# **Product Information/Directions for use**



# elma clean 145 (EC 145)

## **Description**

**elma clean 145 (EC 145)** is a liquid, slightly acid ultrasonic cleaning concentrate with mildly deoxidising effect. Suitable for the slightly acidic cleaning of non-ferrous heavy metals, aluminium, stainless steel, glass, plastics and e.g. AlCuMgPb-alloys. Brass and copper alloys are brightened.

elma clean 145 (EC 145) has an antistatic effect and is also good for decalcifying.

Cleaning results with animal and vegetable fats and ois are considerably improved by pre-cleaning with an alkaline cleaner (e.g. elma clean 110 (EC 110). **elma clean 145 (EC 145)** removes polishing media, grease, oil, oxide layers (e.g. verdigris) and lime.

Attention: risk of tarnish when different metals are cleaned in the same bath.

# **Application and Dosage**

- Ultrasonic bath: Dosage: 2 5 % in water Temperature: 40-80 °C Cleaning time: 3-5 min.
- We recommend: acid cleaning process after alkaline cleaning.

# **Safety Recommendations**

elma clean 145 (EC 145) is classified as hazardous according to the Regulation (EC) No 1272/2008 [GHS] (skin corrosive and serious eye damage, skin sensitiser).

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

### Physical-chemical characterisation

- Density: 1.04 g/ml pH (concentrate): approx. 1 pH (1 % solution): 2.7.
- Ingredients according to Annex VII, A, Regulation (EC) No 648/2004 on detergents: 5-15 % anionic surfactants, 5-15 % non-ionic surfactants, methylisothiazolinone (<100 ppm), benzisothiazolinone (<500 ppm).</p>
- Does not contain phosphates and silicates.

### **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 liter of the concentrate **elma clean 145 (EC 145)** use approx. 50 ml 50 % soda lye.

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

#### Volumes, Storage and Transport

- Store in unopened original container at a temperature between -5 °C and +30 °C, protected from heat and direct solar radiation. Do not store together with alkalies. Provide acid-resistant floor.
- Shelf life: 3 years from date of production (see lot on label).
- Classification for all means of transport: class 8, UN 2586.

#### **Accessories**

- Dosing cup: 250 ml vol./5 ml-scale REF 8000643 1000 ml vol./10 ml-scale REF 8000647.