



**Focusing on your needs  
with platform solutions.**

Pharma Ingredients & Services  
Product Overview 2016

 **BASF**

We create chemistry

# Delivering what matters

We produce excipients and active ingredients of outstanding quality and performance. Our team of experienced industry specialists supports you in developing effective, reliable formulations – giving you a vital advantage in a highly competitive market.

Equipped with an in-depth understanding of multiple industries, technologies, and applications, we have the skills and resources to make drug manufacturing more efficient, robust, and cost-effective.

Whether you want to make your medicine more effective, safer, or just more patient-friendly, BASF has the solution you need. This brochure presents an overview of our leading-edge products, grouped in the following platforms: Instant and Modified Release, Solubilization, Skin Delivery, and Soft Gels. Details on functionality are clearly provided for each product – allowing you to quickly and easily find the right answers to your pharmaceutical formulation challenges.

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A close-up, artistic photograph of an hourglass. The top bulb is filled with a vibrant red liquid, which is dripping through the narrow neck into the bottom bulb. The background is softly blurred, showing other hourglasses with different colored liquids, creating a sense of depth and precision. The lighting is bright and even, highlighting the glass's texture and the liquid's color.

## Instant & Modified Release

BASF's rich portfolio of instant and modified release solutions offers an unprecedented range of functionality. Our high-quality, industry-leading products enable you to formulate pharmaceuticals with the exact release properties you desire. This ensures the right results every time – giving you that all-important competitive edge.

We are a trusted industry player with a proven track record, going back to the invention of PVP (marketed under the brand name Kollidon) in the 1930s. And we have continued to expand and enhance our portfolio ever since – with innovative, multifunctional excipients such as Kollicoat IR, Kollidon VA64, and Ludiflash. These products reflect our dedication to highly effective, reliable, and resource-efficient solutions that help you confidently design the dosage form that you need.

# Instant & Modified Release

## Core formulation

Functionality	Process			Form			Product
	Direct compression	Dry granulation (incl. roll compaction)	Wet granulation	Tablets & capsules	Powders (granules & multiparticulates, pellets)	ODT	
Binding			■	■	■		Kollidon 25 / Kollidon 30 <span style="float: right;">P</span>
			■	■	■		Kollidon 30 LP <span style="float: right;">P</span>
			■	■	■		Kollidon 90F <span style="float: right;">P</span>
			■	■	■		Kollicoat IR
	■	■	■	■	■		Kollidon VA64
	■	■		■	■		Kollidon VA64 Fine
	■	■			■		Kollidon CL-M <span style="float: right;">P</span>
	■	■		■	■	■	Kollidon CL-SF <span style="float: right;">P</span>
			■	■		Kollicoat SR 30 D	
Disintegration	■		■	■	■		Kollidon CL <span style="float: right;">P</span>
	■		■	■	■	■	Kollidon CL-F <span style="float: right;">P</span>
	■	■	■	■	■	■	Kollidon CL-SF <span style="float: right;">P</span>
		■		■	■		Kollidon CL-M
Matrices & fillers***			■	■	■		Kollicoat SR 30 D
	■		■	■	■		Kollidon SR
	■	■		■	■	■	Ludiflash
	■	■		■	■		Ludipress
	■	■		■	■		Ludipress LCE
Wetting / dissolution enhancement			■	■			Kolliphor SLS Fine
			■	■			Kolliphor P188 micro
			■	■			Kolliphor P407 micro
Lubrication	■	■		■			Kolliphor SLS Fine
	■	■		■			Kolliphor P188 micro
	■	■		■			Kolliphor P407 micro
	■	■		■			Kolliwax SA
	■	■		■			Kolliwax S Fine
	■	■		■			Kolliwax HCO

## Core formulation

Description	Monography name*/Chemical name
The Original. Medium molecular weight binder with low peroxide level thanks to Peroxeal packaging leading to extended shelf life.	Ph. Eur., USP, JPE: Povidone
Our Original as Low Peroxide grade using antioxidants.	Ph. Eur., USP, JPE: Povidone
High molecular weight binder with best binding capacity for formulations that need highest binding efficiency.	Ph. Eur., USP, JPE: Povidone
Powerful and peroxide free wet binder for oxidation-sensitive drugs.	Ph. Eur.: Macrogol Poly(vinyl alcohol) Grafted Copolymer; USP-NF: Ethylene Glycol and Vinyl Alcohol Graft Copolymer; JPE**
For direct compression, roller compaction and wet granulation, suitable for markets with higher humidity exposure.	Ph. Eur., USP: Copovidone; JEP: Copolyvidone
Thanks to fine particles, highly efficient binder for roller compaction and direct compression. Suitable for markets with high humidity exposure.	Ph. Eur., USP: Copovidone; JEP: Copolyvidone
Due to micronized particles, excellent choice for roller compaction and direct compression including disintegration functionality.	Ph. Eur., USP, JPE: Crospovidone Type B
2 in 1 functionality – efficient dry binder & fast disintegrant suitable for roller compaction.	Ph. Eur., USP, JPE: Crospovidone Type B
Latex dispersion for wet granulation of sustained release granules & matrix tablets.	Ph. Eur.: Poly(vinyl acetate) dispersion 30 per cent; USP: Polyvinyl Acetate Dispersion
Choose if you need maximum disintegration.	Ph. Eur., USP, JPE: Crospovidone Type A
First choice due to balance of strong disintegration and optimal surface homogeneity.	Ph. Eur., USP, JPE: Crospovidone Type A
Particularly suitable for small tablets and ODTs, providing very pleasant mouthfeel due to finer particles.	Ph. Eur., USP, JPE: Crospovidone Type B
Our disintegrant with micronized, thus finest particles, particularly suitable for small tablets, granules & pellets.	Ph. Eur., USP, JPE: Crospovidone Type B
Latex dispersion for wet granulation of sustained release granules & matrix tablets.	Ph. Eur.: Poly(vinyl acetate) dispersion 30 per cent; USP: Polyvinyl Acetate Dispersion
First choice to create non-erodible matrices using direct compression.	80 % PVAc, 19 % Povidone, 0.8 % SLS, 0.2 % Silica
Ready-to-use ODT solution with superior mouthfeel.	90 % mannitol, 5 % crospovidone, 5 % polyvinyl acetate
Ready-to-use direct compression solution for tablets.	93 % Lactose, 3.5 % Povidone, 3.5 % Crospovidone
Ready-to-use direct compression solution for lozenges, chewables and effervescent tablets.	93 % Lactose, 3.5 % Povidone, 3.5 % Crospovidone
Wetting agent in tableting, reduces disintegration time.	Ph. Eur.: Sodium Laurilsulfate; USP/NF, JP: Sodium Lauryl Sulfate
An average particle size of 50 micron makes it an effective dissolution enhancer, lubricant and dispersing/wetting agent.	Ph. Eur., USP/NF, JP: Poloxamer 188
An average particle size of 50 micron makes it an effective dissolution enhancer, lubricant and dispersing/wetting agent.	Ph. Eur., USP/NF, JP: Poloxamer 407
Hydrophilic lubricant. Due to its water solubility particularly suitable for effervescent tablets.	Ph. Eur.: Sodium Laurilsulfate; USP/NF, JP: Sodium Lauryl Sulfate
Hydrophilic lubricant. Due to its water solubility particularly suitable for effervescent tablets.	Ph. Eur., USP/NF, JP: Poloxamer 188
Hydrophilic lubricant. Due to its water solubility particularly suitable for effervescent tablets.	Ph. Eur., USP/NF, JP: Poloxamer 407
Lipophilic lubricant. 1st choice for sensitive acidic APIs.	Ph. Eur., USP/NF, JP: Stearyl Alcohol
Lipophilic lubricant. Particularly suitable for sensitive APIs.	Ph. Eur., USP/NF, JP: Stearic Acid 50
Lipophilic lubricant. Particularly suitable for sensitive APIs.	Ph. Eur., BP: Caster oil, hydrogenated, NF: Hydrogenated castor oil, JPE: Hydrogenated Oil

▣ Packed in Peroxeal packaging. \*Monograph references were updated at time of printing, please visit us online for the latest status \*\*JPE also available \*\*\*For matrices in solid dispersions please refer to our Solubilization platform.

