

Description

S15 is a mildly acidic concentrate for ultrasonic cleaning and passivation of medical instruments, implants, lab instruments and work pieces. It is suitable for ultrasonic cleaning of stainless steel, non-ferrous and light metals e.g. aluminium, glass and plastics as well as for the "passivation" of stainless and less chromium-containing steels. Brass and copper alloys are brightened up.

Removes mineral grease and oil, oxide layers, rust and lime.

The "passivating" action is based on the selective dissolution of oxidized iron atoms from the surface and the resulting increase of relative chromium content there. An eventual graying can be counteracted by addition of elma bezzusatz S1 to the passivation solution (ratio: concentrate **S15** : elma bezzusatz S1 = 10 : 1).

Application and Dosage

- Cleaning in the ultrasonic bath: Dosage: 1 - 5 vol-% in water, i.e. for 1 litre 1 vol-% solution mix 10 ml **S15** with 990 ml water • Temperature: 30-80 °C • Cleaning time: about 2 min.
- For rust-sensitive parts use rinsing bathes with added agent elma-KS, 0.1 vol-%, as corrosion protecting agent immediately after finishing the cleaning step.
- Passivation: 10-20 vol.-% in water, 10-30 min at 30-80 °C (e. g. AISI 316: 10 vol.-%, 20 min. at 70 °C).
- We recommend: Passivation or acid cleaning process after alkaline cleaning and rinsing in all cases of contamination with natural (vegetable or animal) oils or greases.
- After cleaning / passivation, rinse parts and dry.

Safety Recommendations

S15 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.

Please report any serious incident!

Physical-chemical characterisation

- Density: 1,082 g/ml • pH (concentrate): 1.6.
- Ingredients according to Annex VII, A, Regulation (EC) No 648/2004 on detergents:
<5 % anionic surfactants, <5 % non-ionic surfactants, benzisothiazolinone (<5ppm), methylisothiazolinone (<5ppm).
- 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 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. Recommendation: use lime or soda lye for neutralisation.

European waste code: 20 01 30, „detergents other than those mentioned in 20 01 29“.

Volumes, Storage and Transport

- Available volumes: 1 l PE-bottle [REF 8000798](#), 5 l HDPE-can [REF 8000799](#), 25 l HDPE-can [REF 8000800](#) und 200 l barrel [REF 8000801](#).
- 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 alkalies.
- 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 l cans [REF 8000003927](#) • for 25 l can [REF 8000003928](#).
- Dosing cup: 250 ml vol./5 ml-scale [REF 8000643](#) • 1000 ml vol./10 ml-scale [REF 8000647](#).

General information and exclusion

- This cleaning agent is not intended for cleaning or hydrating contact lenses.
- Only instruments and other medical devices that are approved for ultrasonic, immersion or spray cleaning as well as reusable and authorized for reprocessing, are permitted to be cleaned with this cleaning agent (see information of the medical device manufacturer according to EN ISO 17664).
- When using an ultrasonic device or spray cleaning machine, the instructions of the ultrasonic or spray cleaning device manufacturer must be observed. The safety instructions for the cleaning devices used must also be observed and are not part of this product information.
- The user is responsible to validate the cleaning result. Check instruments for cleanliness and function!
- Use water with drinking quality or quality according to the RKI (Robert-Koch-Institut) recommendation for rinsing.
- After cleaning, disinfection, sterilization or final disinfection must take place depending on the type and classification of the medical device.

- Please report any serious incidents related to the product to:
 - Elma Schmidbauer GmbH · info@elma-ultrasonic.com · Tel. +49 7731 882-0
 - or to the competent authority in your country.