

PRODUCTS AND SERVICE OFFERS

Watery Cleaners for Technical Surfaces and Optics

- Special cleaners on tenside basis for immersion-bath or ultrasonics-bath
- acid, neutral, alkaline
- for work-shop and industry
- Cleaning of: watches, clocks, and jewelry
precision optics and spectacles
surgical instruments
weapons

Organic Cleaners for Technical Surfaces and Electronics

- anhydrous
- ranges of ignition point: A I, II, III
- Removing of: oil
wax and varnish remainders
resin and colophony
- Cleaning of electronic devices
- Rinsing after watery cleaning

Technical Tools

- available are:
- cleaning equipment
 - desk equipment for ultrasonics-cleaning
0.5 l - 39 l, operating frequency: 35 kHz
 - special appliances
 - washers for small parts

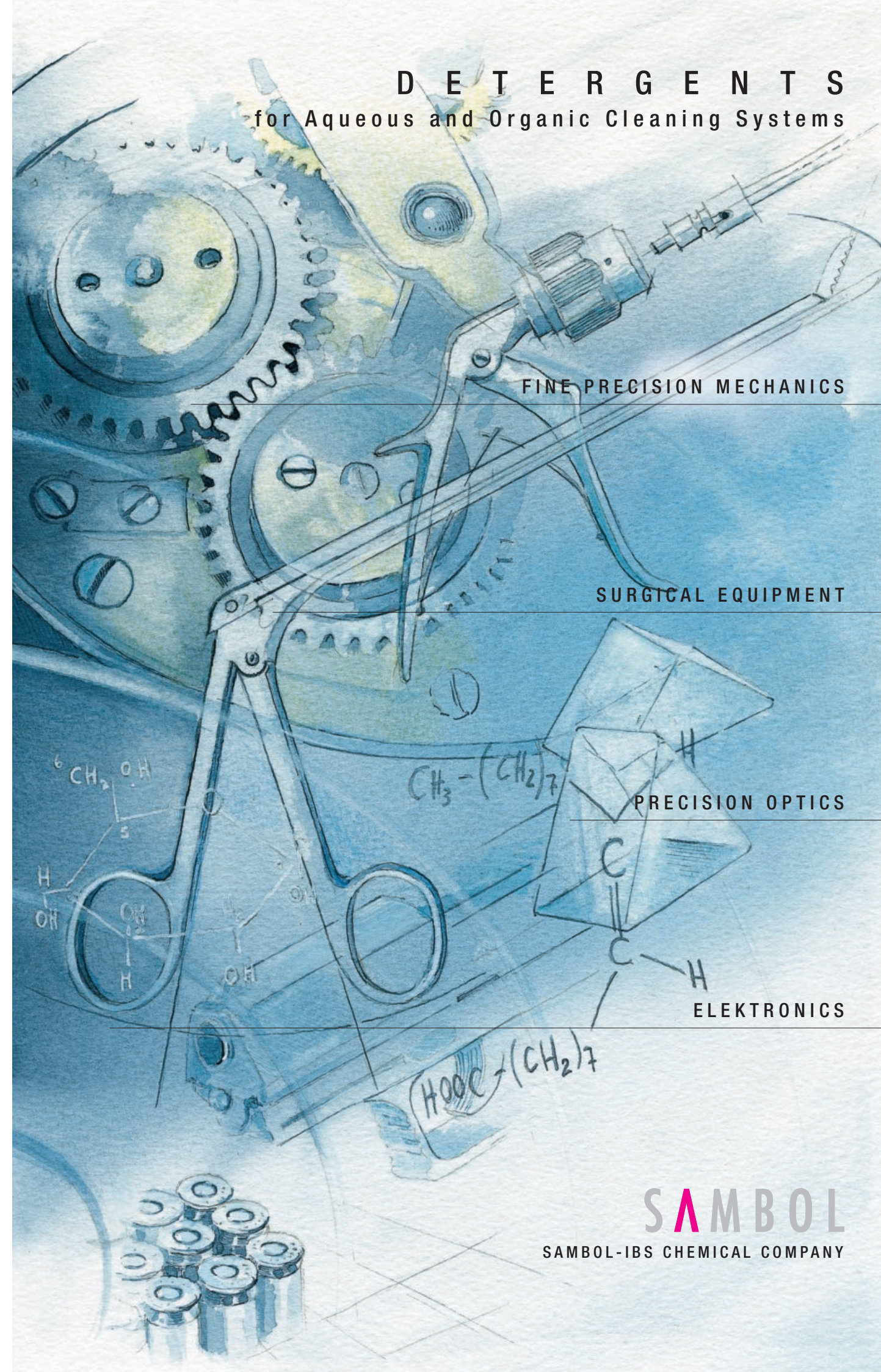


Service Offers

- Working out customer-specific solutions to cleansing problems on the basis of IBS-products
- Advising customer's personnel on appropriate handling of IBS-products
- If IBS-products are resold under customer's own label: taking-over of correspondence with German or Swiss authorities
applying for UBA-No. in Germany
or for BAGT-No. in Switzerland

- Development and preparation of new specific cleansing agents according to customer's needs

DETERGENTS for Aqueous and Organic Cleaning Systems



FINE PRECISION MECHANICS

SURGICAL EQUIPMENT

PRECISION OPTICS

ELEKTRONIKS

SAMBOL
SAMBOL-IBS CHEMICAL COMPANY

Optimized Cleaning with IBS Detergents

Residue-free Removal of Gunpowder Deposits on Disassembled Weapons

1. Bath	2. Bath	3. Bath