# Instant & Modified Release

## Coating formulation

Functionality	Process		Release			Form		Product
	Aqueous	Other***	Instant	Enteric	Sustained	Tablets & capsules	Powders	
Film forming	■	■	■			■	■	Kollicoat IR
	■		■			■	■	Kollicoat IR Coating Systems
	■		■			■	■	Kollicoat Protect
	■		■			■	■	Kollicoat Smartseal 30 D
	■			■		■	■	Kollicoat MAE 30 DP
	■	■		■		■	■	Kollicoat MAE 100 P
	■				■	■	■	Kollicoat SR 30 D
	■	■			■		■	Kolliwax HCO
Plasticizing	■	■	■			■	■	Kollidon VA64
						■	■	Kollisolv GTA
						■	■	Kolliphor RH40
						■	■	Kolliphor HCO
						■	■	Kollisolv PG
						■	■	Kollisolv PEG 300
						■	■	Kollisolv PEG 400
Taste masking	■		■			■	■	Kollicoat Smartseal 30 D
	■		■			■	■	Kollicoat SR 30 D
Moisture protection	■		■			■	■	Kollicoat Protect
	■		■			■	■	Kollicoat Smartseal 30 D
	■		■			■	■	Kollidon VA64

## Coating formulation

Description	Monography name*/Chemical name
Our robust yet flexible water soluble instant release coating polymer. Thanks to its low viscosity & high flexibility it's very efficient & easy to handle.	Ph. Eur.: Macrogol Poly(vinyl alcohol) Grafted Copolymer; USP-NF:Ethylene Glycol and Vinyl Alcohol Graft Copolymer; JPE**
Ready-to-use pigmented coating system based on Kollicoat IR formulated for easy handling and improved productivity. Create your own colors from seven colors based on US/EU/JP approved pigments.	Physical mixture of Kollicoat® IR and monographed raw materials
Our highly water-impermeable, instant release coating polymer for moisture and oxygen protection of sensitive APIs.	Physical mixture of Kollicoat® IR and monographed raw materials
Highly effective taste masking at very low coating levels. Specifically suitable for pellets & particles for ODTs due to easy and non-tacky processability.	Methyl-methacrylate - diethylaminoethyl methacrylate co-polymer
Enteric coating with release above pH 5.5, coming as a 30 % solids content dispersion.	Ph. Eur.: Methacrylic Acid – Ethyl Acrylate copolymer (1:1) dispersion 30 per cent; USP: Methacrylic Acid Copolymer Dispersion; JPE**
Enteric coating with release above pH 5.5, coming as partially preneutralized powder saving you the neutralization step.	Ph. Eur.: Methacrylic Acid – Ethyl Acrylate copolymer (1:1), Type B; USP-NF: Partially-Neutralized Methacrylic Acid and Ethyl Acrylate copolymer
pH-independent sustained release film coating polymer used to film coat small particles, pellets, granules and tablets.	Ph. Eur.: Poly(vinyl acetate) dispersion 30 per cent; USP: Polyvinyl Acetate Dispersion
Used for sustained release melt coating.	Ph. Eur.: Castor Oil Hydrogenated; USP/NF: Hydrogenated Castor Oil; JP: Hydrogenated Oil
Aqueous sugar film coating for thinner films and a faster process. Organic subcoating for highly moisture sensitive cores.	Ph. Eur., USP: Copovidone; JEP: Copolyvidone
Plasticizer particularly suitable for tablet coatings.	Ph. Eur., USP: Triacetin
Plasticizer used in coatings and in solid polymeric matrices.	Ph. Eur.: Macrogolglycerol hydroxystearate; USP: Polyoxyl 40 Hydrogenated Caster Oil
Plasticizer used in coatings and in solid polymeric matrices.	Ph. Eur.: Castor Oil Hydrogenated; USP/NF: Hydrogenated Castor Oil; JP: Hydrogenated Oil
Liquid plasticizer with high ADI, commonly used in softgels and in coatings with enteric polymers like Kollicoat MAE 30 DP.	Ph. Eur., JP, FCC, USP: Propylene Glycol
Liquid plasticizer commonly used in tablet coatings. Also used as solvent in liquid formulations.	Ph. Eur.: Macrogols; USP: Polyethylene Glycol, JPE: Macrogol 300; FCC: Polyethylene Glycols
Liquid plasticizer commonly used in tablet coatings. Also used as solvent in liquid formulations.	Ph.Eur: Macrogols; USP: Polyethylene Glycol; JP: Macrogol 400; FCC: Polyethylene Glycols
Liquid plasticizer commonly used in tablet coatings.	Ph. Eur., USP/NF, JP: Poloxamer 124
Highly effective taste masking, providing efficacy already at very low coating levels. Specifically suitable for pellets and particles for ODTs due to its easy and non-tacky processability.	Methyl-methacrylate – diethylaminoethyl methacrylate co-polymer
When applied as thin coating layer, Kollicoat SR 30 D provides basic taste masking properties.	Ph. Eur.: Poly(vinyl acetate) dispersion 30 per cent; USP: Polyvinyl Acetate Dispersion
In combination with pigments or talc, Kollicoat Protect provides an effective moisture barrier to your dosage form.	Polyvinyl alcohol-polyethylene glycol copolymer and polyvinyl alcohol (PVA), physical mixture of Kollicoat® IR and monographed raw materials
Kollicoat Smartseal has the lowest water vapor permeation available and can be applied as clear coat providing full moisture protection.	Methyl-methacrylate – diethylaminoethyl methacrylate co-polymer
When added to Kollicoat IR or Kollicoat Protect, Kollidon VA64 further reduces the water vapor permeation rate.	Ph. Eur., USP: Copovidone; JEP: Copolyvidone

\*Monograph references were updated at time of printing, please visit us online for the latest status \*\*JPE also available \*\*\*Drug/powder layering, sugar coating, melt coating, organic film coating

## Coating formulation

Functionality	Process		Release			Form		Product
	Aqueous	Other***	Instant	Enteric	Sustained	Tablets & capsules	Powders	
Pore forming	■		■			■	■	Kollicoat IR
	■			■		■	■	Kollicoat MAE 30 DP
	■	■		■		■	■	Kollicoat MAE 100 P
	■		■			■	■	Kollidon 12PF/17PF/25/30/90F
	■		■			■	■	Kollidon VA64
	■				■	■	■	Kolliphor HCO
	■	■				■	■	Kolliwax S Fine

## Oral liquid & oral semi-solid formulations

Functionality	Product	Description
Taste masking	Kollidon 25/Kollidon 30	Complexate with API providing solubilization and taste masking in liquid formulations.
	Kollisolv PEG 300/400/800/8000	Complexate with API providing solubilization and taste masking in liquid formulations.
	Kollidon CL-M	In suspensions, Kollidon CL-M complexates & adsorbes drug molecules
	Kolliphor RH40	Forms micelles enveloping bitter drug molecules.
	Kolliphor P407	Forms micelles enveloping bitter drug molecules.
Viscosity enhancement	Kollidon 90F	Viscosity modifier/thickener for syrups, liquid suspensions, powder for suspensions or oral solutions.
	Kollidon 30	Viscosity modifier/thickener for syrups, liquid suspensions, powder for suspensions or oral solutions.
	Kollidon 12PF	Viscosity modifier for parenteral or ophthalmic injection/powder for injection.
	Kollidon 17PF	Viscosity modifier for parenteral or ophthalmic injection/powder for injection.
	Kolliphor P407	Thickener/gel former/co-emulsifier in creams and liquid emulsions. Stabilizes topical/oral suspensions. Used in tooth-pastes, gargles and mouthwashes.
Stabilization	Kollidon 25/30	Acts as stabilizer in oral solutions and suspensions.
	Kollidon 30 LP	Acts as stabilizer in oral solutions and suspensions.
	Kolliphor P188	Acts as stabilizer in oral suspensions.
	Kollidon CL-M	Acts as stabilizer in dispersions.
	Kolliphor P407	Stabilizes topically and orally administered suspensions and is used in tooth-pastes, gargles and mouthwashes.
Wetting /dissolution enhancement	Kollisolv P124	Dispersing and wetting agent for liquid dispersions.
	Kolliphor P188 micro	Effective dissolution enhancer due to Ø particle size of 50µm. Lubricant and dispersing/wetting agent.
	Kolliphor P407	Dispersing/wetting agent, used as co-emulsifier in liquid emulsions.
	Kolliphor P407 micro	Effective dissolution enhancer due to Ø particle size of 50µm. Lubricant and dispersing/wetting agent.
	Kolliphor RH40	Emulsifier in oral and topical liquid and semi-solid dosage forms.



