

CPAchem – introduction

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CPAchem history



CPAchem is a Bulgarian-French company, which invented the custom-made standards, prepared to specific customer requirements



Nowadays CPAchem has clients in more than 100 different countries on 6 continents



Since 2002, the quality of CPAchem products has enabled the company to become and remain an OEM manufacturer for large international distributors.



CPA chem history line

2001	Founded, started producing and offering custom multi-component Inorganic solutions
2002	ISO 9001 certified
2003	Started production of Analytical standards and standards according to European Pharmacopoeia
2005	Started production of Organic standards
2012	Started production of standards according to US, British, Indian, Japanese and International Pharmacopoeia
2014	ISO 17025 (testing laboratory), ISO Guide 34 (CRM producer) accredited
2015	Started production of Organic compounds (CRM)
2016	Started production of Inorganic compounds (CRM)
2017	Started production of Karl Fischer standards (CRM) and Primary pH buffers (Harned Cell)
2018	Started production of Turbidity standards (CRM) and Chinese Pharmacopoeia products

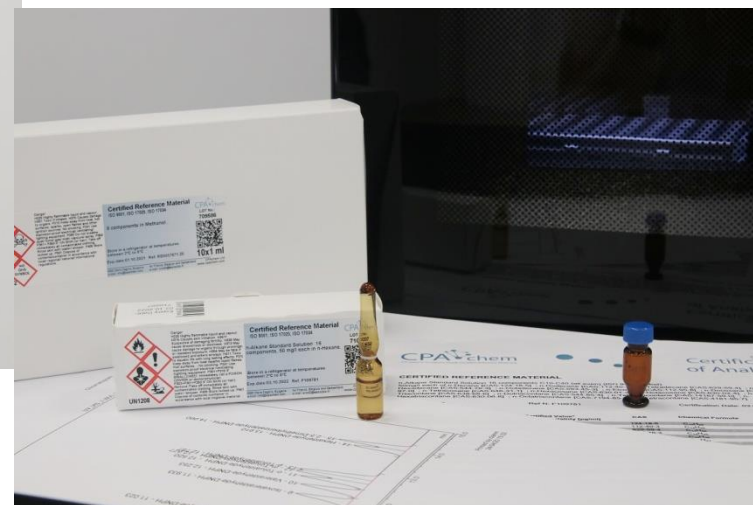
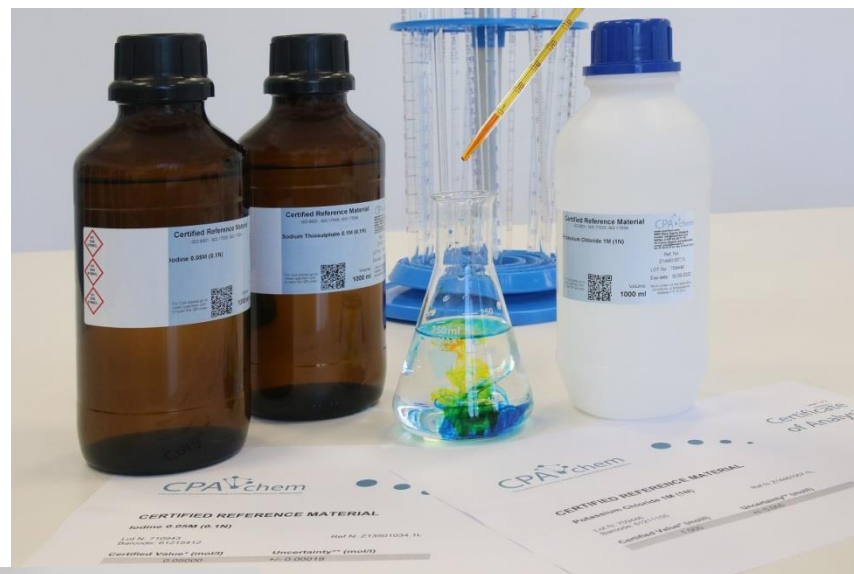


CPAchem history line

2019	<p>Moved to its new building with 5400 square meters (58 125 square feet) modern manufacturing and R&D laboratories, storage, office and recreational space.</p> <p>Started offering organic compounds with certified weight</p>
2020	<p>Certification according to ISO 17025 and ISO 17034 of the Pharmacopoeia products</p> <p>Started production of TIC&TOC, TDS, Alkalinity, COD, Total hardness, Pt-Co/Hazen and UV-VIS standards as CRM</p>
2021	<p>Launched – Osmolality standards, Full range of Karl Fischer standards</p>
2022	<p>Launched – Petrochemical standards</p>
2023	<p>Added TAN, TBN and Density standards to its portfolio</p>



