

# ***elma tec clean S1***

**LIQUID, MILDLY ACID CONCENTRATE FOR CLEANING OF NON-FERROUS & LIGHT METALS, STAINLESS STEELS, GLASS, PLASTICS AND FOR PASSIVATION OF CHROMIUM-CONTAINING STEELS.**

With mildly deoxidising effect for non-ferrous metals.

## **Description**

Suitable as well for the slightly acid ultrasonic cleaning of non-ferrous and light metals, stainless steels, glass plastics as for the passivation of surfaces of stainless and chromium-containing steels. Brass and copper alloys are brightened up.

Removes polishing media, mineral grease and oil, oxide layers (e.g. verdigris), rust and lime.

The passivating action is based on the removal of iron atoms by dissolution from the surface and the increase of relative chromium content at the surface.

## **Application and dosage**

Cleaning: 1 - 5 vol% with water, temp.: 30 - 80 °C, about 2 min with ultrasonics.

For rust-sensitive parts use rinsing bathes with added agent *elma-KS*, 0.1%, as corrosion protecting agent immediately after finishing the cleaning step.

Passivation: 10 - 20 vol%, 10 - 30 min at 30 - 80 °C (e. g. AISI 316: 20 min at 70 °C).

We recommend: Passivation or acid cleaning process *a f t e r* alkaline cleaning in all cases of contamination with natural (vegetable or animal ) oils or greases.

## **Hotline for application consulting**

Working days: Tel. ++49 (0) 7731 882-287. Email: [chemlab@elma-ultrasonic.com](mailto:chemlab@elma-ultrasonic.com)

## **Safety recommendations**

*elma tec clean S1* is classified as hazardous according to the regulation (EC) No 1272/2008 [GHS] (eye irritation). Observe also with respect to this the hints indicated in the Safety Data Sheet and always handle chemicals with care.

## **Physical-chemical characterisation**

Density: 1.082 g/ccm, pH (concentrate): 1,6.

Ingredients according to Annex VII, A, EC-Regulation 648/2004 (detergents): <5% anionic surfactants, <5% non-ionic surfactants, Benzisothiazolinone ( <10 ppm ).

Does not contain phosphates or silicates. Contains citric acid.

## **Disposal**

The surfactants in our product meet the criteria for biodegradation as laid down in Annex III of the Regulation (EC) No 648/2004 on detergents.

The cleaning bath can be fed into the public sewage system after neutralisation; observe the local pH limit values and make sure that the contamination contained complies with the local sewage regulations. European waste code: 20 01 30, „detergents other than those mentioned in 20 01 29“.

## **Volumes, storage and transport**

Available volumes: 2.5, 10 and 25 litre can.

Store in closed original container at a temperature between -5 °C and +30 °C, protected from heat and direct solar radiation. Do not store with alkalis.

Shelf life: 3 years from date of production (see stamp on label).

Classification for all means of transport: no hazardous material.

**Elma Hans Schmidbauer GmbH&Co KG**

Kolpingstr. 1-7, D-78224 Singen

e-mail: [info@elma-ultrasonic.com](mailto:info@elma-ultrasonic.com)

Tel.: ++49 (0) 7731 882-0

Fax: ++49 (0) 7731 882-266

[www.elma-ultrasonic.com](http://www.elma-ultrasonic.com)

16.12.2013/ P:\Produkte\PRODInfo\Produkte\englisch\word\_GB\P\_tec clean S1\_GB.docx