## Core formulation

Description	Monography name* / Chemical name
Peroxide free water-soluble pore former for sustained release tablets and pellet coating.	Ph. Eur.: Macrogol Poly(vinyl alcohol) Grafted Copolymer; USP-NF: Ethylene Glycol and Vinyl Alcohol Graft Copolymer; JPE**
Aqueous dispersion for use as pore former for targeted opening in the intestine to avoid release in the stomach.	Ph. Eur.: Methacrylic Acid - Ethyl Acrylate copolymer (1:1) dispersion 30 per cent; USP: Methacrylic Acid Copolymer Dispersion; JPE**
Pre-neutralized powderous pore former for targeted opening in the intestine to avoid release in the stomach.	Ph. Eur.: Methacrylic Acid - Ethyl Acrylate copolymer (1:1), Type B; USP-NF: Partially-Neutralized Methacrylic Acid and Ethyl Acrylate copolymer
Soluble pore formers for sustained release tablet or pellet coating. Kollidon 30 is already component of Kollicoat SR 30 D.	Ph. Eur., USP, JPE: Povidone
Soluble pore former for sustained release tablet coatings.	Ph. Eur., USP: Copovidone; JEP: Copolyvidone
Slows down drug release when used as pore former in sustained release formulations.	Ph. Eur.: Castor Oil Hydrogenated; USP/NF: Hydrogenated Castor Oil; JP: Hydrogenated Oil
In combination with Kollicoat SR 30 D, Kolliwax S Fine creates sintered sustained release profiles.	Ph. Eur.: Stearic Acid 50; USP/NF, JP: Stearic Acid

## Oral liquid & oral semi-solid formulations

Monography name* / Chemical name
Ph. Eur., USP, JPE: Povidone
Ph. Eur.: Macrogols; USP: Polyethylene Glycol, JPE: Macrogol; FCC: Polyethylene Glycols
Ph. Eur., USP, JPE: Crospovidone Type B
Ph. Eur.: Macrogolglycerolhydroxystearate 40; USP/NF: Polyoxyl 40 Hydrogenerated Castor Oil
Ph. Eur., USP/NF, JP: Poloxamer 407
Ph. Eur., USP, JPE: Povidone
Ph. Eur., USP, JPE: Povidone
Ph. Eur., USP, JPE: Povidone
Ph. Eur., USP, JPE: Povidone
Ph. Eur., USP/NF, JP: Poloxamer 407
Ph. Eur., USP, JPE: Povidone
Ph. Eur., USP, JPE: Povidone
Ph. Eur., USP/NF, JP: Poloxamer 188
Ph. Eur., USP, JPE: Povidone
Ph. Eur., USP/NF, JP: Poloxamer 407
Ph. Eur., USP/NF, JP: Poloxamer 124
Ph. Eur., USP/NF, JP: Poloxamer 188
Ph. Eur., USP/NF, JP: Poloxamer 407
Ph. Eur., USP/NF, JP: Poloxamer 407
Ph. Eur.: Macrogolglycerolhydroxystearate 40; USP/NF: Polyoxyl 40 Hydrogenerated Castor Oil



## **Solubilization**

Poorly soluble drugs are one of the major challenges facing pharmaceutical manufacturers. At BASF, we offer a wide range of cutting-edge solubilization polymers, and have an unparalleled understanding of the corresponding process technology. This unique combination means we can ensure you achieve effective solubilization across a range of dosage forms – particularly in solid dispersions.

What's more, BASF is a highly successful pioneer in the application of hot-melt extrusion technology in pharmaceutical production – helping you to combine effectiveness with cost efficiency.

# Solubilization

## Solid dispersions

Functionality	Product	Description	Process				Monography name*/Chemical name
			Physical mixing	Melt granulation	Spray drying	HME**	
Solubility enhancement	Soluplus	Polymer designed for solid solutions. Soluplus® can increase solubility & bioavailability. Ideal for HME.	■	■	■	■	Polyvinyl caprolactam – polyvinyl acetate – polyethylene glycol graft copolymer
	Kolliphor RH40	Nonionic solubilizer.	■	■	■	■	Ph. Eur.: Macrogolglycerol hydroxystearate; USP: Polyoxyl 40 Hydrogenated Caster Oil
	Kolliphor TPGS	Solubilizer, antioxidant, absorption enhancer, emulsifier and lipid-based drug delivery vehicle. Source of Vitamin E.	■	■	■	■	USP/NF: Vitamin E Polyethylene Glycol Succinate
	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.	■	■	■	■	Ph. Eur.: Macrogolglycerol Ricinoleate 35; USP/NF: Polyoxyl 35 Castor Oil
	Kolliphor ELP	Purified Kolliphor EL, especially for sensitive active ingredients.	■	■	■	■	Ph. Eur.: Macrogolglycerol Ricinoleate 35; USP/NF: Polyoxyl 35 Castor Oil
	Kolliphor SLS	Ionic solubilizer & emulsifier.	■	■	■	■	Ph. Eur.: Sodium Laurilsulfate; USP/NF,JP: Sodium Lauryl Sulfate
	Kolliphor P188	Polymeric solubilizer, emulsifier and plasticizer.	■	■	■	■	Ph. Eur., USP/NF, JP: Poloxamer 188
	Kolliphor P338	Polymeric solubilizer, emulsifier and plasticizer.	■	■	■	■	Ph. Eur., USP/NF, JP: Poloxamer 338
	Kolliphor P407	Polymeric solubilizer, emulsifier and plasticizer.	■	■	■	■	Ph. Eur., USP/NF, JP: Poloxamer 407
	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: Polysorbate 60
	Kolliphor PS 80	Nonionic solubilizer, emulsifier and co-emulsifier.	■	■	■	■	Ph. Eur., USP/NF: Polysorbate 80
	Kollidon 12 PF	Pyrogen-free, low-molecular weight povidone used as a solubilizing matrix.	■	■	■	■	Ph. Eur., USP, JPE: Povidone
	Kollidon 17 PF	Pyrogen-free, low-molecular weight povidone used as a solubilizing matrix.	■	■	■	■	Ph. Eur., USP, JPE: Povidone
Kollidon 25/30	Medium-molecular weight povidone for solubilization, dispersion and crystallization inhibition.	■	■	■	■	Ph. Eur., USP, JPE: Povidone	
Kollidon 90 F	High-molecular weight povidone for solubilization, dispersion and crystallization inhibition.	■	■	■	■	Ph. Eur., USP, JPE: Povidone	

\*Monography references were updated at time of printing, please visit us online for the latest status \*\*Hot melt extrusion

# Solubilization

## Solid dispersions

Functionality	Product	Technology				Positioning	Monography name* / Chemical name
		Physical mixing	Melt granulation	Spray drying	HME**		
<b>Matrices</b>	Soluplus	■	■	■	■	Polymer designed for solid solutions. Provides matrix and can increase solubility & bioavailability. Ideal for HME.	Polyvinyl caprolactam – polyvinyl acetate – polyethylene glycol graft copolymer
	Kollidon VA64		■	■	■	Erodible instant release matrix, solubilizer, dispersant, crystallization inhibitor. Commonly used in HME.	Ph. Eur., USP: Copovidone; JEP: Copolyvidone
	Kollidon SR		■	■	■	Controlled release matrix.	80 % Polyvinyl acetate and 19% povidone, 0.8 % lauryl sulfate & 0.2 % silica
	Kollidon 12 PF		■	■	■	Pyrogen-free, low-molecular weight povidone. Used as a solubilizing matrix, crystallization inhibitor and stabilizer.	Ph. Eur., USP, JPE: Povidone
	Kollidon 17 PF		■	■	■	Pyrogen-free, low-molecular weight povidone. Used as a solubilizing matrix, crystallization inhibitor and stabilizer.	Ph. Eur., USP, JPE: Povidone
	Kollidon 25		■	■	■	For instant release matrices including solubilization & crystallization inhibition.	Ph. Eur., USP, JPE: Povidone
	Kollidon 30			■		For instant release matrices including solubilization & crystallization inhibition. Suitable for spray drying.	Ph. Eur., USP, JPE: Povidone
	Kollidon 90 F			■		High-molecular weight povidone that provides immediate release matrix.	Ph. Eur., USP, JPE: Povidone
	Kollicoat MAE 100 P			■	■	For enteric matrixes, solid solutions for delayed release drug delivery systems.	Ph. Eur.: Methacrylic Acid - Ethyl Acrylate copolymer (1:1), Type B; USP-NF: <sup>1</sup>
	Kollicoat IR		■	■		Polymer for immediate release matrices.	Ph. Eur.: Macrogol Poly(vinyl alcohol) Grafted Copolymer; USP-NF: Ethylene Glycol and Vinyl Alcohol Graft Copolymer; JPE also available
	Kollicoat Protect		■	■	■	Polymer combination for immediate release matrices.	Physical mixture of Kollicoat® IR and monographed raw materials
<b>Antioxidation</b>	Kolliphor TPGS	■	■	■	■	Antioxidant, solubilizer, absorption enhancer, emulsifier and lipid-based drug delivery vehicle. Source of Vitamin E.	USP/NF: Vitamin E Polyethylene Glycol Succinate
<b>Plasticizing &amp; reduction of glass transition temperature</b>	Kollisolv GTA		■	■	■	Liquid plasticizer.	Ph. Eur., USP/NF: Triacetin
	Kollisolv PEG 300			■	■	Liquid plasticizer.	Ph. Eur.: Macrogols; USP: Polyethylene Glycol, JPE: Macrogol 300; FCC: Polyethylene Glycols
	Kollisolv PEG 400			■	■	Liquid plasticizer.	Ph. Eur.: Macrogols; USP: Polyethylene Glycol; JP: Macrogol 400; FCC: Polyethylene Glycols
	Kollisolv P124			■	■	Liquid plasticizer.	Ph. Eur., USP/NF, JP: Poloxamer 124
	Kolliphor P188		■	■	■	Polymeric plasticizer, solubilizer and emulsifier.	Ph. Eur., USP/NF, JP: Poloxamer 188
	Kolliphor P338		■	■	■	Polymeric plasticizer, solubilizer and emulsifier.	Ph. Eur., USP/NF, JP: Poloxamer 338
	Kolliphor P407		■	■	■	Polymeric plasticizer, solubilizer and emulsifier.	Ph. Eur., USP/NF, JP: Poloxamer 407
	Kolliphor TPGS		■	■	■	Plasticizer with multiple functionalities including antioxidant, drug solubilizer, absorption enhancer, emulsifier.	USP/NF: Vitamin E Polyethylene Glycol Succinate
	Kolliphor RH40		■	■	■	Plasticizer in solid polymeric matrices.	Ph. Eur.: Macrogolglycerol hydroxystearate; USP: Polyoxyl 40 Hydrogenated Caster Oil

