Kemio

Protecting public health

Palintest



Introducing Kemio

Kemio uses a sophisticated electrochemical technique, powered by Palintest's patented single-use sensor technology, to test for chemicals and heavy metals in water.

It is widely used by public authorities, water utilities and water management organisations, and the food and beverage industry to protect the public and the environment and ensure compliance with regulations.

Kemio's single-use sensors generate an electrical current by reacting with the chemical or metal in the water sample. Kemio measures this electrical signal to determine the concentration of contaminants within the sample.

How does it work?

A user-friendly testing method, Kemio minimises the potential for human error to ensure accurate results.



Scan the sensor



Insert the sensor



Fill the sample vessel



Close the lid - the measurement begins automatically

Find out more about Kemio www.palintest.com/kemio



The many benefits of Kemio technology...



Highly accurate

A reliable, proven testing method



No calculations required

Clear pass/fail results are shown



Simple operation

No training or chemistry knowledge is required



Full traceability

Integrated data log summarises 10,000 results



Removes administrative and process errors

Test results are logged automatically



Rapid and reliable on-site testing

Kemio combines portability with quick test speeds



Suitable for all sample types

Unaffected by colour, light quality, turbidity or floating particles



Health and safety

No glassware or harsh chemicals

How can Kemio help you?

Protect public health by rapidly identifying contamination



Testing with Kemio delivers reliable results within minutes at the point of use... and no laboratory testing is needed.

This means that dangerous levels of chemicals or heavy metals can be quickly identified, leading to appropriate contamination control action by businesses or authorities.

Comply with regulations



All test results are automatically stored in a Kemio product, providing users and authorities with the traceable and auditable data they need to demonstrate compliance.

Kemio offers US Environmental Protection Agency (EPA) approved testing methods which can help organisations comply with regulations such as the EPA Lead and Copper Rule.

Test water at source – wherever you need to



Kemio is a lightweight, fully portable digital test kit which uses no glassware and is certified IP67 waterproof.

It therefore enables water testing to be carried out in multiple locations and in challenging or remote environments.

Save on resources and training time



Kemio provides users with a simple test method. No training is required, as on-screen visual instructions guide users through the test.

Kemio test kits can be deployed quickly, straight out of the box. They can be easily used by single operators and no resources are required for laboratory work.

Provide peace of mind to authorities and the public



Kemio uses a highly accurate electrochemical technique and measurements aren't affected by ambient light, colour, turbidity or floating particles.

Combine this with automatic result logging and data traceability, and users, authorities and the public can have confidence in Kemio's reliability.

Ensure safe and compliant practices



No glassware or harsh chemicals are used with the Kemio digital test kit. This ensures that no broken or smashed glass can contaminate your product lines and water sources.

No glassware also means that users can conduct tests safely, whether they are using the product in the field or in a laboratory... and there is less waste too.

"The unit is easy to use, easy to train on and is intuitive."

Compliance and Innovation Manager,
Major Fresh Produce Supplier

"I like the simplicity of the Kemio meter, as well as the lack of waste."

Chemist, Utilities Authority

Kemio Disinfection

Accurate testing for critical disinfection parameters

Results in 60 seconds

A user-friendly test method, Kemio Disinfection makes light work of disinfection monitoring. Kemio Disinfection delivers reliable results within minutes at the point of use and what's more no training is required, as on-screen visual instructions guide users through the test.

Guaranteed Accuracy

Kemio Disinfection can be used with all water samples including those which are coloured, turbid, and those with floating particles.



TESTING FOR

Bromine, Chlorine, Chlorine Dioxide, Chlorite and Peracetic Acid

Kemio Disinfection Soft Case Kit

Contains instrument, protective carry case, check standards, micro USB, international adaptor, stylus and quick start instructions.

Product code: KEMS15DIS

Kemio Disinfection Hard Case Kit

Contains instrument, check standards, micro USB, international adaptor, stylus and quick start instructions.

Product code: KEMH15DIS

Kemio Disinfection Benchtop Kit

Contains instrument, check standards, micro USB, international adaptor and quick start instructions.

