

PHARMPROVE®

Multi-compendial bioprocessing
chemicals and excipients



FACTS

Qualified partner of global biopharma companies

"Made in Germany"

Multi-compendial bioprocessing chemicals for use as raw material or excipients

Production facility with cleanrooms class C&D

- EU GMP certified acc. to Part 1 + 2
- IPEC-GMP for excipients certified by EXCiPACT

Pharmacopoeia-compliant raw materials
(e.g. EP/BP/USP/JP/ChP)

Microbiologically controlled raw materials with low impurity profile of endotoxins and bioburden

Warehouse and logistics

- 3,200 pallet spaces for packaging materials, raw materials and finished products, temperature-controlled
- Additional external storage capacities at warehousing service provider
- Customised logistics concepts

Your challenge – Our solution

CUSTOMER IN FOCUS

Our concept: tailored solutions to meet your specific needs

As a trusted partner of manufacturers for plasma-derived therapeutics and biologic drugs, CG Pharma & Biotech serves as a preferred partner for major biopharma companies, supporting the industry's growing trend toward outsourcing buffers, process solutions as well as critical raw materials. Our mission is to enable global biopharma companies to strengthen and localise their supply chains. With innovative solutions, we drive efficiency and sustainability across the industry. We are dedicated in supporting our customers reaching their strategic objectives while upholding the highest standards of quality.

C-MADE

Manufacturing and development of **customised formulations** for the biopharma production process – upstream, downstream and final formulation steps

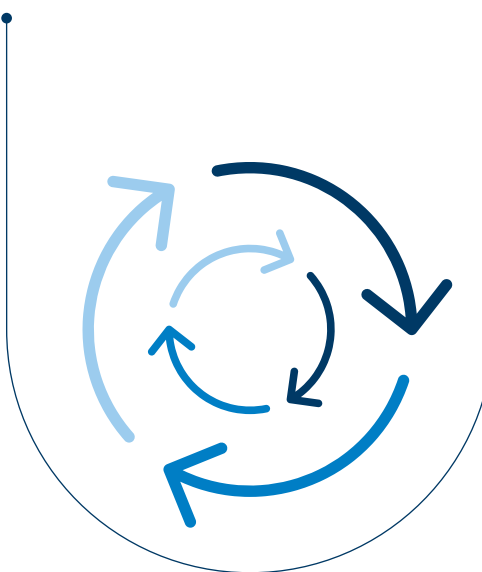
LIQUIDS

customised formulations

SOLIDS

customised formulations

simple and highly complex mixtures



PHARMPROVE®

Multi-compendial bioprocessing chemicals for use as raw material or excipient for manufacturing of biopharmaceuticals

LIQUIDS

single components

SOLIDS

single components



OUR CORE MARKETS

Our customers are leading companies in the biopharmaceutical industry who rely on our expertise and high-quality products for a wide range of applications. We support critical processes and product development in areas such as:

Biotechnology-based drug substances and drug products

- Vaccines (mRNA, recombinant DNA, cell culture-based and vector-based)
- ATPMs (Advanced Therapy Medicinal Products), including cell and gene therapies
- Cell culture media
- Monoclonal antibodies (mAbs)
- Biosimilars

Biological medicinal products

- Plasma-derived medicinal products (PDMP)
- Enzymes
- Heparins

Classic pharmaceuticals (chemical/synthetic drugs, APIs)

- Solid, liquid and semi-solid oral formulations
- Inhalation formulations
- Ophthalmic formulations
- Dialysis formulations

PHARMPROVE®

Multi-compendial bioprocessing chemicals

PharmProve combines "Pharm", which is a clear reference to pharmaceuticals, with "Prove", which underlines a commitment to demonstrating the quality and efficacy of the materials we supply. We offer a range of multi-compendial production chemicals prepared to serve as ingredients, starting materials or excipients. Our comprehensive portfolio is designed to seamlessly integrate into your manufacturing processes, ensuring the highest standards of quality, safety, and efficacy.

Pharmacopoeia-compliant raw materials

Highest GMP standards

Audited processes

Regulatory support and risk mitigation

Microbiological testing

PHARMPROVE®

Packaging suitable for cleanrooms

Reproducible quality

Outstanding customer support

Various raw material groups available

Endotoxin testing

THE CG QUALITY COMMITMENT

Quality assurance is in our DNA

We are committed to continuous improvement and ongoing alignment with global GMP and quality standards to support the evolving needs of our clients and uphold the highest levels of patient safety. Our commitment to quality protects your processes and gives you peace of mind—so you can focus on your core business.

