

### **Gardoclean® T 5281**

Borate-free aluminium cleaning



#### **Advantages:**

- ⊕ Borate-free
- ⊕ Meets the requirements of Regulation 648/2004/EC on detergents
- ⊕ Liquid product – easy application
- ⊕ Low salt content – reduced scaling
- ⊕ Only low product concentration required
- ⊕ Low foaming
- ⊕ Excellent cleaning results achievable even at low temperatures
- ⊕ Minimized attack

#### **Specially designed for cleaning aluminium:**

- in the anodizing process
- in the pretreatment process

Chemetall provides an extensive portfolio of eco-friendly products for surface treatment – and in addition, offers a wide range of integrated added-value services related to their use. Highly experienced local staff can provide help in many areas, including quality control, environment and staff training.

# Gardoclean® T 5281

With Gardoclean® T 5281 Chemetall offers a completely borate-free cleaning technology specifically designed for cleaning aluminium in the anodizing and the pretreatment processes.

## Borate-free Gardoclean® T 5281 helps to meet the challenge of new EC CLP Regulation

The European Commission Regulation (EC) No 790/2009 amending the Regulation (EC) No. 1272/2008 concerning the classification, labeling and packaging of substances and mixtures has had an impact on cleaner classification and labeling.

### Today's standard:

- from December 1st 2010 all mixtures containing borate have had to be reclassified
- all products containing 8.5 % (and over) of borax now need to be labeled with the skull and crossbones

Most powder degreasers for anodized aluminium contain borate – and from December 1st, 2010, these cleaners formerly regarded as harmless are now classified as toxic.



### Usage of Gardoclean® T 5281:

- Bath temperature:  
45–75 °C (preferably 55 – 60 °C)
- Concentration: 30 – 60 g/l
- Product consumption: 2 – 4 g/m<sup>2</sup>
- Automatic dosage possible

The ready-to-use liquid product is easy to apply – no need to dissolve a powder product – and provides good cleaning results even at temperatures below 60 °C (depending on the condition of the parts).

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