## Solid dispersions

Functionality	Product	Technology				Positioning	Monography name*/Chemical name
		Physical mixing	Melt granulation	Spray drying	HME**		
	Kolliwax HCO		■	■	■	Plasticizer in solid polymeric matrices.	Ph. Eur., BP: Caster oil, hydrogenated, NF: Hydrogenated castor oil, JPE: Hydrogenated Oil
	Kolliwax SA		■	■	■	Plasticizer that includes consistency factor functionality.	Ph. Eur., USP/NF, JP: Stearyl Alcohol

## Liquid dispersions, solutions, emulsions & micro emulsions

Functionality	Product	Technology			Positioning	Monography name*/Chemical name
		Solutions	Liquid suspensions	Lipid-based DDS***		
Solubility enhancement	Soluplus	■	■	■	Polymer specifically designed to increase solubility and bioavailability of poorly soluble drugs.	Polyvinyl caprolactam – polyvinyl acetate – polyethylene glycol graft copolymer
	Kolliphor RH40	■	■	■	Nonionic solubilizer & emulsifier.	Ph. Eur.: Macroglycerol hydroxystearate; USP: Polyoxy 40 Hydrogenated Caster Oil
	Kolliphor TPGS	■	■	■	Solubilizer, antioxidant, absorption enhancer, emulsifier and lipid-based drug delivery vehicle. Source of Vitamin E.	USP/NF: Vitamin E Polyethylene Glycol Succinate
	Kolliphor HS 15	■	■	■	Nonionic solubilizer & emulsifier.	Ph. Eur.: Macrogol 15 Hydroxystearate; USP/NF: Polyoxy 15 Hydroxystearate
	Kolliphor EL	■	■	■	Nonionic solubilizer & emulsifier.	Ph. Eur.: Macroglycerol Ricinoleate 35; USP/NF: Polyoxy 35 Castor Oil
	Kolliphor ELP	■	■	■	Purified Kolliphor EL, especially for sensitive active ingredients.	Ph. Eur.: Macroglycerol Ricinoleate 35; USP/NF: Polyoxy 35 Castor Oil
	Kolliphor SLS	■	■	■	Ionic solubilizer & emulsifier.	Ph. Eur.: Sodium Laurilsulfate; USP/NF, JP: Sodium Lauryl Sulfate
	Kolliphor P188	■	■	■	Polymeric solubilizer, emulsifier and plasticizer.	Ph. Eur., USP/NF, JP: Poloxamer 188
	Kolliphor P338	■	■	■	Polymeric solubilizer, emulsifier and plasticizer.	Ph. Eur., USP/NF, JP: Poloxamer 338
	Kolliphor P407	■	■	■	Polymeric solubilizer, emulsifier and plasticizer.	Ph. Eur., USP/NF, JP: Poloxamer 407
	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: Polysorbate 60
	Kolliphor PS 80	■	■	■	Nonionic solubilizer, emulsifier and co-emulsifier.	Ph. Eur., USP/NF: Polysorbate 80
	Kollidon 12 PF	■	■	■	Pyrogen-free povidone used as a solubilizing agent, crystallization inhibitor & stabilizer in injectables and ophthalmics.	Ph. Eur., USP, JPE: Povidone
	Kollidon 17 PF	■	■	■	Pyrogen-free povidone used as a solubilizing agent, crystallization inhibitor & stabilizer in injectables and ophthalmics.	Ph. Eur., USP, JPE: Povidone
	Kollidon 25/30	■	■	■	Medim-molecular weight povidone used as a solubilizing agent, dispersant & crystallization inhibitor.	Ph. Eur., USP, JPE: Povidone
Kollidon 90 F	■	■	■	High-molecular weight povidone used as a solubilizing agent, dispersant & crystallization inhibitor.	Ph. Eur., USP, JPE: Povidone	

# Solubilization

## Liquid dispersions, solutions, emulsions & micro emulsions

Functionality	Product	Technology			Positioning	Monography name* / Chemical name
		Solutions	Liquid sus-pensions	Lipid-based DDS***		
<b>Crystallization inhibition</b>	Kollidon 12 PF	■	■	■	Low-molecular weight, pyrogen-free povidone used as crystallization inhibitor and stabilizer in injectables and ophthalmics.	Ph. Eur., USP, JPE: Povidone
	Kollidon 17 PF	■	■	■	Low-molecular weight, pyrogen-free povidone used as crystallization inhibitor and stabilizer in injectables and ophthalmics.	Ph. Eur., USP, JPE: Povidone
	Kollidon 25/30	■	■	■	Medim-molecular weight povidone used as a solubilizing agent, dispersant & crystallization inhibitor.	Ph. Eur., USP, JPE: Povidone
	Kollidon 90 F	■	■	■	High-molecular weight povidone used as a solubilizing agent, dispersant & crystallization inhibitor.	Ph. Eur., USP, JPE: Povidone
	Kollidon VA 64	■	■	■	Solubilizing agent, dispersant & crystallization inhibitor.	Ph. Eur., USP: Copovidone; JEP: Copolyvidone
<b>Thickening/ sedi-mentation inhibition</b>	Kollidon 90 F	■	■	■	Viscosity modifier/thickener for syrups, liquid suspensions, powder for suspensions or oral solutions.	Ph. Eur., USP, JPE: Povidone
	Kolliphor P407	■	■	■	Thickening agent and gel former, as a co-emulsifier and viscosity enhancer in creams and liquid emulsions. Also stabilizes topically and orally administered suspensions.	Ph. Eur., USP/NF, JP: Poloxamer 407
	Kollidon-CL-M		■		Sedimentation inhibitor in suspensions.	Ph. Eur., USP, JPE: Crospovidone Type B
<b>Solvents</b>	Kollisolv PG	■	■	■	Solvent for oral and topical applications.	Ph. Eur., USP, JP: Propylene Glycol
	Kollisolv PEG 300	■	■	■	Solvent for oral and topical applications.	Ph. Eur.: Macrogols; USP: Polyethylene Glycol, JPE: Macrogol 300; FCC: Polyethylene Glycols
	Kollisolv PEG 400	■	■	■	Solvent for oral and topical applications.	Ph. Eur.: Macrogols; USP: Polyethylene Glycol; JP: Macrogol 400; FCC: Polyethylene Glycols
	Kollisolv P124	■	■	■	Solvent for APIs, dispersing agent for liquid dispersions, stabilizer and co-emulsifier in semi-solid formulations.	Ph. Eur., USP/NF, JP: Poloxamer 124
	Kollisolv MCT 70	■	■	■	Solubilizer for lipophilic drugs.	Ph. Eur., USP/NF, Triglycerides medium-chain
	Kollisolv CAP	■	■	■	Solvent for lipophilic drugs.	Cetearyl ethylhexanone & Isopropyl myristate
	Kolliwax GMS II	■	■	■	Solvent for oral, topical applications.	Ph. Eur.: Glyceryl Monostearate 40–55 (type II); USP/NF: Mono- and Di-glycerides
	Kollisolv GTA	■	■	■	Commonly used solvent.	Ph. Eur., USP/NF: Triacetin
	Kollisolv PYR	■	■	■	Solvent for injectables & oral formulations for animal health.	Ph. Eur.: Pyrrolidone

\*Monograph references were updated at time of printing, please visit us online for the latest status \*\*Hot melt extrusion \*\*\*Drug Delivery Systems



## Skin Delivery

BASF offers an unparalleled portfolio of excipients for topical formulations, enabling customers to create the ideal skin delivery solution for each and every application. We are committed to maintaining the highest level of quality across the product spectrum. Our range of solubilizers and penetration enhancers supports effective delivery of the target API – the number-one priority when designing any dermatological product.

At the same time, we have focused on improving the mildness of formulations. And by extensively analyzing, refining, and enhancing the sensorial effects of each ingredient class, we can help our customers create products that increase patient compliance.

What's more, BASF works closely with leading global organizations on the design, evaluation, and microstructure of semi-solid formulations.

