# **Product Information/Directions for use**



# elma clean 210 (EC 210)

### **Description**

**elma clean 210 (EC 210)** is a liquid, slightly alkaline ultrasonic cleaning concentrate suitable for cleaning surfaces made of steel, non-ferrous heavy metals, precious metals, light metals, nickel, chrome, zinc and German silver (also combinations of different materials). It is also suitable for plastics that are resistant against stress cracking.

**elma clean 210 (EC 210)** removes aqueous cooling lubricants, grease, oil, abrasives, grinding and polishing pastes. For the cleaning of polishing media containing animal greases check the suitability of the cleaner before application. Check any Mg, MgZnAl alloys ("electron") and plastics for compatibility before application.

## **Application and Dosage**

- Ultrasonic bath: Dosage: 3-5 vol-% in water Temperature: 50-75 °C Cleaning time: 3-5 min.
- A milky cloudiness of the cleaning fluid does not impede the cleaning effect.
- Corrosion-sensitive pieces (e.g. grey cast iron) are corrosion-proof if unrinsed.
- For further temporary corrosion protection (e.g. in case the pieces have to be rinsed in DI water) add elma-KS to the cleaning bath.

#### **Safety Recommendations**

**elma clean 210 (EC 210)** is classified as hazardous according to the Regulation (EC) No 1272/2008 [GHS] (serious eye damage).

Observe also with respect to this the hints indicated in the safety data sheet and always handle chemicals with care.

#### **Physical-chemical characterisation**

- Density: 1.032 g/ccm pH (concentrate): ~9.0.
- Ingredients according to Annex VII, A, Regulation (EC) No 648/2004 on detergents: 5-15 % anionic surfactants, 15-30 % non-ionic surfactants, perfumes.
- Does not contain phosphates or silicates. Emulsifying.

#### **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 used cleaning solution can be fed into the public sewage system after neutralisation; observe the local pH limit values and make sure that the contamination contained in the used cleaning solution complies with the local sewage regulations. For neutralisation we recommend: for 1 kg of the concentrate use approx. 200 ml 60 % acetic acid or approx. 190 g waterfree citric acid in an ultrasonic bath – do not use hydrochloric or sulphuric acid!

European waste code: 20 01 29\*, "detergents containing dangerous substances".

#### **Volumes, Storage and Transport**

- Available volumes: 5 I HDPE-can 5823100000, 10 I HDPE-can 8000304, 25 kg HDPE-can 5809800000, 200 kg barrel 5814500000.
- 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 acids.
- Shelf life: 3 years from date of production (see lot on label).
- Classification for all means of transport: no hazardous material.

# **Accessories**

- Tap (outlet tap): for 5 / 10 I cans 8000003927 for 25 I can 8000003928.
- Dosing cup: 250 ml vol./5 ml-scale 8000643 1000 ml vol./10 ml-scale 8000647.