THE CG QUALITY SYSTEM		
Manufacturing authorisation in accordance with the German Medicinal Products Act AMG §13	Change control management	Management of pharmacopoeia-compliant raw materials (e.g. EP/BP/USP/JP/ChP)
Highest standard: EU GMP-certified, inspected facility for raw material production	Quality assurance agreements with customers and suppliers	In-house chemical/physical analytical laboratory
	Validated procedures and processes	
IPEC-GMP for excipients certified by EXCiPACT standard	Batch record management	Microbiological testing (e.g. sterility, endotoxins, RNase, bioburden)
Risk management system according to ICH Q9	Ensuring pharmaceutical product compliance	Environment and sustainability: ISO 50001, ISO 14001, SQAS/ESAD, responsible care, EcoVadis
Supplier qualification system	Stability testing	Kosher/halal certifications

PACKAGING SOLUTIONS

For biopharmaceutical raw materials:
ensuring quality, safety and regulatory compliance

- Filling in custom-designed 2D and 3D single-use bags/manifolds from 1 L to 1,000 L
- Multiway transport/bioprocess containers for 3D single-use bags from 100 L to 1,000 L (CG Tainer)
- Various packaging options for liquids: 10 L to 25 L canisters, 220 L PE or steel drums, 1,000 L intermediate bulk containers (IBC), isotainers up to 20,000 L
- Customer-specific multiway packaging with validated cleaning concepts
- Various primary and secondary packaging options for solid raw materials ranging from 1 kg to 25 kg (e.g. plastic pail, cardboard box, PE cross-bottom bag with PE inliner)



THE PHARMPROVE® CATALOGUE

Comprehensive range of
high-quality chemical raw materials

Our product portfolio is tailored to support biopharmaceutical manufacturers to develop safe, effective, and innovative products that improve global healthcare. With a commitment to product quality and regulatory compliance, our portfolio offers a wealth of solutions for pharmaceutical formulation and manufacturing.

EXCIPIENTS

- Amino acids
- Buffers
- Carbohydrates
- Chlorides
- Citrates
- Cleaning-in-place solutions
- Phosphates
- Speciality components
- Sterile-filtered bioprocess solutions
- Sulphates



PRODUCT PORTFOLIO

PharmProve®

PRODUCTS	QUALITY BRAND CAS NO.	TYMC*	TAMC**	BET***
Amino acids				
Glycine	EP/BP/USP PharmProve® 56-40-6	x	x	x
L-arginine	EP/BP/USP PharmProve® 74-79-3	x	x	x
L-arginine HCl	EP/BP/USP PharmProve® 1119-34-2	x	x	x
L-histidine	EP/BP/USP PharmProve® 71-00-1	x	x	x
L-histidine monohydrochloride	EP/BP PharmProve® 5934-29-2	x	x	x
Buffers				
HEPES	In-house standard PharmProve® 7365-45-9	x	x	x
Tris (trometamol base)	EP/BP/USP/JP/ChP PharmProve® 77-86-1	x	x	x
Tris (trometamol hydrochloride)	In-house standard PharmProve® 1185-53-1	x	x	x
Carbohydrates				
Dextrose monohydrate	EP/BP/USP PharmProve® 5996-10-1	x	x	x
D-(+)-galactose	EP/BP/USP PharmProve® 59-23-4	x	x	x
Maltose monohydrate	based on USP PharmProve® 6363-53-7	x	x	x
Sorbitol	EP/BP/USP PharmProve® 50-70-4	x	x	x
Sucrose	EP/BP/USP/JP/ChP PharmProve® 57-50-1	x	x	x
Chlorides				
Sodium chloride	EP/BP/USP PharmProve® 7647-14-5	x	x	x
Citrates				
Citric acid anhydrous	EP/BP/USP PharmProve® 77-92-9	x	x	x
Citric acid monohydrate	EP/BP/USP PharmProve® 5949-29-1	x	x	x
Tri-sodium citrate anhydrous	USP PharmProve® 6132-04-3	x	x	x
Tri-sodium citrate dihydrate	EP/BP/USP PharmProve® 6132-04-3	x	x	x

* Total yeast and mould count ** Total aerobic microbial count *** Bacterial endotoxins test