# Skin Delivery

## Emulsions, ointments & gels

Functionality	Product	Description	Form				Monography name* / Chemical name
			Emulsions & creams	Ointments	Gels	Foams	
Emollients & solvents	Kollicream® 3C	Medium spreadability. Extremely mild. Solvent for lipophilic drugs. Enhances skin penetration.	■	■	■	■	Ph. Eur.: Cocoyl caprylocaprate, Coco-caprylate/caprate
	Kollicream® CP 15	Solid, slow spreading with rich feeling. Solvent for lipophilic drugs.	■	■			Ph. Eur: Cetyl palmitate 15
	Kollicream® DO	Medium spreadability. Solvent for lipophilic drugs. Enhances skin penetration.	■	■	■	■	Ph. Eur.: Decyl oleate
	Kollicream® IPM	Fast spreading with light & fresh feeling. Solvent for lipophilic drugs. Enhances skin penetration.	■	■	■	■	Ph. Eur., USP/NF: Isopropyl myristate
	Kollicream® OA	Medium spreadability. Solvent for lipophilic drugs. Enhances skin penetration.	■	■	■	■	Ph. Eur., USP/NF: Oleyl alcohol
	Kollicream® OD	Medium spreadability. Solvent for lipophilic drugs. Enhances skin penetration. Effective in exceptionally wide pH range.	■	■	■	■	Ph. Eur., USP/NF: Octyldodecanol
	Kollisolv® MCT 70	Oily solvent for some lipophilic drugs. Water barrier-repairing, emollient film-former on skin.	■	■	■	■	Ph. Eur.: Medium chain triglycerides, USP/NF: Triglycerides, medium chain
	Kollisolv® PEG 300	Solubilizer for drugs. Forms anhydrous, hydrophilic ointments in conjunction with higher mol. weight PEG.	■	■	■	■	Ph. Eur., USP/NF, JPE: Polyethylene glycol 300
	Kollisolv® PEG 400	Solubilizer for drugs. Forms anhydrous, hydrophilic ointments in conjunction with higher mol. weight PEG.	■	■	■	■	Ph. Eur., USP/NF, JPE: Polyethylene glycol 400
	Kollisolv® GTA	Versatile water or oil miscible solvent.	■		■	■	Ph. Eur., USP/NF: Triacetin
Kollisolv® PG	Versatile hydrophilic solvent and humectant.	■	■	■	■	Ph. Eur., USP/NF, JP, FCC: Propylene glycol	
Skin penetration enhancement	Kollicream® DO	Skin penetration enhancer & medium spreadability emollient.	■	■	■	■	Ph. Eur.: Decyl oleate
	Kollicream® IPM	Skin penetration enhancer & fast spreading emollient.	■	■	■	■	Ph. Eur., USP/NF: Isopropyl myristate
	Kollicream® 3C	Skin penetration enhancer. Medium spreadable emollient. Extremely mild. Solvent for lipophilic drugs.	■	■	■	■	Ph. Eur.: Cocoyl caprylocaprate, Coco-caprylate/caprate
	Kollicream® OA	Skin penetration enhancer. Medium spreadable emollient.	■	■	■	■	Ph. Eur., USP/NF: Oleyl alcohol
	Kollicream® OD	Penetration enhancer, solubilizer & antioxidant.	■	■	■	■	Ph. Eur., USP/NF: Octyldodecanol
	Kolliphor® TPGS	Penetration enhancer, solubilizer & antioxidant.	■		■		USP/NF: D-Alpha tocopherol polyethylene glycol 1000 succinate
	Kollisolv® PG	Skin penetration enhancer & solvent.	■	■	■	■	Ph. Eur., USP/NF, JP, FCC: Propylene glycol
	Kollisolv® PYR	Versatile solvent with broad miscibility.	■	■	■	■	Ph. Eur.: 2-Pyrrolidone



## Emulsions, ointments & gels

Functionality	Product	Description	Form				Monography name* / Chemical name
			Emulsions & creams	Ointments	Gels	Foams	
Emulsification	Kolliphor® CS 12	Nonionic emulsifier for O/W emulsions.	■			■	Ph. Eur.: Macrogol cetostearyl ether 12
	Kolliphor® CS 20	Nonionic emulsifier for O/W emulsions.	■			■	Ph. Eur.: Macrogol cetostearyl ether 20, USP/NF: Polyoxyl 20 cetostearyl ether
	Kolliphor® EL	Nonionic emulsifier for O/W emulsions; Solubiliser.	■				Ph. Eur.: Macrogolglycerol ricinoleate, USP/NF: Polyoxyl 35 castor oil
	Kolliphor® HS 15	Nonionic emulsifier for O/W emulsions; Solubiliser.	■				Ph. Eur., USP/NF: Polyethylene glycol-15-hydroxy-stearate
	Kolliphor® PS 20	Nonionic emulsifier for O/W emulsions.	■		■	■	Ph. Eur., USP/NF: Polysorbate 20
	Kolliphor® PS 60	Nonionic emulsifier for O/W emulsions; Foam stabilizer.	■		■	■	Ph. Eur., USP/NF, JP: Polysorbate 60
	Kolliphor® PS 80	Nonionic emulsifier for O/W emulsions.	■		■	■	Ph. Eur., USP/NF: Polysorbate 80
	Kolliphor® RH 40	Nonionic emulsifier for O/W emulsions; Solubiliser.	■		■	■	Ph. Eur., USP/NF: Polyoxyl 40 hydrogenated castor oil
	Kolliphor® SLS	Widely used, high HLB anionic emulsifier for semi-solids and foams.				■	Ph. Eur., USP/NF, JP: Sodium Lauryl Sulfate
	Kolliphor® SLS fine	Finer particles of Kolliphor SLS for more controlled and efficient solubilization.				■	Ph. Eur., USP/NF, JP: Sodium Lauryl Sulfate
	Kolliphor® CS S	Anionic emulsifier.	■			■	Ph. Eur.: Sodium cetostearyl sulphate
	Kolliphor® CS A	Anionic emulsifier and consistency factor combination for creams & lotions.	■				Ph. Eur.: Cetostaeryl alcohol (type A), self-emulsifying
	Kolliphor® TPGS	Vitamin E-based emulsifier, solubilizer & antioxidant.	■				USP/NF: D-Alpha tocopherol polyethylene glycol 1000 succinate
	Kollisol® P 124	Liquid amphiphilic co-polymer.	■		■	■	Ph. Eur., USP/NF, JP: Poloxamer 124
	Kolliphor® P 188	Solid amphiphilic co-polymer, drug solubilizer, emulsifier & foaming agent. Very mild.	■		■	■	Ph. Eur., USP/NF, JP: Poloxamer 188
	Kolliphor® P 338	Solid amphiphilic co-polymer, drug solubilizer, emulsifier.	■		■	■	Ph. Eur., USP/NF: Poloxamer 338
Kolliphor® P 407	Solid amphiphilic co-polymer drug solubilizer, emulsifier.	■		■	■	Ph. Eur., USP/NF, JP, FCC: Poloxamer 407	
Kolliwax® GMS II	Co-emulsifier and low HLB surfactant. Stabilizes surfactant phases & emulsion droplets.	■	■	■	■	Ph. Eur.: Glyceryl monostearate 40-55 (type II), USP/NF: Mono- and di-glycerides, C16-C18	

\*Monography references were updated at time of printing, please visit us online for the latest status

# Skin Delivery

## Emulsions, ointments & gels

Functionality	Product	Description	Form				Monography name* / Chemical name
			Emulsions & creams	Ointments	Gels	Foams	
<b>Consistency factors &amp; viscosity enhancement</b>	Koliwax® MA	Consistency factor with low melting point. Soft sensory effect.	■	■	■		USP/NF: Myristyl alcohol
	Koliwax® CA	Structure-building consistency factor for semi-solids. Viscosity regulator.	■	■	■		Ph. Eur., USP/NF, JP: Cetyl alcohol
	Koliwax® SA	Structure-building consistency factor for semi-solids. Viscosity regulator. Higher melting point	■	■	■		Ph. Eur., USP/NF, JP: Stearyl alcohol
	Koliwax® CSA 50	Structure-building consistency factor for semi-solids.	■	■	■	■	Ph. Eur., USP/NF, JP: Cetostearyl alcohol 50
	Koliwax® CSA 70	Viscosity regulator.	■	■	■		Ph. Eur.: Cetostearyl alcohol 70
	Koliwax® GMS II	Structure-building consistency factor for semi-solids. Can mitigate stickiness or greasiness.	■	■	■		Ph. Eur.: Glyceryl monostearate 40-55 (type II), USP/NF: Mono- and di-glycerides, C16-C18
	Koliwax® HCO	Consistency factor; high melting point & retention on skin; Applies with little whiteness.	■	■	■		Ph. Eur., USP/NF, JP: Hydrogenated castor oil
	Koliwax® S	Structure-building consistency factor with dry feel; forms crystalline barrier on skin.	■	■			Ph. Eur., USP/NF, JP: Stearic acid 50
	Kolliphor® P 188	Forms clear gels at higher concentrations/temperatures.			■		Ph. Eur., USP/NF, JP: Poloxamer 188
	Kolliphor® P 338	Forms clear gels at higher concentrations/temperatures.			■		Ph. Eur., USP/NF: Poloxamer 338
	Kolliphor® P 407	Forms clear gels at higher concentrations/temperatures.			■		Ph. Eur., USP/NF, JP, FCC: Poloxamer 407
	Pluriol® E 1000	Forms anhydrous, hydrophilic ointments in combination with low mol. weight PEG.		■			USP/NF: Polyethylene glycol 1000
	Pluriol® E 1450			■			USP/NF: Polyethylene glycol 1450
	Pluriol® E 3350	Forms anhydrous, hydrophilic ointments in combination with low mol. weight PEG.		■			USP/NF: Polyethylene glycol 3350
	Pluriol® E 8000			■			USP/NF: Polyethylene glycol 8000
Kollidon® 90 F	Soluble Povidone; Significantly enhances viscosity of hydrophilic & -phobic systems.		■			Ph. Eur., USP/NF, JP, FCC : Polyvinylpyrrolidone, Povidone	

