









Product	Product - info	! Safety	Main contamination	Main surfaces	Properties	pH-value	Dosage
Alkaline cleaners							
elma tec clean A1 electronics and fine optics cleaner	info		Light oils & greases, fluxing agents, dust, finger prints.	Substrates in the electronics (pcb) and optics industries (glasses, fine optics), electro-mechanical components. For the overhaul cleaning of plastics.	Liquid, emulsifying, silicate and phosphate-free, mildly alkaline.	10,8	3 - 10 %
elma tec clean A2 intensive cleaner with brightening effect for brass and copper	info		Grinding, polishing and lapping media, grease/oil.	Nonferrous metals, precious metals, brass, nickel, titanium; check zinc and aluminium for resistance before use!	Liquid, emulsifying, contains ammonia, silicate and phosphate-free, mildly alkaline.	11,0	5 - 10 %
elma tec clean A3 cleaner for iron and precious metals	info		Punching oil, drawing grease, soot, scale, grinding and polishing media, high-performance cooling lubricants.	Stainless steel, steel and other iron materials, titanium and precious metals, gray cast iron; check nonferrous heavy metals, brass, glass and quartz for resistance before use! Not suitable for aluminium and light metals.	Liquid, emulsifying, contains silicate and phosphate, alkaline.	13,0	3 - 6 %
elma tec clean A4 universal cleaner	info		Oil, grease, soot, coking, scale, dust, finger prints.	Stainless steel, steel, iron, gray cast iron, aluminium and light metals, brass, nonferrous heavy metals, precious metals, nickel, zinc, plastics, ceramics, glass, quartz, rubber.	Liquid, in most cases demulsifying, contains silicate and phosphate, alkaline.	13,4	with ultrasound: 1 - 5 % without ultrasound: 5 - 10 %
elma tec clean A5 powerful cleaner for iron and light metals	info		Scaled and resinified oil and grease, grinding and polishing media, lacquer and paint, remnants, wax.	Stainless steel, steel, iron, gray cast iron, aluminium and light metals, nickel, stainless metals, zinc.	Powder, emulsifying, contains silicate and phosphate, alkaline.	11,5 (1%)	1 - 4 %
Neutral cleaners							
elma tec clean N1 neutral cleaner	info		Oil, grease, grinding, lapping and polishing media, dust, sweat, finger prints.	All metals, plastics, ceramics, glass, rubber; check magnesium and its alloys for resistance before use!	Liquid, emulsifying, silicate and phosphate-free, neutral	9,3	with ultrasound: 2 - 5 % without ultrasound: 10 %
Acid cleaners							
elma tec clean S1 mild acid cleaner	info		Rust, lime oxide films (e.g. verdigris), grease, oil.	Nonferrous heavy metals, stainless steel, aluminium and light metals, brass, steel, plastics, glass; take out steel immediately after derusting and rinse with anticorrosive.	Liquid, emulsifying, acid.	1,6	1 - 5 %
elma tec clean S2 strong acid cleaner	info		Mineral contaminations such as lime, rust and other oxides; films that can be removed by pickling.	Stainless steel, steel, iron, gray cast iron, hard alloys, brass, nickel, nonferrous heavy metals and precious metals; take out steel, iron and gray cast iron immediately after derusting and rinse with anticorrosive.	Liquid, emulsifying, acid.	< 1,0	with ultrasound: 1 - 10 %