

Innovative Excipient Solutions by Pharmatrans Sanaq AG

Neutral Starter Cores

CELLETS®

Microcrystalline Cellulose spheres - Ph. Eur., USP-NF

Neutral starter core for pellet formulations (100% Microcrystalline Cellulose)

μm	mesh approx.	Main Applications of CELLETS [®]
63-125	120-230	Produced of pure Microcrystalline Cellulose and
100-200	70-140	purified water for less interactions with the API.
100-160	90-140	Insoluble starter pellets for combination drug formulations.
5* 150-200	70-100	
200-355	45-70	Highly spherical and narrow particle size for reproducible production processes and content
212-300	50-70	uniformity.
350-500	35-45	Shorter and more stable layering process with higher yields due to low friability and non-solubility
500-710	25-35	in comparison to standard starter cores.
710-1000	18-25	Smallest size starter cores (< 200µm) for the
710-850	20-25	production of micropellets and MUPS tablet formulations incl. ODT.
1000-1400	14-18	
	63-125 100-200 100-160 5* 150-200 200-355 3 212-300 350-500 710-1000 710-850	μm approx. 63-125 120-230 100-200 70-140 100-160 90-140 150-200 70-100 200-355 45-70 212-300 50-70 350-500 35-45 500-710 25-35 710-1000 18-25 710-850 20-25

^{*}min. 75% within fraction - other types min. 85% within fraction

Functional Starter Cores

TAP®

Tartaric Acid Pellets - Ph. Eur., USP-NF			
Function	nal starter c	ore for exte	ended release pellet formulations
Туре	μm	mesh approx.	Main Application - Characteristics
TAP® 200	100-350	45-140	Certain API show pH dependent solubility which can be a hurdle in the formulation
TAP [®] 400	300-500	35-50	of extended release dosage forms.
TAP® 425-500	425-500	35-40	TAP acts as a pH-modifierfor substances (weakly basic drugs) with a poorsolubility in higher pH that occur in the lower GIT. TAP
TAP® 500	400-600	30-40	enhances the solubility in this environment.
TAP® 600	500-710	25-35	
TAP® 700	600-800	20-30	
TAP® are spherical cores and consist of 100% Tartaric Acid.			

High Performance API

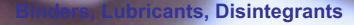
Ibuprofen DC 100

Ibuprofen Pellets (Ph. Eur)

Spherical Ibuprofen for optimised Direct Compression and coating processes

Туре	μm	mesh approx.	Main Application / Advantages
Ibuprofen DC 100	200-500	35-70	Opportunity for long term high speed Direct Compression.
Ibuprofen DC 100 consists of 100% pure, specifically shaped Ibuprofen. It does not show sticking and picking behavior in high speed tableting.			Easier coating for taste masking (ODT) and extended release formulations. Smaller tablets / higher drug load.

Tableting Aids



Microcrystalline Cellulose, Sodium Starch Glycolate, Crospovidone, Povidone, Sodium Stearlyl Fumarate ...

SUGAR SPHERES SANAQ®

Sugar Spheres / Non-Pareil Seeds - Ph. Eur., USP-NF

Neutral starter core for pellet formulations (Sucrose and corn starch)

Control of the contro					
Type*	μm	mesh approx.	Main Applications of Sugar Spheres		
SUGAR SPHERES SANAQ® 355	355-500	35-45	Sugar Spheres Sanag® are used as		
SUGAR SPHERES SANAQ® 500	500-600	30-35	neutral starter cores for controlled release pellet formulations.		
SUGAR SPHERES SANAQ® 600	600-710	25-30	For the use in capsule or MUPS		
SUGAR SPHERES SANAQ® 710	710-850	20-25	tablet formulations.		
SUGAR SPHERES SANAQ® 850	850-1000	18-20	Highly spherical and consistent particle size distribution for reproducible		
SUGAR SPHERES SANAQ® 850A	850-1180	16-20	production processes and content uniformity.		
SUGAR SPHERES SANAQ® 1000	1000-1400	14-18	Low friability for more stable		
SUGAR SPHERES SANAQ® 1180	1180-1400	14-16	production processes.		
SUGAR SPHERES SANAQ® 1400	1400-1700	12-16			
toddillocal DCD topos on demand					