Functionality	Product	Description	Monography name* / Chemical name
<b>Transdermal patches</b>			
<b>Solvents</b>	Kollicream® IPM	Skin penetration enhancer. Solvent for lipophilic drugs.	Ph. Eur., USP/NF: Isopropyl myristate
	Kollicream® OA	Skin penetration enhancer. Solvent for lipophilic drugs.	Ph. Eur., USP/NF: Oleyl alcohol
	Kollisol® GTA	Versatile water or oil miscible solvent. Polymer film plasticizer.	Ph. Eur., USP/NF: Triacetin
<b>Matrices</b>	Kolliccoat® MAE 100 P	Matrix polymer.	Ph. Eur., USP/NF: Methacrylic Acid-Ethyl Acrylate Copolymer 1:1
	Kollidon® CL-M	For drug solubilization and transdermal drug delivery aid.	Ph. Eur., USP/NF, JPE, FCC: Crospovidone, cross linked polyvinylpyrrolidone
	Kollidon® SR	Matrix polymer.	Ph. Eur., USP/NF, JP/JPE: 80 % Polyvinyl acetate and 19 % povidone, 0.8 % lauryl sulfate & 0.2 % silica (4:1)
<b>Solubilization</b>	Kolliphor® EL	Solubilizer e.g. for microneedles, approved for injectable formulations.	Ph.Eur.: Macrogolglycerol ricinoleate, USP/NF: Polyoxyl 35 castor oil
	Kolliphor® HS 15	Solubilizer e.g. for microneedles, approved for injectable formulations.	Ph. Eur., USP/NF: Polyethylene glycol-15-hydroxystearate

Functionality	Product	Description	Monography name*/Chemical name
<b>Transdermal patches</b>			
<b>Solubilization</b>	Kolliphor® P 188	Inert, biocompatible, amphiphilic polymer, approved for injectable applications.	Ph. Eur., USP/NF, JP: Poloxamer 188
	Kollidon® 12 PF	Pyrogen free; approved for injectables; Suitable for dissolvable microneedles.	Ph. Eur., USP/NF, FCC: Polyvinylpyrrolidone, Povidone
	Kollidon® 17 PF	Pyrogen free; approved for injectables; Suitable for dissolvable microneedles.	Ph. Eur., USP/NF, JP, FCC: Polyvinylpyrrolidone, Povidone
	Kollidon® CL-M	For drug solubilization and transdermal drug delivery aid.	Ph. Eur., USP/NF, JPE, FCC: Crospovidone, cross linked polyvinylpyrrolidone
	Kollidon® 25	Drug solubilizer.	Ph. Eur., USP/NF, FCC: Polyvinylpyrrolidone, Povidone
	Kollidon® 30 & 30 LP	Drug solubilizer with low peroxide option.	Ph. Eur., USP/NF, FCC: Polyvinylpyrrolidone, Povidone
	Kollidon® 90 F	Drug solubilizer and delivery aid in transdermal patches.	Ph. Eur., USP/NF, FCC: Polyvinylpyrrolidone, Povidone
	Soluplus®	Forms solid solutions, increasing solubility & bioavailability. Extrudable into films.	Polyvinyl caprolactam – polyvinyl acetate – polyethylene glycol graft copolymer
	Kollidon® VA 64	Drug solubilizer & matrix former in extruded or solvent cast films.	Ph. Eur., USP/NF, JPE: Copovidone, Vinylpyrrolidone/vinyl acetate copolymer
<b>Topical polymeric films</b>			
<b>Film formers</b>	Kollidon® 90 F	Film former & viscosifying agent in aqueous formulations. Drug solubilizer.	Ph. Eur., USP/NF, FCC: Polyvinylpyrrolidone, Povidone
	Kollidon® VA 64	Sprayable film former; Drug solubilizer & matrix former in HME or solvent cast films.	Ph. Eur., USP/NF, JPE: Copovidone, Vinylpyrrolidone/vinyl acetate copolymer
	Kollicoat® SR 30 D	Sprayable polymeric film former. Flexible. Wash resistant.	Ph. Eur., USP/NF: Polyvinyl acetate dispersion
	Kollidon® SR	Sprayable polymeric film former. Flexible. Wash resistant.	Ph. Eur., USP/NF, JP/JPE: 80 % Polyvinyl acetate and 19 % povidone, 0.8 % lauryl sulfate & 0.2 % silica (4:1)
	Soluplus®	Forms solid solutions, increasing solubility & bioavailability. Extrudable into films.	Polyvinyl caprolactam – polyvinyl acetate – polyethylene glycol graft copolymer
<b>Plasticization</b>	Kollisol® PEG 400	Solubilizer for drugs. Forms hydrophilic ointments when used with higher molecular weight PEGs.	Ph. Eur., USP/NF, JPE: Polyethylene glycol 400
	Kollisol® PG	Film plasticizer & co-surfactant.	Ph. Eur., USP/NF, JP, FCC: Propylene glycol
	Kolliphor® P 188	Versatile plasticizer & solubilizer for polymeric films.	Ph. Eur., USP/NF, JP: Poloxamer 188
	Kollisol® GTA	Polymeric film plasticizer; Versatile water or oil miscible solvent.	Ph. Eur., USP/NF: Triacetin
<b>Suppositories</b>			
<b>Solvents</b>	Kollisol® PEG 300	Solubilizer for drugs. Mixes with higher molecular weight PEGs.	USP/NF, Ph. Eur., JPE: Polyethylene glycol 300
	Kollisol® PEG 400	Solubilizer for drugs. Mixes with higher molecular weight PEGs.	USP/NF, Ph. Eur., JPE: Polyethylene glycol 400
	Kollisol® PG	Solubilizes and aids in skin penetration of lipophilic actives.	Ph. Eur., USP/NF, JP, FCC: Propylene glycol
	Kollisol® MCT 70	Solubilizer for lipophilic drugs. Penetration enhancer. Lubricant.	Ph. Eur.: Medium chain triglycerides, USP/NF: Triglycerides, medium chain
<b>Matrices</b>	Novata® grades	Matrix for suppositories.	Ph. Eur., USP/NF, JPE: Hard fat
	Pluriol® E 1000	Forms anhydrous, hydrophilic ointments in combination with lower mol. weight PEG.	USP/NF: Polyethylene glycol 1000
	Pluriol® E 1450		USP/NF: Polyethylene glycol 1450
	Pluriol® E 3350	Forms anhydrous, hydrophilic ointments in combination with lower mol. weight PEG.	USP/NF: Polyethylene glycol 3350
	Pluriol® E 8000		USP/NF: Polyethylene glycol 8000



## Soft Gels

Easy to swallow and featuring an attractive translucent appearance, soft gelatin capsules or softgels have become one of the most popular dosage forms for a variety of pharmaceutical products. The BASF softgel portfolio offers leading-edge functional excipients to help customers achieve the

best possible results for each element of their capsules – whether coating, shell, or fill. Moreover, all ingredients have been tested to the highest quality standards to minimize the possibility of crosslinking.

