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# ThermoClean CPX

# Universal corrosion protection concentrate for water circulation systems. Only 1 ml ThermoClean CPX to 1 L water

ThermoClean is the original brand name of the original equipment manufacturer (OEM) Bioanalytic GmbH - Germany.

ThermoClean is also sold worldwide under many secondary brand names of other manufacturers (OSM = Original Sales Manufacturer).

ThermoClean stands for a series of different products for water circulation systems and humidification devices.

## Characteristic

ThermoClean CPX is a universal protection concentrate for water circulation systems (cooling/temperature control). It offers particularly effective corrosion protection for multi-metal designs (aluminium, copper, brass, bronze, etc.). Economical application: Only 1 ml per litre of circulation water.

We recommend to ask the technical release by the device manufacturer.

# **Properties**

- Highly concentrated: Application only 0.1 %, corresponds to only 1 ml ThermoClean CPX per 1 L circulation water! Higher dosages are possible but not significantly more effective.
- Liquid, 100 % water soluble.
- Prevents or reduces the corrosion capacity of water, especially on nonferrous metals (aluminium, copper, brass, bronze).
- · Prevents the removal of metal by corrosion.
- · Device parts lasts longer...
- · Deposits are avoided.
- Prevents blockages in the hose and circulation system as well as "cold zones" in temperature-controlled cuvette blocks.
- · Contains no aggressive phosphates, acids or alkalis, is absolutely free of organic solvents and leaves no residue - 100% water soluble.
- ThermoClean CPX is compatible with antifreeze agents such as ethylene glycol (1,2-ethanediol). Test other antifreeze agents if necessary.
- · No foam formation, even with strong circulation!
- · Suitable for all thermostats and circulation pumps made of waterresistant metals or metal alloys, glass or many commonly used plastics (as far as resistant to ethylene glycol).
- · Also suitable for closed circulation systems.

#### **Pointers**

- ThermoClean CPX is harmful to aquatic organisms and must therefore not get into surface waters!
- The working solution used in the cooling circuit can be disposed of via the used water disposal system (sewage treatment plant). If necessary, also observe the regional regulations of your country.

## Reagent

The reagents are ready to use and stable at room temperature (+10 ... +35 °C) until the expiration date printed on them.

See label for batch (LOT) and expiry date.

Do not use reagent if precipitation occurs.

#### **Effectivity**

ThermoClean CPX is a highly effective corrosion protection that largely effectively prevents oxidation and corrosion, or reduces it to a minimum, even in multi-metal versions of technical assemblies.

However, there can be no 100 % prevention of corrosion.

ThermoClean CPX has a lifetime of 3 months in the cooling water circuit ≥ The cooling water should then be replenished or ideally renewed.

#### Risks and Safety

Please observe the necessary precautions for use of laboratory reagents. Applications should be performed by expert personnel only. Follow the national and laboratory internal guidelines for work safety. Wear suitable protective clothing, safety eyewear and disposable gloves while handling





For additional safety information please refer to the information on the label and the corresponding Safety Data Sheet (SDS)

Download by QR-Code or link: www.sds-id.com/100198-5

The information on the SDS applies exclusively to the ThermoClean CPX concentrate. The finished, 1:1000 diluted working solution in the water bath/thermostat is no longer classified according to CLP. Therefore no SDS is required.

# Main Components/Contents

Cont. Angaben zur Zusammensetzung siehe Sicherheitsdatenblatt (SDS).

ThermoClean CPX blue mit Indikator 002521-... (recommended for close to all applications) 1× 100 ml ThermoClean CPX blue 002521-0100 Dropper bottle. 002521-0500 1× 500 ml ThermoClean CPX blue Dosing bottle. 5.0 I ThermoClean CPX blue 002521-1050

#### 002520-... ThermoClean CPX colorless ohne Indicator

(only recommended for applications where the indicator interferes) 1× 100 ml ThermoClean CPX colorless 002520-0100 Dropper bottle.

1× 500 ml ThermoClean CPX colorless 002520-0500 Dosing bottle.