CPAchem's product range



CPAchem's product range

Custom-made and Stock
Inorganic solutions for AAS,
ICP, ICP/MS and Ion
Chromatography

Custom-made and Stock
Organic solutions for LC,
LC/MS, LC-MS/MS, GC and
GC/MS

Custom-made and Stock
Volumetric Solutions, Karl Fischer,
Turbidity, TOC, TIC, UV-VIS, COD,
Alkalinity, TDS, Pt-Co/ Hazen and
Total hardness Standards

High-Purity Inorganic
Compounds

High-Purity Organic
Compounds


Custom-made and Stock pH
and Conductivity Buffers,
Primary pH buffers
(Harned Cell)

Certified Reference Materials

Pharmacopoeia Products

Reagents according to European, US, British,
Indian, Japanese, International and Chinese
Pharmacopoeia

CPAchem is an expert in the production of Custom-made standards



🧪 The custom-made standards are prepared to exactly match clients' needs and give them opportunities to quickly achieve their goals

🧪 They are very cost-effective

🧪 Short lead time for preparation:

✓ 2 to 5 business days usually

✓ Emergency orders within 24 hours

🧪 55 % of CPAchem's turnover for 2023 is of custom-made standards

CPAchem accreditations




 ISO 17034:2016 (CRM producer)



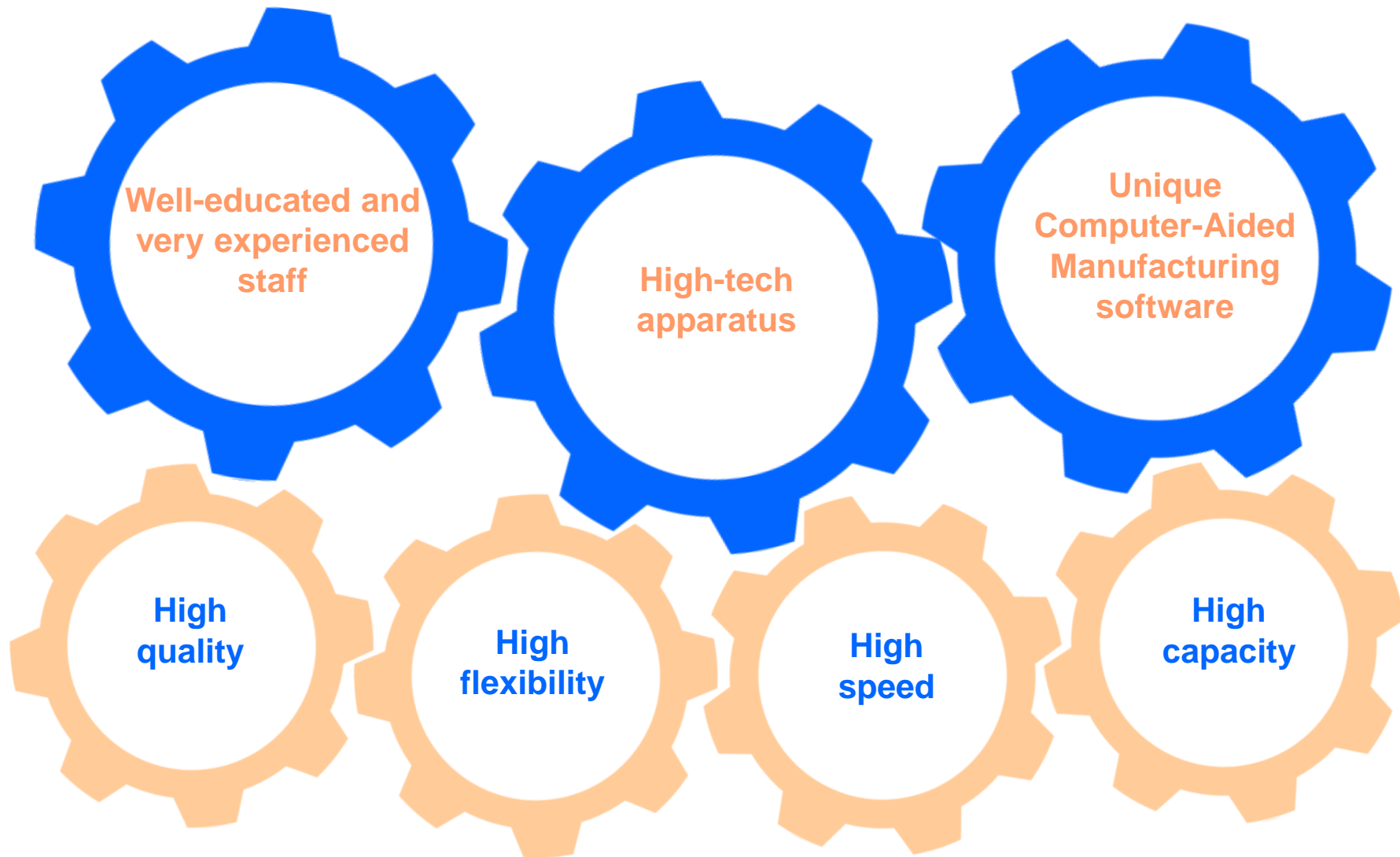
 ISO/IEC 17025:2017 (Testing)