^{*}additional PSD types on demand

Co - Processed Excipients DC

Homogenous mix	Homogenous mixture of excipients designed for high compressibility, superior dilution and desidered disintergration time					
Туре	PSD	Flow properties	Main Application			
SANAQ® SL 004 Lactose / Starch	SANAQ® SL 004 has average PSD by Malvern method of 300 – 550 microns	SANAQ SL 004® shows excellent and superior free powder flow compared with physical mixture in same ratio of components showing very poor flow properties.	Co Processed excipent based on mix of Lactose monohydrate and Starch. It is designed for direct compression providing help to improve tablet hardness, faster disintegration, and superior flowability Excellent flowability Excellent flowability Fast disintegration of final tablets Disintegration of tablets independent from tablet hardness and lubricant level			
SANAQ® ML 011 Lactose monohydrate/MCC	SANAQ® St. 011 has average PSD by Malvern method within range 250 – 600 microns	Bulk Density (g/mL) = 0.55 Tap Density (g/mL) = 0.67 Hausner's ratio = 1.20 Carr Index (%) = 16.84 LOD (%) = 0.02 Angle of repose (o)=34.12	Co-processed excipient based on lactose monohydrate and cellulose micro crystalline Smooth surface of the resulting tablets. It provides superior tablet hardness and powder flowability. Excellent compaction excipient for sensitive APIs. Useful excipient for low dosage formulations. Consistent tablet hardness. High weight consistency at all compaction speeds.			
SANAQ® SP 204 Co processed excipient for special formulation moisture sensitive and controlled alkaline conditions.	SANAQ® SP 204 PSD observed by Malvern 300-600 microns	Bulk Density = 0.59 g/mL Haussner ratio = 1.16 Carr Index(%) = 14.07 Angle of repose = 30.73°	SANAQ® SP204 is especially tailored to help formulation development of moisture sensitive APIs and for formulations where alkaline conditions need to be controlled for stability purpose. SANAQ® SP204 is microcrystalline cellulose (MCC) based co-processed excipient along with MgOxide-Starch- Pregelatinized starch-Sodium stearyl glycolate.			
SANAQ® SP 205 Co processed exciplent for special fomulation higroscopic and deliquescent APIs	Average PSD observed by Malvern was 300-600 microns. It founds optimal PSD ensuring superior flow properties, Optimal particle size and particle morphology will give minimal segregation.	Bulk Density (g/mL) = 0.52 Angle of repose (P) = 33 Flow rate (g/s) (10 mm orifice) = 3 - 4 Flow rate (g/s) (20 mm orifice) = 5 - 6	SANAQ® SP205, is microcrystalline collulose (MCC) based excipient, co-processed with colloidal silicon dioxide (CSD). It is pre-granulated complete system along with auxiliary excipients such as binder and disintegrant having superior tableting properties. It is tallor made specifically designed excipient for mosture sensitive and low bulk density / fluffy API's.			

Pellets on Demand

We continously develop further material in Pellet form and gladly evaluate possibilities based on customer demand.

This can be applied for API pellets & coated API.

Please get in touch with us.



Pharmaceutical Excipients, Innovation and Technology since 1982

Binders

MCC SANAQ®

Microcrystalline Cellulose

PVP SANAQ®

Soluble Povidone - Polyvinylpyrrolidone

Mannitol SANAQ® DC

100 % Mannitol

Disintegrants

SSG SANAQ®

Sodium Starch Glycolate

PVP-P SANAQ®

Crospovidone - Polyvinylpolypyrrolidone

Lubricants

LubriSanaq®

Sodium Stearyl Fumarate

Co - Processed Excipients DC

SANAQ® SL 004

SANAQ® ML 011

SANAQ® SP 204

SANAQ® SP 205

Functional Starter Cores

TAP® - Tartaric Acid Pellet

pH-modifier for extended release formulations

Neutral Starter Cores / Drug Layering

Cellets®

Neutral starter cores of pure Microcrystalline Cellulose

SUGAR SPHERES SANAQ®

Sugar spheres / non-pareils

High Performance API

Ibuprofen DC 100

100% Ibuprofen pellets for Chect Compression and coating processes for taste masking (OTD) & extended release