Product code: KEMR15DIS



| Tests | | Range | | Temperature |
|------------------|--|------------------|--|-------------|
| Bromine | | 0.2 - 10mg/L | | 5 - 30°C |
| Chlorine (free) | | 0.02 - 100 mg/L | | 2 - 35°C |
| Chlorine (total) | | 0.02 - 500 mg/L | | 2 - 35°C |
| Chlorine Dioxide | | 0.02 - 50 mg/L | | 5 - 40°C |
| Chlorite | | 0.02 - 50 mg/L | | 5 - 40°C |
| Peracetic Acid | | 0.02 - 4000 mg/L | | 2 - 60°C |

| Measuring System | Chronoamperometry | | |
|---------------------------|---|--|--|
| Temperature Range | Ambient range: 0°C - 50°C | | |
| Display | High clarity LCD screen | | |
| User Interface | Touchscreen | | |
| Language Options | English, French, Spanish and Chinese (Simplified) | | |
| Connectivity | USB-C | | |
| Information Input | Barcode scanner, on-screen keyboard, on-screen keypad | | |
| Data Storage | 10,000 test results with all test information | | |
| Size (W x L x H) & Weight | 156 mm x 180 mm x 95 mm, 1012g | | |
| Battery | 2300mAh NiMH Rechargeable Battery Pack. Only battery packs supplied by Palintest can be used with Kemio | | |
| Power Supply | USB power and external charger | | |
| Rating | IP67 | | |

Kemio Heavy Metals

Expert testing for heavy metal contaminants

EPA approved method for lead testing

Protect against Lead, Copper, Arsenic and Cadmium contamination with Kemio Heavy Metals. The only portable EPA approved method for lead testing. The US Environmental Protection Agency (EPA) has approved Palintest Method 1001, Rev. 1.1. for the determination of total recoverable lead in drinking water using differential pulse anodic stripping voltammetry using pre-calibrated disposable sensors in a Palintest Kemio device.

Results in 3 minutes

Kemio Heavy Metals is lightweight and durable. In as little as three minutes, Kemio Heavy Metals provides a measurement in the field, allowing you to rapidly respond to contamination without the delays of laboratory test results.



TESTING FOR

Lead, Copper, Arsenic and Cadmium

Kemio Heavy Metals Soft Case Kit

Contains instrument, protective carry case, check standards, micro USB, international adaptor, stylus and quick start instructions.

Product code: KEMS15HM

Technical specifications



| Tests | Range | Temperature |
|---------|-----------------|-------------|
| Lead | 1 - 100 μg/L | 5 - 35°C |
| Cadmium | 0.2 - 10 μg/L | 5 - 35°C |
| Copper | 100 – 2000 μg/L | 5 - 35°C |
| Arsenic | 2 – 250 μg/L | 5 - 35°C |

| Measuring System | Anodic Stripping Voltammetry (ASV) | | | |
|---------------------------|---|--|--|--|
| Temperature Range | Ambient range: 0°C - 50°C | | | |
| Display | High clarity LCD screen | | | |
| User Interface | Touchscreen | | | |
| Language Options | English, French, Spanish and Chinese (Simplified) | | | |
| Connectivity | USB-C | | | |
| Information Input | Barcode scanner, on-screen keyboard, on-screen keypad | | | |
| Data Storage | 10,000 test results with all test information | | | |
| Size (W x L x H) & Weight | 156 mm x 180 mm x 95 mm, 1012g | | | |
| Battery | 2300mAh NiMH Rechargeable Battery Pack. Only battery packs supplied by Palintest can be used with Kemio | | | |
| Power Supply | USB power and external charger | | | |
| Rating | IP67 | | | |
| | | | | |

Kemio Multi

An 'all in one' system

Combining the best in Kemio technology

Combining the capabilities of Kemio Heavy Metals with Kemio Disinfection. Kemio Multi is our next generation, multi-parameter measurement platform. It provides laboratory quality results, whether in the lab or in the field, allowing you to swiftly address and protect from water contamination.

Training Needs Minimised

Kemio Multi boasts the many benefits of our Kemio range including a user-friendly interface, digital data log, clear pass or fail results, electronic measurement and accurate results.



TESTING FOR

Lead, Cadmium, Copper, Bromine, Chlorine, Chlorine Dioxide, Chlorite, Arsenic and Peracetic Acid

Kemio Multi Soft Case Kit

Contains instrument, 2 x sample vessels, protective carry case, check standards, micro USB, international adaptor, stylus and quick start instructions.

