoleic acid NMT 8.0 Stearic acid NMT 6.0 Oleic acid NLT 58.0 Linoleic acid NMT 18.0 Linolenic acid NMT 4.0	% Wt	USP41-NF36
Peroxide Value	Max. 10	mgO ₂ /g	USP41-NF36
Residual solvents	Defined as Organic volatile chemicals	ppm	USP41-NF36