

## ***elma clean 210 (EC 210)***

**LIQUID, SLIGHTLY ALKALINE ULTRASONIC CLEANING CONCENTRATE  
FOR METAL AND PLASTIC SURFACES**

### **Description**

*elma clean 210 (EC 210)* is suitable for surfaces made of steel, nonferrous 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.

Check any Mg, MgZnAl alloys ("electron") and plastics for compatibility before application.

*elma clean 210 (EC 210)* removes aqueous cooling lubricants, grease and oil, abrasive, grinding and polishing pastes.

For the cleaning of polishing media containing animal greases check the suitability of the cleaner before application.

### **Application and dosage**

Dosage: 3 - 5 mass% in water, temperature: 50 - 75°C, duration: 3 - 5 min with ultrasonic.

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.

Ingredients according to Annex VII, A, EC-Regulation 648/2004 (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 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. For neutralisation we recommend: for 1 kg of the concentrate use approx. 200 ml 60% acetic acid or approx. 190g water-free 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: 10 litre can, 25 kg can, 200 kg barrel.

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 stamp on label).

Classification for all means of transport: no hazardous material.

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