 ISO 9001:2015 certified


 The accreditation scope is one of the largest ones in the world


CPAchem main advantages?




What makes CPAchem different as a CRM producer?

 We answer every inquiry extremely fast – within the same day, not later than 24 hours

 We produce and ship every order (incl. for custom-made products) within 3-7 working days and process emergency orders within 24 hours when it is needed


 High capacity – ability to produce more than 200 different custom-made standards per day without volume and quantity limits

 We guarantee high-quality of products – the number of valid claims has never exceeded 0.3% of the total number of orders per year

 CPAchem has the widest accreditation scope in the industry



What makes us different as a CRM producer?

 The control of all processes is fully automated by our dedicated Computer Aided Manufacturing (CAM) software

 The software system performs and controls the whole working process:

- ✓ starting from the raw materials' incoming control through
- ✓ products preparation
- ✓ certified values and uncertainties budget calculation
- ✓ certificates generation
- ✓ packaging and expedition



05.03.2019 CPA Svella Ivanova

Ord 214348 Cat 11134 Quo 260021 637115 REF TEXT ELEM MCC Time Clients Quote

Payments OK

Details CAPURAN Components Custom Multi(7)-element Solution for IC

S	Ord	E..	R...	D...	Cl...	LOT	Box	P	Prep
2	0	INC	INC	637112					MD,PA
1	0	UNL	UNL	637113			1		TS,DH
2	0	INC	INC	637114					NP
1	0	UNL	UNL	637115			1		TS,DH
1	0	UNL	UNL	637116			1		NP
1	0	UNL	UNL	637117			1		NP
1	0	UNL	UNL	637118			1		NP
1	0	UNL	UNL	637119			1		NP

214348 Orders

Distr UNL Sent Archive P6135373 25.02.2019 25.02.2019

7 Components

ID	Component	Conc.	Msr.U.
F-	Fluorides	100	mg/l
NO2-	Nitrites	100	mg/l
Br-	Bromides	100	mg/l
Cl-	Chlorides	1000	mg/l
NO3-	Nitrates	1000	mg/l
SO42-	Sulphates	1000	mg/l
PO43-	Phosphates	200	mg/l

WOpen Certificate - C:\Everest3\Everest\Archive\ANALYSIS\637115.rtf

Times New Rom 10

Copies Print *.rtf Duplex Setup Printer Print to PDF-CAR Undo Barcode in PT

CERTIFIED REFERENCE MATERIAL
Solution of 7 components : 1000 mg/l each of Cl-, NO3-, SO42-; 200 mg/l PO43-; 100 mg/l each of F-, NO2-, Br-; Matrix: H2O

Lot N: 637115 Ref N: RM007035L1 Certification Date: 20.02.2019

Component	Certified Value and uncertainty [mg/l]	Metrological traceability
F-	99.82 ± 0.22 ⁽¹⁾	NIST SRM No 3183 Lot 140203
NO ₂ -	100.00 ± 0.22 ⁽¹⁾	BAM CRM No 71804 Lot BCBRS525V
Br-	99.90 ± 0.22 ⁽¹⁾	NIST SRM No 3184 Lot 151130
Cl-	997.5 ± 2.2 ⁽¹⁾	NIST SRM No 3182 Lot 060925
NO ₃ -	997.9 ± 2.3 ⁽¹⁾	NIST SRM No 3185 Lot 050517
SO ₄ ²⁻	1000.5 ± 2.1 ⁽¹⁾	NIST SRM No 3181 Lot 080603
PO ₄ ³⁻	199.85 ± 0.48 ⁽¹⁾	NIST SRM No 3186 Lot 170606

Notes:
(1) WQP 5.15.1.24 The certified value was obtained by a weighted mean of the results of two independent calibration methods among: Classical Volumetric, Primary Gravimetric, Instrumental (ICP/OES, ICP/MS or IC)

Products Certification

Fully in tune with our company's philosophy we have been constantly trying to make our certificates more precise, detailed and easily accessible, meeting even the toughest demands of every user.