Cleaning ultrasonic IBS 003-10-10 5 % 5 min 65 °C	Rinsing with tap water flow sink 100 % 5 min 50 °C	Rinsing closed sink IBS 140 dewatering fluids 100 % 5 min 25 °C

Residue-free Removal of Polishing Agents on Surgical Equipment straight from Production

1. Bath	2. Bath	3. Bath	4. Bath	5. Bath	6. Bath
Cleaning ultrasonic IBS 003 5 % 70 °C	Cleaning ultrasonic IBS 003 0,5 % 60 °C	Rinsing with tap water 100 % 55 °C	Rinsing with demineralized water 100 % 55 °C	Rinsing with demineralized water 100 % 55 °C	Drying with circulation air, filtered 100 % 115 °C

Residue-free Removal of Polishing Agents after Polishing of Optics

1. Bath	2. Bath	3. Bath	4. Bath	5. Bath	6. Bath
Cleaning ultrasonic NMP 100 % 65 °C 2 min	Cleaning ultrasonic NMP 100 % 65 °C 2 min	Rinsing with osmosis water 100 % 55 °C 2 min	Cleaning ultrasonic IBS 050 OP 3 % 55 °C 2 min	Rinsing with osmosis water 100 % 55 °C 2 min	Rinsing with osmosis water 100 % 55 °C 2 min
7. Bath	8. Bath	9. Bath	10. Bath	11. Bath	12. Bath
Cleaning ultrasonic IBS 051 OP 3 % 55 °C 2 min	Rinsing with osmosis water 100 % 55 °C 2 min	Rinsing with osmosis water 100 % 55 °C 2 min	Rinsing with demineralized water 100 % 55 °C 2 min	Rinsing with demineralized water 100 % 55 °C 2 min	Drying with circulation air, filtered 100 % 115 °C 15 min

Residue-free Removal of Oil using Small Parts-Wash

1. Bath	2. Bath	3. Bath	4. Bath
Small parts-wash Cleaning Surfactant solution 100 % 20 °C 2 min	Rinsing with water 100 % 20 °C 1 min	Rinsing with demineralized water 100 % 20 °C 1 min	Small parts-wash rinsing and drying dewatering fluid 100 % 20 °C 1 min

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Aqueous Detergents for Technical Surfaces