Product code: KEMS15MUL





Technical specifications

| Tests | Range | Temperature |
|------------------|------------------|-------------|
| Lead | 1 - 100 μg/L | 5 - 35°C |
| Cadmium | 0.2 - 10 μg/L | 5 - 35°C |
| Copper | 100 – 2000 μg/L | 5 – 35°C |
| Bromine | 0.2 - 10mg/L | 5 - 30°C |
| Chlorine (free) | 0.02 - 100 mg/L | 2 - 35°C |
| Chlorine (total) | 0.02 - 500 mg/L | 2 - 35°C |
| Chlorine Dioxide | 0.02 - 50 mg/L | 5 - 40°C |
| Chlorite | 0.02 - 50 mg/L | 5 - 40°C |
| Peracetic Acid | 0.02 - 4000 mg/L | 2 - 60°C |
| Arsenic | 2 - 250 μg/L | 5 - 35°C |

| Measuring System | Anodic Stripping Voltammetry (ASV) / Chronoamperometry | | |
|---------------------------|---|--|--|
| Temperature Range | Ambient range: 0°C - 50°C | | |
| Display | High clarity LCD screen | | |
| User Interface | Touchscreen | | |
| Language Options | English, French, Spanish and Chinese (Simplified) | | |
| Connectivity | USB-C | | |
| Information Input | Barcode scanner, on-screen keyboard, on-screen keypad | | |
| Data Storage | 10,000 test results with all test information | | |
| Size (W x L x H) & Weight | 156 mm x 180 mm x 95 mm, 1012g | | |
| Battery | 2300mAh NiMH Rechargeable Battery Pack. Only battery packs supplied by Palintest can be used with Kemio | | |
| Power Supply | USB power and external charger | | |
| Rating | IP67 | | |



Kemio

Order your Kemio now

https://www.palintest.com/get-in-touch/



Ordering information

| Items in kit | Kemio Disinfection Benchtop Kit KEMR15DIS | Kemio Disinfection Soft Case Kit KEMS15DIS | Kemio Disinfection Hard Case Kit KEMH15DIS | Kemio Heavy Metals Soft Case KEMS15HM | Kemio Multi Soft Case Kit KEMS15MUL |
|--------------------------------|---|--|--|---------------------------------------|-------------------------------------|
| Kemio Disinfection | | | | | |
| Check Standards | | | | | |
| Protective Case | | | | | |
| USB Cable | | | | | |
| International Power Adaptor | | | | | |
| Kemio Sensors | | | | | |
| Soft Case | | | | | |
| Hard Case | | | | | |
| Additional Information | Sensors ordered separately | Sensors ordered separately | Includes 200 Chlorine Dioxide/Chlorite sensors and 100 Chlorine sensors. *Kit required for Chlorite measurement. | Sensors ordered separately | Sensors ordered separately |

Kemio Sensors

Kemio Sensors help you to understand your chemical concentration and to reduce the risks and costs associated with overdosing and underdosing. Please note, both the Kemio Disinfection Sensors and Kemio Heavy Metal Sensors are suitable for Kemio Multi.



Consumables

| Consumables | Part Code |
|--|-----------|
| CR-1 Reagent (Chlorite test) | PT546 |
| CR-2 Reagent (Chlorite test) | PT547 |
| Glycine Reagent (Chlorine Dioxide and Chlorite test) | PT549 |

Please see page 16 for more Kemio accessories.

Kemio Heavy Metal Sensors

| | Range | Temperature | Part Code |
|---------|----------------|-------------|---|
| Lead | 1 - 100 µg/L | 5 - 35°C | 10 pack: KEM22MPB |
| | | | Includes tablets, crushing rods and disposable vessels |
| Cadmium | 0.2 - 10 µg/L | 5 - 35°C | 10 pack: KEM22MCD Includes tablets, crushing |
| | | | rods and disposable vessels |
| Copper | 100 - 2000µg/L | 5 - 35°C | KEM22MCU |
| Arsenic | 2 - 250 μg/L | 5 -35°C | Total Arsenic: KEM100M-TAS - Pack of 100 sensors. |
| | | | Speciated Arsenic (Arsenic III, Arsenic V, and Total Arsenic): KEM100M-SAS - Pack of 100 sensors (50 tests for total arsenic and 50 tests for arsenic (III)). |
| | | | Both packs include tablets, crushing rods, disposable vessels, 2x syringes and 2x pre-packed reusable cation exchange columns. |