## Soft Gels

Functionality	Product	Description	Monography name*/Chemical name
<b>Capsule fill (solution, LBBDS, etc.)</b>			
<b>Solvents and fills</b>	Kollisolv® MCT 70	Oil fill for solubilization of lipophilic APIs.	Ph. Eur.: Medium chain triglycerides, USP/NF: Triglycerides, medium chain
	Kollisolv® PEG 300	Hydrophilic fill for solubilization of hydrophilic APIs.	Ph. Eur., USP/NF, JPE: Polyethylene glycol 300
	Kollisolv® PEG 400	Hydrophilic fill for solubilization of hydrophilic APIs.	Ph. Eur., USP/NF, JPE: Polyethylene glycol 400
	Kollisolv® PG	Versatile hydrophilic solvent.	Ph. Eur., USP/NF, JP, FCC: Propylene glycol
	Kollisolv® P 124	Liquid amphiphilic polymer for solubilizing APIs.	Ph. Eur., USP/NF, JP: Poloxamer 124
<b>Solubility enhancement &amp; emulsification</b>	Kolliphor® EL	Nonionic O/W emulsifier and solubilizer.	Ph. Eur.: Macrogolglycerol ricinoleate, USP/NF: Polyoxyl 35 castor oil
	Kolliphor® RH 40	Nonionic O/W emulsifier and solubilizer.	Ph. Eur., USP/NF: Polyoxyl 40 hydrogenated castor oil
	Kolliphor® HS 15	Nonionic O/W emulsifier and solubilizer.	Ph. Eur., USP/NF: Polyethylene glycol-15-hydroxystearate
	Kolliphor® TPGS	Nonionic O/W emulsifier, solubiliser, penetration enhancer, antioxidant, source of natural vitamin E.	USP/NF: D-Alpha tocopherol polyethylene glycol 1000 succinate
	Kolliphor® PS 20	Nonionic O/W emulsifier and solubilizer.	Ph. Eur., USP/NF: Polysorbate 20
	Kolliphor® PS 60	Nonionic O/W emulsifier and solubilizer.	Ph. Eur., USP/NF, JP: Polysorbate 60
	Kolliphor® PS 80	Nonionic O/W emulsifier and solubilizer.	Ph. Eur., USP/NF: Polysorbate 80
	Kollisolv® P 124	Liquid amphiphilic polymer, solubilizer.	Ph. Eur., USP/NF, JP: Poloxamer 124
	Kolliphor® P 188	Solid amphiphilic polymer, solubilizer.	Ph. Eur., USP/NF, JP: Poloxamer 188
	Kolliphor® P 338	Solid amphiphilic polymer, solubilizer.	Ph. Eur., USP/NF: Poloxamer 338
	Kolliphor® P 407	Solid amphiphilic polymer, solubilizer.	Ph. Eur., USP/NF, JP, FCC :Poloxamer 407
	Kolliwax® GMS II	Co-emulsifier and viscosity enhancer.	Ph. Eur.: Glyceryl monostearate 40-55 (type II), USP/NF: Mono- and di-glycerides, C16-C18
	Kolliwax® CSA 50	Co-emulsifier and viscosity enhancer.	Ph. Eur., USP/NF, JP: Cetostearyl alcohol 50
Kolliwax® S	Emulsifying & solubilizing agent, viscosity enhancer.	Ph. Eur., USP/NF, JP: Stearic acid 50	
<b>Viscosity enhancement</b>	Kollidon 90 F	Soluble Povidone. Enhances the viscosity.	Ph. Eur., USP/NF, JP, FCC: Polyvinylpyrrolidone, Povidone
	Kolliwax® GMS II	Co-emulsifier and viscosity enhancer.	Ph. Eur.: Glyceryl monostearate 40-55 (type II), USP/NF: Mono- and di-glycerides, C16-C18
	Kolliwax® CSA 50	Co-emulsifier and viscosity enhancer.	Ph. Eur., USP/NF, JP: Cetostearyl alcohol 50
	Novata® B, BC, BCF, BD	Matrix and viscosity enhancer.	Ph. Eur., USP/NF, JPE: Hard fat
<b>Crystallization inhibition</b>	Kollidon® 12 PF	Low-molecular weight povidone. Solubilizing agent & crystallization inhibitor.	Ph. Eur., USP/NF, FCC: Polyvinylpyrrolidone, Povidone
	Kollidon® 17 PF	Low-molecular weight povidone. Solubilizing agent & crystallization inhibitor.	Ph. Eur., USP/NF, JP, FCC: Polyvinylpyrrolidone, Povidone

\*Monograph references were updated at time of printing, please visit us online for the latest status

## Soft Gels

Functionality	Product	Description	Monography name* / Chemical name
<b>Capsule shell</b>			
<b>Polymers for the shell</b>	Kollocoat® IR	Due to it's flexibility and stability Kollocoat® IR is suitable polymer for gelatin-free capsule shells.	Ph. Eur., USP/NF: Ethylene glycol and vinyl alcohol graft copolymer
	Kollocoat® Protect	Due to it's flexibility and stability the Kollocoat® IR-based Kollocoat Protect is suitable polymer for gelatin-free capsule shells.	Polyvinyl alcohol-polyethylene glycol copolymer and polyvinyl alcohol (PVA), physical mixture of Kollocoat® IR and monographed raw materials
<b>Plasticizing</b>	Kollisolv® PEG 300	Liquid plasticizer.	Ph. Eur., USP/NF, JPE: Polyethylene glycol 300
	Kollisolv® PEG 400	Liquid plasticizer.	Ph. Eur., USP/NF, JPE: Polyethylene glycol 400
<b>Lubrication</b>	Kollisolv® MCT 70	Liquid, Oily lubricant.	Ph. Eur.: Medium chain triglycerides, USP/NF: Triglycerides, medium chain
	Kolliwax® HCO	Solid lubricant.	Ph. Eur., USP/NF, JP: Hydrogenated castor oil
	Kolliwax® S fine	Solid lubricant.	Ph. Eur., USP/NF, JP: Stearic acid 50
	Kolliwax® SA fine	Solid lubricant.	Ph. Eur., USP/NF, JP: Stearyl alcohol
<b>Coating formulation</b>			
<b>Film formers</b>	Kollocoat® MAE 30 DP	Effective & reliable enteric coating for soft capsules. Aqueous dispersion.	Ph. Eur., USP/NF: Methacrylic Acid-Ethyl Acrylate Copolymer 1:1, 30 % in water
	Kollocoat® MAE 100 P	Effective & reliable enteric coating for soft capsules. Powder grade.	Ph. Eur., USP/NF: Methacrylic Acid-Ethyl Acrylate Copolymer 1:1
	Kollocoat® SR 30 D	Highly flexible & pH-independent sustained release film coating polymer	Ph. Eur., USP/NF: Polyvinyl acetate dispersion
	Kollocoat® protect	Highly flexible instant release film coating polymer. Especially suitable for moisture protection.	Polyvinyl alcohol-polyethylene glycol copolymer and polyvinyl alcohol (PVA), physical mixture of Kollocoat® IR and monographed raw materials
<b>Plasticizing</b>	Kollisolv® PEG 300	Liquid plasticizer.	Ph. Eur., USP/NF, JPE: Polyethylene glycol 300
	Kollisolv® PEG 400	Liquid plasticizer.	Ph. Eur., USP/NF, JPE: Polyethylene glycol 400
	Kollisolv® GTA	Liquid plasticizer.	Ph. Eur., USP/NF: Triacetin
	Kollisolv® PG	Liquid plasticizer.	Ph. Eur., USP/NF, JP, FCC: Propylene glycol

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## APIs

For over 75 years, BASF has been driving excellence in active pharmaceutical ingredients (APIs). Backed by this wealth of experience, we offer a proven portfolio of products that delivers consistent safety and reliability. What's more, we have achieved worldwide leadership in generic actives such as ibuprofen and omega 3.

With a strong international presence, BASF is a truly global partner that can also offer reliable local support. And thanks to our state-of-the-art production facilities located around the world, we can deliver the products you need – wherever and whenever you need them.

Product	CAS no.	Registration				Regulatory status	Description
		CEP	EDMF	JDMF	US-DMF		
<b>Ibuprofen</b>							
Ibuprofen 25	15687-27-1	■	■	■	■	USP, Ph. Eur., JP, IP	Particle size: D (0.5) = 20-33 µm. Particle size: D (0.5) = 33-45 µm. Particle size: D (0.5) = 45-60 µm. Particle size: D (0.5) = 60-85 µm. Direct compressible Ibuprofen with 85 % drug content. Fast-acting Ibuprofen. Fast-acting Ibuprofen.  Chiral propionic acid derivative, classified as a nonsteroidal anti-inflammatory drug (NSAID). Is used as an analgesic and antiinflammatory agent.
Ibuprofen 38	15687-27-1	■	■	■	■	USP, Ph. Eur., JP, IP	
Ibuprofen 50	15687-27-1	■	■	■	■	USP, Ph. Eur., JP, IP	
Ibuprofen 70	15687-27-1	■	■	■	■	USP, Ph. Eur., JP, IP	
Ibuprofen DC 85 W	15687-27-1						
Ibuprofen Sodium	31121-93-4		■		■		
Racemic Ibuprofen Lysinate	57469-86-8		■				
<b>Omega 3</b>							
Maxomega™ EPA 97 EE	86227-47-6			■		JP	Eicosapentaenoic acid ethyl ester therapy in patients with very high triglyceride levels.
Omega 3 Acid Ethyl Ester (K 85 EE)	73310-11-9	■			■	USP, EP	Europe and ROW: HTG – hypertriglyceridemia; post-MI – after myocardial infarction; US: adjunct to diet to reduce triglyceride levels in adult patients with severe (>500mg/dl) hyperlipidemia.
Omega-3-Acid Ethyl Esters 1g Capsules (USP)	86227-47-6				■	USP	Omega-3-acid ethyl esters are indicated as an adjunct to diet to reduce triglyceride (TG) levels in adult patients with severe (≥500mg/dL) hypertriglyceridemia (HTG).
other Omega 3 products might be available on special request only							
<b>Other</b>							
Polyethylene Glycol 3350 (PEG 3350)	25322-68-3	■	■	■	■	USP, Ph. Eur.	Oral laxative which acts by osmotic retention of water in the intestine. PEG 3350 is applicable for long-term therapy because it has no effect on the cardiovascular system, causes no irritation of the intestinal mucosa.
PVP Iodine 30/06	25655-41-8	■	■	■	■	USP, Ph. Eur., JP, IP	Surgical and hygienic disinfection. Treatment of burns, decubitus, varicose ulcers, dermatomycosis, pyoderma, acne and vaginitis. PVP iodine is used in topical formulations such as solutions, gels, creams, ovula and others.
Azelaic Acid 99% (Dermaz 99)	123-99-9				■		Treating acne vulgaris, inflammatory rosacea, and hyperpigmentary disorder.
Dexpanthenol Ph. Eur.	81-13-0	■	■			USP, Ph. Eur.	Dermaticum, treatment of wounds, promotion of epithelization.
L-Menthol	2216-51-5	■	■	■	■	USP, Ph. Eur., JP	Antitussive, nasal decongestant, antihistamine, expectorant, throat irritation relief, topical analgesic, local anesthetic.

