

## Elma cleaning solutions for industrial, scientific, bio- & medical labs

cleaner	application	attributes	dosage [%]; [ml/l]	time [min.] temp. [°C]	in future replaced by
elma clean 10  universal concentrate	For laboratory instruments & equipment and for workpieces made from stainless steel, glass, ceramics, plastics and rubber. Check plastic materials before. Not for: Al, Mg, Zn or alloys!  Removes blood, saliva, bone & protein residues, oil, grease, grinding and polishing paste, organic scale & cokings.	liquid, emulsifying, pH(conc.): <b>12</b> alkaline	Ultrasonic bath: 1 - 3 % eq. 10 - 30 ml/l or higher – according to dirt.  Immersion bath: > 3 % eq. > 30 ml/l	With ultrasonics:  4 – 10 min  at 50 – 80 °C.  Immersion bath:  15 – 30 min  at 50 – 80 °C	elma lab clean A 25 (elc A25)
concentrate, rust & lime remover	For laboratory instruments & equipment made from stainless steel, glass, acidresistant plastics.  Not for: Al, Mg, Zn or alloys!  Removes rust, lime, grease, oil, and tarnish on metal surfaces.	liquid, emulsifying, pH(conc.): 0-1 acidic	Ultrasonic bath: 1 – 10 % eq. 10–100 ml/l Immersion bath: 20 % eq. 200 ml/l	Ultrasonic bath:  1 – 5 min  40 – 70 °C.  Immersion bath:  > 5 min  40 – 70 °C	elma lab clean S 20 (elc S20)
elma clean 65  concentrate for delicate parts	For delicate laboratory instruments & equipment and work-pieces made from: all metals, glass, plastics, rubber.  Removes dust, fingerprints, pigments, grease, oil.	liquid, emulsifying, pH(conc.): <b>7-8</b> neutral	Ultrasonic bath: 2 – 5 % eq. 20 – 50 ml/l	Ultrasonic bath: about 5 min 20 – 80 °C	elma lab clean N 10 (elc N10)
elma clean 70  concentrate, universal lab cleaner	For laboratory instruments & equipments and workpieces made from: glass, stainless steel, ceramics, alkalineresistant plastics, rubber.  Removes dust, oil, fats, greases, soot.	liquid, emulsifying, pH(conc.): <b>13</b> alkaline	Ultrasonic bath:     2 - 5 %     eq. 20 - 50 ml/l  Immersion bath:     5 - 10 %     eq. 50 -100 ml/l	Ultrasonic bath: about 5 min 20 – 80 °C Immersion bath: about 15 min 20 – 80 °C	elma lab clean A 10 (elc A10)
elma clean 75 ammoniated concentrate	For workshop and laboratory. Cleans: non-ferrous metals, glass, precious metals, also with gems. Not for soft gems as corals, lapis lazuli, amber etc.!  Removes: non-ferrous metal oxide layers, dirt, grease, sweat, lapping & polishing residues.	liquid, ammoniated, emulsifying, pH(conc): <b>10-11</b>	Ultrasonic bath: 5 – 10 % eq. 50 -100 ml/l Immersion bath: 15 % eq. 150 ml/l	Ultrasonic bath: 5 – 10 min desoxidation at room temp., after mech. treatment: 50 – 70 °C  Immersion bath: 15 min 50–75 °C	Remains in the product program