

# Ready-to-Hydrate Buffers

Pre-Weighed Powder Buffers in Flexel® Tank Liners & Powder Transfer Bags for Downstream Processing Applications.

## Benefits

### Reducing time & contamination risks

Powder Bags are connectable to any mixing systems via their tri-clamp connector.

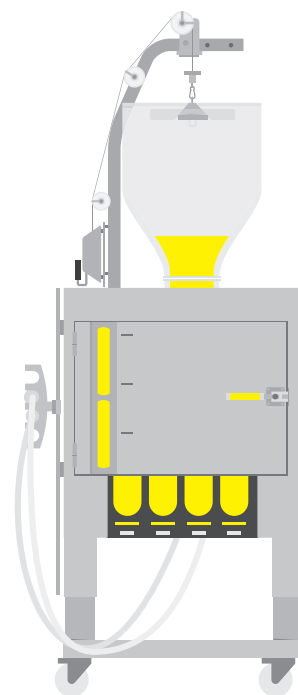
Powder buffers are manufactured according to the highest quality standards from qualified, compendial grade raw materials.

### Consistency from batch to batch

Powder buffers are manufactured in ISO8 clean-rooms following cGMP referentials according to users' unique specifications.

### Ready-to-Hydrate Buffers

Once hydrated, only sterile filtration is left to do. If required, pH adjustment can be easily achieved with our off-the-shelf sterile NaOH 1M in Flexsafe® bag.



## Product Information

Powder Buffers Prefilled Bags are pre-weighed and designed to fit with any downstream processing application up to manufacturing scale. Flexel® Tank Liners & Powder bags will respectively match open and closed mixing solutions.

As buffers composition varies from a process to another, our Technical Sales team will provide support for the evaluation of any customized request.

## Applications

Our powder buffer manufacturing capabilities cover the entire downstream process steps from flush buffers to depth filtration to chromatography. Two primary packaging options are available in order to match with any mixing systems.

Powder Buffers Prefilled Bags are single-use primary packaging solutions which allow for faster implementation and reduce risks of contamination by avoiding dusting when preparing large buffer volumes.

Powder Buffers Prefilled Bags set a new benchmark in convenience and reliability for downstream buffer prep.

In Bioprocessing, **the safety of the operators** is a critical aspect increasingly outlined by regulatory agencies. This is where **Ready-to-Hydrate Buffers help improve environment conditions** (including ATEX) as it offers a dust-free contained powder handling for mixing.

All powder buffer formulations are available in any preferred format and primary packaging; from regular buckets to drums to pre-weighed bags.

## Technical Data

### Specifications

Features	Benefits	Comment
Dust-free	Reduce risks of contamination	4" or 8" Tri-Clamp connection for Powder Transfer Bags
Non-Animal Origin	Yes	Certificate available on request*
Precise Filling	One bag, one prep	Precision of ± 1%
Storage conditions	No need of refrigeration	Ambient in the dark
Shelf-life	Can be determined on demand	
Consistency	High quality	EP   USP raw materials
Robust packaging	Suitable for GMP operations	Each Prefilled bag is double-wrapped in vacuum-sealed pouches

\* Powder Buffers are non-animal origin certified.  
Powder Buffers are manufactured according to cGMP referentials in ISO-certified facilities.

### Characteristics

Our extensive experience in buffer manufacturing and our strong presence in the downstream processing field have led to high quality and reliable product design as well as a broad coverage of DSP applications.

We recommend our range of WFI-Quality Water in Flexsafe® bags for the powder buffer hydration step which can be achieved quickly and easily even in worse-case conditions with Flexsafe® Pro Mixer high mixing performances.

Ready-to-Hydrate Powder Buffers require minimal setup and reduce footprint for the buffer preparation. The hydration process is achieved in a few minutes only; the milling process for the powder manufacturing ensures a homogeneous particle size distribution.

The joined knowledge and expertise in buffer & film manufacturing ensures the supply of a reliable and convenient solution.

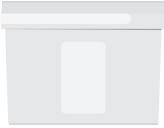



Sartopore® 2 filters are recommended for the sterilization-grade filtration step.

# Product types

	Nominal Size	Max Load	Eq. Max Volume*	Application
	50 L	2 kg	50 L	Open Mixing
Flexel® Tank Liners	100 L	5 kg	100 L	Open Mixing
	200 L	10 kg	200 L	Open Mixing
Powder Transfer Bags	15 L	10 kg	1,000 L	Closed Mixing
	30 L	20 kg	2,000 L	Closed Mixing

\* Based on a regular PBS formulation ~10 g/L

## Complete Range of Packaging Solutions for Powder Buffers

		10 g to 2 kg	5 kg to 20 kg	500 g to 10kg	2 kg to 20 kg	
Bucket		✓				
Drum			✓			
Flexel® Tankliner				✓		Suitable for Open Mixing Systems
Powder Transfer Bag					✓	Suitable for closed mixing systems including Flexsafe® ProMixer
				Up to 200 L	Up to 2,000 L*	

\* Based on a regular PBS formulation ~10 g/L

# Ordering Information\*

Powder Buffers Prefilled Bags are also available as custom products. They will be manufactured to the exact specifications requested and delivered with the appropriate documentation. Contact your local Sales Representative and CMTS Technical Sales Specialist for more information and get started with Buffers.

Below are product information for our standard powder buffer references.

Product Description	Product	Packaging	Volume	Order Number
Ready-to-Hydrate Buffer	PBS	Flexel® Liner	50 L	CQB3FA0001
Ready-to-Hydrate Buffer	PBS	Flexel® Liner	100L	CQB3FA0002
Ready-to-Hydrate Buffer	PBS	Flexel® Liner	200 L	CQB3FA0003
Ready-to-Hydrate Buffer	PBS	Powder Transfer Bag	100 L - in 15 L bag size	CQB3FA0004
Ready-to-Hydrate Buffer	PBS	Powder Transfer Bag	200 L - in 15 L bag size	CQB3FA0005

## Additional product information

- Shelf life: 2 years
- Shipping & storage temperature: 2°C to 30°C
- Documentation:  
Certificate of Analysis, Safety Datasheet

## Standard PBS pH 7.4

Component	g/L	CAS #	Grade
KH <sub>2</sub> PO <sub>4</sub>	0.283	7778-77-0	EP   USP
Na <sub>2</sub> HPO <sub>4</sub>	1.124	7558-79-4	EP   USP
NaCl	9.000	7647-14-5	EP   USP

## Complementary Products

Product Description	Product	Packaging	Volume	Order Number
WFI-Quality Water	WFI	Flexsafe®	20L (EMEA & Asia)	CFB3FA3006
WFI-Quality Water	WFI	Flexsafe®	20L (Americas)	CFB3FA3106
WFI-Quality Water	WFI	Flexsafe®	200L (EMEA & Asia)	CFB3FA3009
WFI-Quality Water	WFI	Flexsafe®	20L (Americas)	CFB3FA3109
NaOH 1M	Sodium Hydroxide	Flexsafe®	20L	CFB3FA7006


\* Other product formats and formulation available. For more information please contact: Europe | Asia: CellCultureMedia.EU@sartorius.com, Americas: CellCultureMedia.NA@sartorius.com

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