Get it online, be green

The users could access 24/7 each product's certificate and download it from our web-site simply using the QR code printed on product's label

Sample CoAs for all stock products are also available on the web-site

The shelf-life starts on the date the product is sent to the customer, i.e. customers always receive products with 100% shelf-life

All products lot numbers are unique and are related to given distributor's order









Inorganic Certified Reference Materials




Scan the QR code and go directly to our web-page: <https://www.cpachem.com/shop/inorganic>

Inorganic standards Certification

-  All certified values and their uncertainties are obtained analytically
-  Certificates of Analysis report the actual values and not simply the calculated ones
-  Traceability to SI (NIST, BAM)
-  The uncertainties refer to each of the components separately and not to the uncertainty of the whole mixture



Inorganic standards Certification

 Several methods are used to obtain the certified values of the produced certified reference materials:

- Instrumental - Ion Chromatography, ICP/OES or ICP/MS calibration;
- Classical volumetric analysis;
- Gravimetric dilution of a concentrate, which had been calibrated by instrumental and/or classical analysis;
- Weighted mean of the results of two independent calibration methods among: Instrumental (ICP/OES, ICP/MS or IC), Classical volumetric and Primary gravimetric*

* Primary gravimetric method is used only if the other methods are not usable. If it is possible the gravimetric preparation is always checked analytically for correct dilutions and eventual contamination





Organic Certified Reference Materials



Scan the QR code and go directly to our web-page: <https://www.cpachem.com/shop/organic>

Organic standards certification



The uncertainties refer to each of the components separately and not to the uncertainty of the mixture



The certified value(s) are obtained gravimetrically and confirmed experimentally by GC-MS or HPLC-DAD/ HPLC-MS/ HPLC-MS-MS. The latest option is to provide a chromatogram with the CoA or instrumentally obtained certified value(s)



The CoAs provide full traceability of preparation. The dissolution of the raw materials (with their purity), passing through the preparation of the intermediate solutions and reaching to the preparation of the final solutions is described in section Additional Information



An option for high-purity organic compounds is to certify their exact weight



A collection of laboratory glassware including a round-bottom flask with dark red liquid, a beaker with orange liquid, a graduated cylinder with light green liquid, an Erlenmeyer flask with yellow liquid, and a test tube with blue liquid. The text "Analytical Certified Reference Materials" is overlaid in white italicized font.

Analytical Certified Reference Materials



Scan the QR code and go directly to our web-page: http://www.cpachem.com/shop/analytical_reagents


Analytical CRM certification

 All certified values and their uncertainties are obtained analytically

 Certificates of Analysis report the actual values

 Traceability to SI (NIST, BAM)

 For pH and conductivity standards CPAchem certifies values and uncertainties for two different temperature values

 For COD standards certified values and uncertainties are obtained by the weighted mean of two independent calibration methods





Pharmacopoeia products



Scan the QR code and go directly to our web-page: <https://www.cpachem.com/shop/pharmacopoeia>

Pharmacopoeia products according to European, US, British, Indian, Japanese, International and Chinese Pharmacopoeia

-  Opalescence suspension *
-  Color Primary Certified Reference Materials and Reference Materials
-  Reagents*
-  Standard Solutions *
-  Buffer Solutions *
-  Volumetric Solutions *
-  Indicators

* Certification according to ISO 17025 and ISO 17034 is available upon request




Pharmacopoeia products according to European, US, British, Indian, Japanese, International and Chinese Pharmacopoeia


 All products are prepared strictly following the latest Pharmacopoeia edition recipes

 Options for production of large volumes




MSDS, CoAs, Transportation, Claims

 MSDS – the safety data sheets could be downloaded from CPAchem's web-page - <http://www.cpachem.com/msds>

 CoA – certificates of analysis of the already produced standards could be downloaded from CPAchem's web-page - <http://www.cpachem.com/certificates>

 CoA for products with private labels are automatically send to ftps, provided by the respective distributors

 Transportation – we use the best transportation options for each destination. The organic solutions have been always sent by Air

 Claims – each claim is answered within 10 days after we analyze the retaining sample of the claimed product. In case the claim has grounds, a free of charge replacement product is sent

CPAchem staff and facilities



 Total staff – 51 employees

 44 of them are university graduates with proven track-record

Our new home





*The Experts in Custom-made
Certified Reference Materials*

Our new home



Our new home



Our new home



Our new home



Our new home



Our new home



Our new home



Our new home



Our new home



Our new home





Thank you for your attention!