002520-1050 5.0 I ThermoClean CPX colorless

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# C ∈ - Conformity



- · ThermoClean DC is the first stabilizing concentrate for water circulation systems worldwide with certified C € conformity and complies with RoHS Directive 2011-65-EU.
- ThermoClean DC therefore protects the C € certification of your circulation system (device).
- · This applies also, if you impose or recommend the use of ThermoClean DC for safe and reliable operation of your circula-
- ThermoClean DC is the agent of choice for all device manufacturers of water cooling systems without ifs and buts!
- · Be on the right side with ThermoClean DC.

- Bioanalytic GmbH

  biomedical & analytical chemical reagents medical laboratory diagnostics
- in vitro diagnostics (IVD)
   biomedical science & analysis technology
   Waldmatten 10-13
   79224 Umkirch/Freiburg i. Br.
   Germany

+49 7665 5951 Phone: Fax: +49 7665 5683 E-Mail: office@bioanalytic.de Internet: www.bioanalytic.de

# **Application**

Only 0.1%: Add 1 mL ThermoClean CPX to 1 L water in the cleaned water bath / circulation system.

Demineralised water is recommended - see also the operating instructions for the devices. If the demineralized water is obtained by ion exchange, we recommend a final microfiltration  $\leq$  0.2  $\mu$ m. An entry of resin abrasion from the ion exchanger (very strong corrosion effect!) must be avoided.

#### Temperature range

A wide temperature range from (minus) -40  $^{\circ}$ C ... +85  $^{\circ}$ C, briefly up to short-term 95  $^{\circ}$ C is possible. Avoid boiling.

ThermoClean CPX is compatible with frost protection:

- Ethylene glycol (1,2-ethanediol).
- Ethanol
- Glycerin
- · check others

#### Re-Dosing

For ThermoClean CPX we recommend a monthly additional dosage of  $50\,\%$  =  $0.5\,\text{mL/L}.$ 

The blue indicator of ThermoClean CPX blue indicates that the water contains effective ThermoClean CPX.

A decrease in colour is a sign of the parallel degradation of the active substances. However, this process depends on various factors and parameters.

#### Water changes

Water should be changed immediately if the water is turbid or regularly every 3...6 months.

Cloudy water indicates corrosion, entry of dirt or biological contamination. In the latter case, remediation (including complete disinfection) and refilling is strongly recommended.

#### Decontamination

ThermoClean CPX is 100 % water soluble and can be completely removed by sufficient rinsing with water.

### Guarantee

ThermoClean CPX contains no toxic mercury or other heavy metal compounds. It also contains no compounds with aluminium, cobalt, copper, iron or zinc.

### **Notes**

This product information exclusively relates to the product described in this leaflet. In particular, this product information cannot be applied to similar reagents from other manufacturers.

Periodically check for updates of this product information on our website.

#### Instruction for use

For professional use only.

To avoid errors, the use of qualified personnel is carried out. National guidelines for work safety and quality assurance must be followed.

The used equipment must comply with the state of technology and the laboratory requirements.

If disturbing foam is produced during extremely strong circulation, Bioanalytic GmbH can supply additional defoamers (on request).

#### Support/Information service

For methodological and technical support, please contact us by E-Mail at <a href="mailto:support@bioanalytic.de">support@bioanalytic.de</a>.

Periodically check for updates of this product information on our website.

#### Feedback

Information from users can be reported to <a href="mailto:support@bioanalytic.de">support@bioanalytic.de</a>. Suggestions for further developments will be considered.

#### Waste Management

#### Please observe your national laws and regulations.

Used and expired solutions must be disposed of in accordance with your local regulations. Inside the EU, national regulations apply that are based on the current, amended version of Council Directive 67/548/EEG on the approximation of the laws, regulations and administrative provisions relating to the classification, packaging and labelling of dangerous substances. Decontaminated packaging can disposed of as household waste or recycled, unless otherwise specified.

#### **Unused Remains**

These are usually hazardous wastes that must be recycled or disposed of. After consultation we take back such residual materials in the original container.

#### Used circulation water

Used circulation water with ThermoClean CBX in application concentration is usually waste water after use and can then be disposed of via the sewage system and sewage treatment plants. However, it must not be discharged untreated into surface waters.

#### Ordering information

and package sizes.

Please refer to our document ThermoClean - Overview & Compatibility for the combination possibilities and usability of our ThermoClean products. This document also contains detailed ordering information on the product

Download from our website for all ThermoClean products.

# Literature & Footnotes

Legends for the graphic symbols and tags used follow relevant norms or are available on our internet pages.