PRODUCTS	QUALITY BRAND CAS NO.	TYMC*	TAMC**	BET***
Cleaning-in-place solutions (CIP)				
Acetic acid (glacial) 100 %	EP/USP/JP PharmProve® 64-19-7	-	-	-
Citric acid 50%	In-house standard PharmProve® Plus N/A	-	-	-
Hydrochloric acid 1 M	In-house standard PharmProve® Plus 7647-01-0	-	-	-
Hydrochloric acid 10%	EP/USP PharmProve® Plus 7647-01-0	-	-	-
Hydrochloric acid 37%	EP/USP PharmProve® 7647-01-0	-	-	-
Phosphoric acid 85%	EP/USP/JP/ChP PharmProve® 7664-38-2	-	-	-
Sodium hydroxide pellets	EP/BP/USP PharmProve® 1310-73-2	-	-	-
Sodium hydroxide solution 1 M	In-house standard PharmProve® Plus N/A	x	x	x
Sodium hydroxide solution 10 M	In-house standard PharmProve® Plus N/A	-	-	-
Sodium hydroxide solution 45%	In-house standard PharmProve® Plus N/A	-	-	-
High-quality water				
Purified Water (PW)	EP PharmProve® Plus 7732-18-5	x	x	x
Water for Injections (WFI)	EP PharmProve® Plus 7732-18-5	x	x	x
Phosphates				
Sodium dihydrogen phosphate dihydrate	EP/BP/USP PharmProve® 13472-35-0	x	x	-
Speciality components				
1,2-propylene glycol	EP/USP PharmProve® 57-55-6	x	x	x
Adipic acid	EP/USP/JP PharmProve® 124-04-9	x	x	x
Ascorbic acid	EP/USP PharmProve® 50-81-7	x	x	x
Glycerol 99% (vegetable)	EP/USP PharmProve® 56-81-5	x	x	x
Glycerol 99% (synthetic)	EP/USP PharmProve® 56-81-5	x	x	x
Guanidine hydrochloride	USP PharmProve® 50-01-1	x	x	x
Macrogol 4,000 powder	EP/USP PharmProve® 25322-68-3	x	x	x
Methylparaben	EP/USP PharmProve® 99-76-3	x	x	x
Octoxynol (triton X-100 substitute)	EP PharmProve® 9002-93-1	x	x	x
Polysorbate 80	EP/BP/USP PharmProve® 9005-65-6	x	x	x
Tri-n-butylphosphate	EP PharmProve® 126-73-8	-	-	-
Urea crystalline	EP/USP PharmProve® 57-13-6	x	x	-
Urea compacted	EP/USP PharmProve® 57-13-6	x	x	-
Sulphates				
Ammonium sulphate	USP PharmProve® 7783-20-2	x	x	x
Sterile-filtered bioprocess solutions in single-use bags				
Sodium hydroxide solution 10 mM	In-house standard PharmProve® Plus N/A	x	x	x
Sodium hydroxide solution 0.1 M	In-house standard PharmProve® Plus N/A	x	x	x
Sodium hydroxide solution 0.5 M	In-house standard PharmProve® Plus N/A	x	x	x
Sodium hydroxide solution 1 M	In-house standard PharmProve® Plus N/A	x	x	x

* Total yeast and mould count ** Total aerobic microbial count *** Bacterial endotoxins test

CG CONNECTS – YOUR EXPERTS AND OUR SPECIALISTS

DR. FRANK VELTE

Head of CG Pharma & Biotech

+49 (0) 511 87 80 3-106

+49 (0) 152 346 676 31

frank.velte@cg-chemikalien.de

MARCO REGEL

Head of Sales, Business Development

+49 (0) 511 87 80 3-146

+49 (0) 172 251 66 96

marco.regel@cg-chemikalien.de

DR. SHAHID I. AWAN

Key Account Manager, Business Development

+49 (0) 511 87 80 3-175

+49 (0) 162 349 23 42

shahid.awan@cg-chemikalien.de

DR. BAHNE KRAHWINKEL

Key Account Manager, Business Development

+49 (0) 511 87 80 3-259

+49 (0) 162 203 44 12

bahne.krahwinkel@cg-chemikalien.de

THOMAS METZGER

Key Account Manager, Business Development

+49 (0) 511 87 80 3-258

+41 (0) 79 438 72 81

thomas.metzger@cg-chemikalien.de

MARIAN SÜß

Key Account Manager, Business Development

+49 (0) 511 87 80 3-864

+49 (0) 173 202 43 34

marian.suess@cg-chemikalien.de

CG Pharma & Biotech – a business unit of
CG 1962 | CG CHEMIKALIEN GMBH & CO. KG

Ulmer Strasse 1, GER 30880 Laatzen

+49 (0) 511 87 80 3-0

www.cg-pharma-biotech.com