Kemio Disinfection Sensors

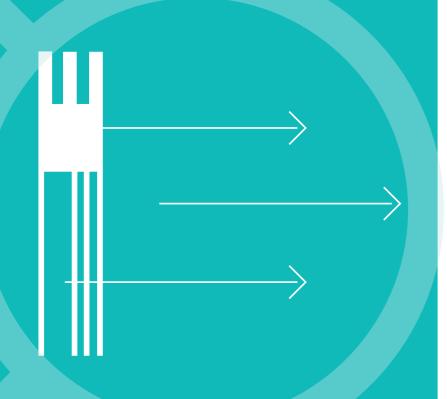
| Free and Total Chlorine | Range | Temperature | Part Code | |
|-------------------------|---|----------------------|--|--|
| CLO | Free Chlorine: 0.02 - 10mg/L Total Chlorine: 0.02 - 75mg/L | 2 - 35°C | 100 pack: KEM21CLO 500 pack: KEM25CLO | |
| CHR | Free Chlorine: 0.1 - 25mg/L Total Chlorine: 1 - 500mg/L | 5 - 25°C 5 - 30°C | 100 pack: KEM21CHR 500 pack: KEM25CHR | |
| CLT | Free Chlorine: 0.1 - 25mg/L Total Chlorine: 1 - 500mg/L | 2 - 15°C | 100 pack: KEM21CLT 500 pack: KEM25CLT | |

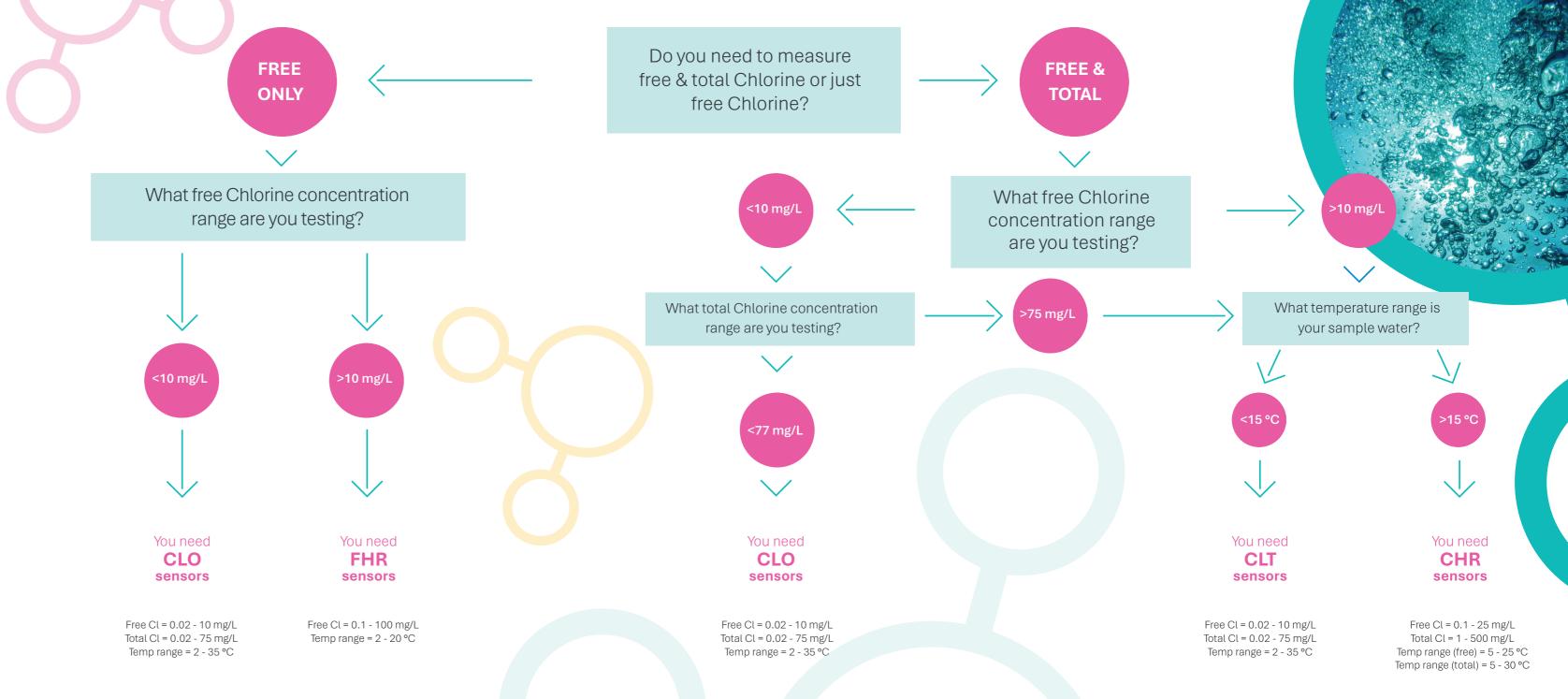
| Free Chlorine | Range | Temperature | Part Code Part Code |
|---------------|---------------|-------------|---------------------|
| FHR | 0.1 - 100mg/L | 2 - 20°C | 100 pack: KEM21FHR |
| | | | 500 pack: KEM25FHR |