## APIs – additional BASF products

Product	CAS no.	Registration				Regulatory status	Description
		CEP	EDMF	JDMF	US-DMF		
Aminophylline Anhydrous	317-34-0	■	■			USP, Ph. Eur.	Aminophylline is used in a similar way to theophylline and acts as a bronchodilator in the management of asthma and chronic obstructive pulmonary disease. It is also used to relieve apnoea in neonates. Aminophylline is recommended when exceptional water solubility is required, particularly in intravenous formulations.
Aminophylline Hydrus	5897-66-5	■	■			USP, Ph. Eur., IP	
Amylmetacresol (AMC)	1300-94-3	■	■			Ph. Eur.	Amylmetacresol is an antiseptic used to treat minor infections of the mouth and throat.
Benoxinate HCl	5987-82-6		■		■	USP, Ph. Eur.	Local surface anesthetic or contact anesthetic. It acts on the neuronal membrane by inhibiting excitation and conduction. Secondary pharmacological properties include antimicrobial and bacteriostatic effects.
Benzonatate	104-31-4				■	USP	Anti-tussive, non-narcotic, expectorant and mucolytic of the benzoate ester type. It acts peripherally by anaesthetizing stretch receptors in the respiratory passages, lungs and pleura, depressing the cough reflex at its source.
Bethanechol Chloride	590-63-6		■		■	USP	Cholinergic with muscarinic action used in urology and to treat certain intestinal disorders. It mainly acts in the intestine and bladder.
Bupivacaine Base	38396-39-3		■		■		Local conduction anesthetic of the anilide or pipercoloxylidide type. It acts on the neuronal membrane by inhibiting excitation and conduction.
Bupivacaine HCl	14252-80-3	■	■			USP, Ph. Eur.	Local conduction anesthetic of the anilide or pipercoloxylidide type. It acts on the neuronal membrane by inhibiting excitation and conduction.
Caffeine Anhydrous	58-08-2	■	■	■	■	USP, Ph.Eur., JP, IP	Among the methylxanthines, caffeine has the most distinctive central effect. It primarily acts on the cerebral cortex and stimulates psychic and sensory functions. Caffeine increases mental receptivity and efficiency and reduces fatigue.
Choline Salicylate 80 %	2016-36-6		■		■		Salicylic acid derivative with analgesic and anti-inflammatory properties. Is used in the management of rheumatic disorders and in the treatment of pain, fever and mouth lesions.
Dobutamine HCl	49745-95-1	■	■	■	■	USP, Ph. Eur.	Dobutamine is used as an infusion for the treatment of heart failure, distinct hypotension and shock conditions.
Dopamine HCl	62-31-7	■	■	■	■	USP, Ph. Eur., JP	Dopamine is used as an infusion for the treatment of heart failure, distinct hypotension, shock and imminent kidney failure.
Ephedrine HCl	50-98-6	■	■	■	■	USP, Ph. Eur.	Bronchial asthma, chronic bronchitis, urticaria, essential hypotension and related conditions.
Ephedrine Sulphate	134-72-5		■		■	USP	Bronchial asthma, chronic bronchitis, urticaria. Essential hypotension and related circulatory conditions.
Isotretinoin M	4759-48-2	■	■		■	USP, Ph. Eur.	Treatment of severe forms of acne, such as acne conglobata and acne cystica, which are generally resistant to other forms of treatment.
Mepivacaine HCl	1722-62-9	■		■	■	USP, Ph. Eur., JP	Local conduction anesthetic of the anilide or pipercoloxylidide type. It acts on the neuronal membrane by inhibiting excitation and conduction.

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## APIs – additional BASF products

Product	CAS no.	Registration				Regulatory status	Description
		CEP	EDMF	JDMF	US-DMF		
Methylphenidate HCl	298-59-9	■	■			Ph. Eur.	Central nervous system stimulant and psychotonic of the piperidine type. The stimulating effect is the consequence of an increased release of dopamine. Is used to treat children with attention deficit and hyperactivity disorder (ADHD). Is a narcotic.
Oxybutynin Base	5633-20-5		■		■	USP, Ph. Eur.	Antis-pasmodic with anti-muscarinic action. Is used to treat urinary frequency, urgency, incontinence in neurogenic bladder disorders and nocturnal enuresis. It acts by diminishing frequency and intensity of bladder contractions, diminishing internal bladder pressure and increasing its capacity.
Oxybutynin HCl	1508-65-2	■	■	■	■	USP, Ph. Eur.	Is a direct-acting sympathomimetic. It is a vasoconstrictor, reducing swelling and relieving nasal congestion when applied to mucous membranes. It is also applied as eye drops for the treatment of non-infected and allergic, irritated or inflamed conjunctiva.
Oxymetazoline HCl	2315-02-8	■	■	■	■	USP, Ph. Eur., JP	For nasal decongestion as tablets, capsules or sachets, also as nasal drops or sprays. As mydriatic or conjunctiva decongestant in ophthalmology.
Phenylephrine HCl	61-76-7	■	■		■	USP, Ph. Eur., JP, IP	Local surface and conduction anesthetic of the anilide type. It acts on the neuronal membrane by inhibiting excitation and conduction.
Prilocaine Base	721-50-6	■	■	■	■	USP, Ph. Eur.	Local surface and conduction anesthetic or contact anesthetic of the anilide type. It acts on the neuronal membrane by inhibiting excitation and conduction.
Prilocaine HCl	1786-81-8	■	■	■	■	USP, Ph. Eur.	Oral decongestant for the treatment of stuffy noses in common colds (often associated with rhinitis), and in allergic rhinitis. Common rhinitis also provides a favorable breeding ground for bacterial super-infections, resulting in sinusitis, otitis media and pneumonia.
Pseudoephedrine HCl	345-78-8	■	■		■	USP, Ph. Eur., JPC, IP	Stimulates the adrenergic receptors in the smooth vascular muscles in the nose, constricts the dilated arterioles of the mucosa, reduces the blood flow in the nasal mucosa, and causes the mucosa to contract.
Pseudoephedrine Sulphate	7460-12-0		■		■	USP	Local surface, conduction and infiltration anesthetic or contact anesthetic of the benzoate ester type. It acts on the neuronal membrane by inhibiting excitation and conduction.
Tetracaine Base	94-24-6		■		■	USP	Standard treatment for bronchial asthma, chronic obstructive airway disease, status asthmaticus, bronchial emphysema and shortness of breath caused by right-side heart failure due to obstructive pulmonary disease.
Tetracaine HCl	136-47-0		■	■	■	USP, Ph. Eur., JP	Standard treatment for bronchial asthma, chronic obstructive airway disease, status asthmaticus, bronchial emphysema and shortness of breath caused by right-side heart failure due to obstructive pulmonary disease.
Theophylline Anhydrous	58-55-9	■	■	■	■	USP, Ph. Eur., JP, IP	Treatment of acne (acne vulgaris and keratosis pilaris).
Theophylline Hydrous	5967-84-0	■			■	USP, Ph. Eur., JP, IP	Is a direct-acting sympathomimetic. It is a vasoconstrictor, reducing swelling and relieving nasal congestion when applied to mucous membranes. It is also applied as eye drops for the treatment of non-infected and allergic, irritated or inflamed conjunctiva.
Tretinoin M	302-79-4	■			■	USP, Ph. Eur.	
Xylometazoline HCl	1218-35-5	■	■		■	USP, Ph. Eur., IP	

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