

**Product certificate**  
**K83927/02**

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Replaces K83927/01

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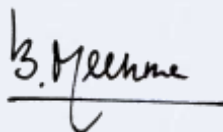
**AQUOX<sup>®</sup> potassium permanganate Free-Flowing Grade**  
**CARUSOL<sup>®</sup> liquid permanganate**  
**CARUSOL<sup>®</sup> C liquid permanganate**

**STATEMENT BY KIWA**

With this product certificate, issued in accordance with the Kiwa Regulations for Product Certification, Kiwa declares that legitimate confidence exists that the products supplied by

**Carus Europe SL**

as specified in this product certificate and marked with the Kiwa<sup>®</sup>-mark in the manner as indicated in this product certificate may, on delivery, be relied upon to comply with the Regeling materialen en chemicaliën drink- en warm tapwatervoorziening (Regulation materials and chemicals in the supply of drinking water and hot tap water).



Bouke Meekma  
Kiwa

Publication of the certificate is allowed.

Advice: consult [www.kiwa.nl](http://www.kiwa.nl) in order to ensure that this certificate is still valid.

**Kiwa Nederland B.V.**

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**Certification process  
consists of initial and  
regular assessment of:**

- quality system
- product

# AQUOX<sup>®</sup> potassium permanganate Free-Flowing Grade

## CARUSOL<sup>®</sup> liquid permanganate

### CARUSOL<sup>®</sup> C liquid permanganate

#### PRODUCT SPECIFICATION

This certificate covers AQUOX<sup>®</sup> potassium permanganate Free-Flowing Grade, CARUSOL<sup>®</sup> liquid permanganate and CARUSOL<sup>®</sup> C liquid permanganate for the use as oxidizing agents for treatment of drinking water.

#### APPROVAL

The products are approved on the basis of the requirements set in the "Regeling materialen en chemicaliën drink- en warm tapwatervoorziening" (Materials and chemicals in the supply of drinking water and warm tap water Regulation; published in the Government Gazette).

#### CRITERIA HYGIENIC ASPECTS

The product certification is based on two main criteria. It should permanently comply with the:

- product recipe approved during the assessment procedure. This recipe is not to be changed without prior approval by Kiwa following the Kiwa approval procedure related to the hygienic aspects.
- specific product requirements (see "PRODUCT REQUIREMENTS HYGIENIC ASPECTS").

#### PRODUCT REQUIREMENTS HYGIENIC ASPECTS

For this product are relevant the maximum contents of heavy metals, mentioned in the table below, based on:

- the purity requirements in Table II of the "Drinkwaterbesluit" of the Dutch Ministry of Infrastructure and Environment
- a maximum dosage of 10 mg potassium permanganate (KMnO<sub>4</sub>) per liter of drinking water as stated in the norm NEN-EN 12672 "Chemicals used for treatment of water intended for human consumption – Potassium permanganate"
- a maximum dosage of 17 mg CARUSOL<sup>®</sup> liquid permanganate per liter of drinking water.
- a maximum dosage of 8 mg CARUSOL<sup>®</sup> C liquid permanganate per liter of drinking water.

Parameter	Maximum content in AQUOX <sup>®</sup> potassium permanganate Free-Flowing Grade (mg/kg)	Maximum content in CARUSOL <sup>®</sup> liquid permanganate (mg/kg)	Maximum content in CARUSOL <sup>®</sup> C liquid permanganate (mg/kg)
Antimony	50	30	63
Arsenic	100	60	125
Cadmium	50	30	63
Chrome	500	300	625
Mercury	10	6	13
Lead	100	60	125
Nickel	200	120	250
Selenium	100	60	125

#### APPLICATION AND USE

The products under this certificate are used for taste and odour control, elimination of algae and microorganisms, removal of iron (Fe) and manganese (Mn) by oxidation to insoluble oxides and regeneration of filtering material.

The maximum dosage of AQUOX<sup>®</sup> potassium permanganate Free-Flowing Grade is 10 mg/l.

The maximum dosage of CARUSOL<sup>®</sup> liquid permanganate is 17 mg/l.

The maximum dosage of CARUSOL<sup>®</sup> C liquid permanganate is 8 mg/l.

#### MARKING


Design of the required Kiwa certification mark:

- "KIWA ", in ink or seal.

Location of the mark:

- On the product / On the packaging / On the delivery receipt.

Mandatory marks:

- "KIWA ";
- Product name:
  - "AQUOX<sup>®</sup> potassium permanganate Free-Flowing Grade"; or
  - "CARUSOL<sup>®</sup> liquid permanganate"; or
  - "CARUSOL<sup>®</sup> C liquid permanganate";
- "K83927".

**AQUOX<sup>®</sup> potassium permanganate Free-Flowing Grade**  
**CARUSOL<sup>®</sup> liquid permanganate**  
**CARUSOL<sup>®</sup> C liquid permanganate**

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**REMAINING CONDITIONS**

The means for and the way of transportation, storage and packaging have to be in accordance with the directives as given by the consumer, taking into consideration the use of the product. (These guidelines are not a part of the hygienic criteria.)

**RECOMMENDATIONS FOR CUSTOMERS**

1. Check at the time of delivery whether:
    - 1.1 the supplier has delivery in accordance with the agreement;
    - 1.2 the mark and the marking method are correct;
    - 1.3 the products show no visible defects as a result of transport etc.
  
  2. If you should reject a product on the basis of the above, please contact:
    - 2.1 Carus Europe SL  
and, if necessary,
    - 2.2 Kiwa Nederland B.V.
  
  3. Consult the supplier's (processing) guidelines for the proper storage and transport methods.
  
  4. Check whether this certificate is still valid by consulting [www.kiwa.nl/ata](http://www.kiwa.nl/ata).
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