More Information:

Tel. +41 61 225 9000 - Fax. +41 61 225 9001 info@pharmatrans-sanq.com

www.pharmatrans-sanaq.com

Tableting Aids by Pharmatrans Sanaq AG

MCC SANAQ®

Microcrystalline Cellulose - Ph. Eur., USP-NF

Filler, binder and diluent in tablet, capsule and pellet formulations

Туре	PSD (d50)	Bulk Density (g/cm3)	Main Application
MCC SANAQ® 101	30-70µm	0.26 - 0.31	Standard fine grade especially suited for wet granulation, roller compation, extrusion/ spheronisation and direct pelletisation. Highly compactible.
MCC SANAQ® 102	60-100µm	0.28 - 0.33	Standard medium size grade for the use in direct compression. Enhanced flowability and highy compactible.
MCC SANAQ® 200	120-170µm	0.29 - 0.36	Coarse grade with excellent flow properties for the use in direct compression.

PVP SANAQ®

Soluble Polyvinylpryrrolidone / Povidone - Ph. Eur., USP-NF

Binder for tablet and capsule formulations

Туре	K-value	Main Application
PVP SANAQ® K15	13-17	- Binder for tablets and in capsule formulations
PVP SANAQ® K17	15-19	- Bioavailability enhancement - Film formation
PVP SANAQ® K25	24-27	- Solubilization - Injection preparations
PVP SANAQ® K30	29-32	- Stabilization of suspensions - Drug stabilization
PVP SANAQ® K90	85-95	- Dietetic tablets in nutritional products

PVP-P SANAQ®

Crospovidone / Polyvinylpolypyrrolidone - Ph. Eur., USP-NF

Disintegrant for tablet and capsule formulations

Main Application

- Disintegrant in tablets and hard gelatin capsules
- Stabilizer for oral and topical suspensions
- Improvement of dissolution and bioavailability
- Filtration aid

SSG SANAQ®

Sodium Starch Glycolate Type A - Ph. Eur., USP-NF, JPE

Superdisintegrant for tablet and capsule formulations		
Properties	Main Application	
 Rapid absorption of water & enormous swelling power result in a rapid tablet disintegration. Insolouble in water - no viscous barrier formed when mixed with water. 	Disintegrant for tablets & capsule formulations Effective for tablets produced by direct and wet granulation Concentration: 2-8% w/w - usually approx. 4%	

LubriSanaq®

Sodium Stearyl Fumarate - Ph. Eur., USP-NF

High quality lubricant for tablet and capsule formulations

Main Application / Advantages	API Examples
Alternative lubricant when Magnesium Stearate does not perform as required. In comparison: - Superior tablet hardness at equivalent compression force - Lower ejection force at equivalent compression force - Less impact on disintegration times - Performance varies less with blending time or lubricant level - In ODT's (orally dispersible tablets) to avoid metallic taste caused by Magnesium Stearate	Especially in combination with organic salts of API, API with Carbonyl-Carboxylgroups and API with Sulfogroups: Micronazol, Triamcinolon, Albuturol Sulfate, Metoprololtartrat, Clopidogrel-acetate, Pravastatin-Na, Fosinopril-Na, Acidum salcylicum, Amiodipine, Cefaclor, Clatrithromycin, Diclofenac, Donepezil-HCl, Doxazosin, Felodipine, Metoprololsuccinat, Fexofendadine, Ibuprofen, Ketorolac, Levofloxacin, Metaxalone, Nifedipine, Ramipril, Trandolapril

Mannitol SANAQ® DC

Mannitol Pellets - Ph. Eur., USP-NF

Neutral starter core for pellet formulations

Туре	μm	mesh approx.	Main Application
Mannitol 300	212-500	35-70	Water soluble starter core designed for drug layering
Mannitol 400	100-500	35-150	and coating as alternative to other starter cores.
			Controlled and narrow particle size distribution for a reproducible dissolution behavior.