




Emulsions & micro emulsions, SEDDS, SMEDDS, SNEEDS

Functionality	Product	Description	Monograph title*/Chemical name
Emulsifiers/ Solubilizers	Kolliphor® RH 40	Nonionic solubilizer. High acceptability in SEDDS formulations.	Ph.Eur.: Macrogolglycerol hydroxystearate; USP/NF: Polyoxyl 40 hydrogenated castor oil
	Kolliphor® HS 15	Nonionic solubilizer in paste form used in combination with a matrix polymer.	Ph.Eur.: Macrogol 15 hydroxystearate; USP/NF: Polyoxyl 15 hydroxystearate
	Kolliphor® EL	Nonionic solubilizer. High acceptability in SEDDS formulations.	Ph.Eur.: Macrogolglycerol ricinoleate; USP/NF: Polyoxyl 35 castor oil; polyoxyl 35 castor oil
	Kolliphor® ELP	Purified Kolliphor® EL, especially for sensitive active ingredients to improve their stability.	Ph.Eur.: Macrogolglycerol ricinoleate; USP/NF: Polyoxyl 35 castor oil
	Kolliphor® SLS 	Ionic solubilizer and emulsifier.	Ph.Eur.: Sodium laurilsulfate; USP/NF, JP: Sodium lauryl sulfate
	Kolliphor® P 188 Geismar	Polymeric solubilizer, emulsifier and plasticizer.	Ph.Eur., USP/NF, JP: Poloxamer 188; JPE: Polyoxyethylene (160) polyoxylpropylene (30) glycol
	Kolliphor® P 338 Geismar	Polymeric solubilizer, emulsifier and plasticizer.	Ph.Eur., USP/NF, JP: Poloxamer 338
	Kolliphor® P 407 Geismar	Polymeric solubilizer, emulsifier and plasticizer.	Ph.Eur., USP/NF, Poloxamer 407; JPE: Polyoxyethylene (196) polyoxylpropylene (67) glycol
	Kolliphor® PS 20 	Nonionic solubilizer, emulsifier and co-emulsifier.	Ph.Eur., USP/NF: Polysorbate 20
	Kolliphor® PS 60	Nonionic solubilizer, emulsifier and co-emulsifier.	Ph.Eur., USP/NF, JPE: Polysorbate 60
	Kolliphor® PS 80 	Nonionic solubilizer, emulsifier and co-emulsifier.	Ph.Eur., USP/NF: Polysorbate 80
	Kolliphor® P 124 Geismar	High acceptability in SEDDS formulations.	Ph.Eur., USP/NF: Poloxamer 124; JPE: Polyoxyethylene (20) polyoxylpropylene (20) glycol
Solvents	Kollisol® PG	Solvent for oral and topical applications.	Ph.Eur., USP/NF, JP, FCC: Propylene glycol
	Kollisol® PEG 300	Solvent for oral and topical applications.	Ph.Eur.: Macrogols; USP/NF: Polyethylene glycol, JPE: Macrogol 300; FCC: Polyethylene glycols
	Kollisol® PEG 300 G	Solvent for oral and topical applications.	Ph.Eur.: Macrogols; USP/NF: Polyethylene glycol
	Kollisol® PEG 400	Solvent for oral and topical applications.	Ph.Eur.: Macrogols; USP/NF: Polyethylene glycol; JP: Macrogol 400; FCC: Polyethylene glycols
	Kollisol® PEG 400 G	Solvent for oral and topical applications.	Ph.Eur.: Macrogols; USP/NF: Polyethylene glycol
	Kollisol® P 124 Geismar	Solvent for APIs, dispersing agent for liquid dispersions, stabilizer and co-emulsifier in semi-solid formulations.	Ph.Eur., USP/NF, JPE: Polyoxyethylene (20) polyoxypropylene (20) glycol
	Kollisol® GTA	Commonly used, both semi-hydrophilic and semi-hydrophobic solvent.	Ph.Eur., USP/NF: Triacetin
	Kollisol® PYR	Solvent for injectables and oral formulations for animal health.	Ph.Eur.: Pyrrolidone



Functionality	Product	Description	Monograph title*/Chemical name
Lipids	Kollisol [®] MCT 70	Solubilizer for lipophilic drugs.	Ph.Eur.: Triglycerides, medium-chain, USP/NF: Medium-chain triglycerides
Co-solvents	Kollisol [®] PEG 300	Solvent for oral and topical applications.	Ph.Eur.: Macrogols; USP/NF: Polyethylene glycol, JPE: Macrogol 300; FCC: Polyethylene glycols
	Kollisol [®] PEG 300 G	Solvent for oral and topical applications.	Ph.Eur.: Macrogols; USP/NF: Polyethylene glycol
	Kollisol [®] PEG 400	Solvent for oral and topical applications.	Ph.Eur.: Macrogols; USP/NF: Polyethylene glycol; JP: Macrogol 400; FCC: Polyethylene glycols
	Kollisol [®] PEG 400 G	Solvent for oral and topical applications.	Ph.Eur.: Macrogols; USP/NF: Polyethylene glycol
	Kollisol [®] P 124 Geismar	Solvent for APIs, dispersing agent for liquid dispersions, stabilizer and co-emulsifier in semi-solid formulations.	Ph.Eur., USP/NF, JPE: Polyoxyethylene (20) polyoxypropylene (20) glycol
	Kollisol [®] GTA	Commonly used solvent.	Ph.Eur., USP/NF: Triacetin
	Kollisol [®] PYR	Solvent for injectables and oral formulations for animal health.	Ph.Eur.: Pyrrolidone

Suspensions

Functionality	Product	Description	Process			Monograph title*/Chemical name
			Physical mixing, e.g. wet granulation	Melt granulation	Spray drying	
Reduction of sedimentation	Kollidon [®] CL-M	Reduces sedimentation by steric effects. Insoluble.		■		Ph.Eur., USP/NF, JP: Crospovidone type B
	Kolliphor [®] P 407 Geismar	Thickening agent and gel former, as a co-emulsifier and viscosity enhancer in creams and liquid emulsions. Also stabilizes topically and orally administered suspensions and is used in tooth-pastes, gargles and mouthwashes. Used in sustained release formulations.	■	■	■	Ph.Eur., USP/NF, Poloxamer 407; JPE: Polyoxyethylene (196) polyoxypropylene (67) glycol
	Kollidon [®] 90 F P	Reduces sedimentation by viscosity enhancement. Soluble in water and many organic solvents.	■		■	Ph.Eur., USP/NF, JP: Povidone
Redispersing agent	Kollidon [®] CL-M	Sedimentation inhibitor in suspensions.		■		Ph.Eur., USP/NF, JP: Crospovidone type B
	Kollidon [®] 90 F P	Reduces sedimentation by viscosity enhancement. Soluble in water and many organic solvents.	■		■	Ph.Eur., USP/NF, JP: Povidone
	Kolliphor [®] HS 15	Nonionic solubilizer in paste form used in combination with a matrix polymer.	■	■	■	Ph.Eur.: Macrogol 15 hydroxystearate; USP/NF: Polyoxyl 15 hydroxystearate
	Kollidon [®] 12 PF P Kollidon [®] 17 PF P	Low-molecular weight povidone that is endotoxin controlled. Crystallization inhibitor and stabilizer in injectables and ophthalmic products.	■	■	■	Ph.Eur., USP/NF, JP: Povidone