| Other Disinfection Sensors | Range | Temperature | Part Code |
|-------------------------------|---|-------------|--|
| Bromine | 0.2 - 10mg/L | 5 - 30°C | 100 pack: KEM21BRS |
| Chlorine Dioxide and Chlorite | Chlorine Dioxide: 0.02 - 50mg/L Chlorite: 0.02 -50mg/L | 5 - 40°C | Starter pack (100 sensors and glycine reagent): KEM20CDX 100 pack: KEM21CDX 500 pack: KEM25CDX |
| Peracetic Acid | 10 - 2000mg/L | 5 - 30°C | 100 pack: KEM21PAA 500 pack: KEM25PAA |
| Peracetic Acid (low range) | 0.02 – 10 mg/L | 2 - 30°C | 100 pack: KEM21PAL 500 pack: KEM25PAL |
| Peracetic Acid (high range) | 400 - 4000mg/L | 10 - 60°C | 100 pack: KEM21PAH 500 pack: KEM25PAH |

Chlorine Sensor Selection

Use our Chlorine sensor selection diagram to select the most suitable sensor for your testing needs.





Accessories

Palintest is committed to supporting all your water testing requirements. We offer a range of accessories and check standards to help support your testing procedures.

| Accessories | Code | Compatibility | | |
|--|--------|-----------------------|-----------------------|----------------|
| | | Kemio Disinfection | Kemio Heavy Metals | Kemio Multi |
| Kemio Check Standards | KEMC10 | | | • |
| Kemio Stylus | KEM306 | | • | |
| Kemio Protective Case | KEM307 | - | | |
| USB-C Cable | KEM309 | • | | |
| Replacement Sample Vessel (Disinfection) | KEM308 | • | | |
| Replacement Sample Vessel (Heavy Metals) | KEM313 | | • | |
| Degassing Equipment | PT553 | | | |
| Degassing Replacement Filter | PT556 | | | |
| Degassing Pump | PT554 | | | |

Introducing Palintest

Our Expertise in Safeguarding Water

Palintest supports water utilities providers, industrial clients, and water management and wastewater personnel in meeting regulatory requirements and ensuring water safety. We collaborate with a diverse range of customers, including local authorities, humanitarian organisations, and various industrial sectors. Our commitment is to deliver innovative solutions and reliable support, ensuring the highest standards of water quality and safety.

Established in the UK in 1989, but with a history dating back to the 1800s, Palintest has pioneered techniques and technology used in drinking and wastewater, recreational water, industrial and humanitarian water. Our technology is manufactured in the UK and used globally in a variety of applications to protect lives and the environment.

Palintest is part of Halma, a global group of life-saving technology companies.







Innovation



Championing water safety



UK manufacturing



Tech leaders

Palintest Connect

Do you have Palintest technology? If so, don't forget to register for Palintest Connect!

Monitoring water in critical applications requires full confidence in field quality data. Palintest Connect is a cloud-based data management software which allows you to upload, view and manage water quality data swiftly and seamlessly – saving you time and money, and improving efficiencies.



Demonstrate compliance

Automatically generates auditable data log for regulatory reporting. Data is recorded and maintained in a secure database for 8 years.



Data at your fingertips

Access data anywhere, anytime from your secure cloud platform to make informed decisions.



Remote supervision

Share and monitor data across multiple sites. What's more, trigger alert notifications to take immediate action and avoid exceedances.



Data storage and management

Automatic data upload, eliminating the need for manual data entry on paper logs.



Remote technical and product support

Enables superior troubleshooting support from our technical team to help keep your operations running.



Optimum performance

Ensure your instrument is always up to date with the latest firmware through automatic updates.

Register for Palintest Connect:

www.palintestconnect.com



Kemio



Register your product



Download the latest software



View new sensors



Technical support

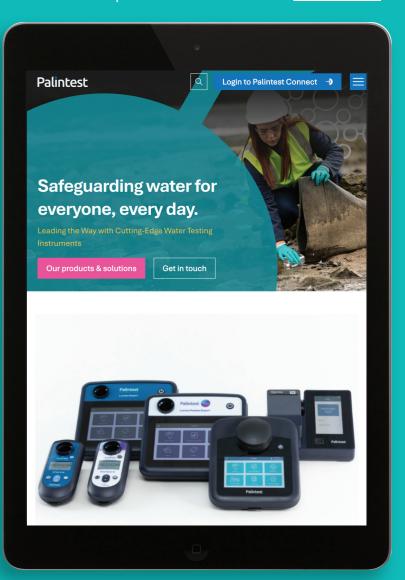


Product FAQs

For the latest information about Kemio



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