Produkt Name State	Application Concentration Temperature Time	Properties	Usage	Removal	Size
IBS 002 liquid concentrate	1 - 10 % 30 - 80 °C 1 - 5 min	alkaline, ammoniacal, foaming	disassembled clock works and large clocks, in immersion and ultrasonic techniques	oils, resins	5 kg
					30 kg
IBS 003 liquid concentrate	3 - 5 % 50 - 90 °C 0,5 - 10 min	mildly alkaline, acid- and alkali-free, foaming, with dripping-off effect and corrosion inhibitor	all materials, in immersion and ultrasonic techniques	sanding and polishing pastes, oils and fats	5 kg
					30 kg
IBS 003-10-10 liquid concentrate	3 - 5 % 50 - 90 °C 0,5 - 10 min	mildly alkaline, acid- and alkali-free, foaming, with dripping-off effect and corrosion inhibitor	all materials, especially for weapon cleaning, in immersion and ultrasonic techniques	sanding and polishing pastes, oils and fats, copper, tombac and zinc, gunpowder residues	5 kg
					30 kg
S 5 viscous	100 % 20 °C	alkaline	especially for gunbarrel cleaning	copper, tombac zinc	100 ml 1,0 l
IBS 004 liquid concentrate	1 - 4 % 40-80 °C 0,5 - 2 min	acidic, foaming	sensitive surfaces such as plastics, varnishes and glass, in immersion and ultrasonic techniques	oils, fatty contaminations, polishing pastes, oxidized layers	5 kg
					30 kg
IBS 005 fest powder	1 - 5 % 80 - 90 °C 0,5 - 10 min	alkaline, hardly foaming, inhibited by silicate	engine parts, injector nozzles, carburetor, aluminum is not attacked, in immersion, ultrasonic and spraying techniques	oils, resins, pigment contaminations, carbonizations	1 kg
					25 kg
IBS 006 liquid concentrate	5 - 70 % 60 - 90 °C 5 - 30 min	strongly alkaline, foaming	steel, stainless steel magnesium, nickel, not suitable for aluminum, immersion, ultrasonic and spraying techniques	rust, paints	5 kg
					30 kg
IBS 009 liquid concentrate	3 - 10 % 40 - 90 °C 0,5 - 10 min	alkaline, silicate-free, surfactant-free, non-foaming, recyclable by ultrafiltration	glass, ceramics, plastics, all metals, in immersion, ultrasonic and spraying techniques possibly with cleansing booster IBS 010	polishing pastes, oils, fats, pigment contaminations	5 kg
					35 kg
IBS 009-1 liquid concentrate	3 - 10 % 40 - 90 °C 0,5 - 10 min	neutral, silicate-free, surfactant-free, non-foaming, recyclable by ultrafiltration	glass, ceramics, plastics, all metals, in immersion, ultrasonic and spraying techniques booster IBS 010	polishing pastes, oils, fats, pigment contaminations	5 kg
					35 kg

Produkt Name State	Application Concentration Temperature Time	Properties	Usage	Removal	Size
IBS 009-2 liquid concentrate	3 - 10 % 40 - 90 °C 0,5 - 10 min	neutral, silicate-free, surfactant-free, non-foaming, recyclable by ultrafiltration	glass, ceramics, plastics, all metals, in immersion, ultrasonic and spraying techniques booster IBS 010	polishing pastes, oils, fats, pigment contaminations	5 kg
					35 kg
IBS 010 liquid concentrate	0,3 - 1 % 40 - 90 °C 0,5 - 10 min	alkaline, foaming, recyclable	cleansing booster in combination with IBS 009/009-1/009-2		5 kg
					30 kg
IBS 011 OP liquid ready-to-use	100 % 20-90 °C 0,5 - 10 min	mildly alkaline, hardly foaming	optics, in immersion, wiping and ultrasonic techniques	fingerprints, polishing pastes, pigment contaminations	5 l
					30 l
IBS 015 liquid concentrate	1 - 5 % 20 - 70 °C 1 - 5 min	mildly alkaline, foaming,	cleansing of masks, plastics, varnishes, glass, in immersion and ultrasonic techniques, in area of service	oils fatty and pigment contaminations	1 kg
					5 kg
					30 kg
IBS 016 liquid concentrate	1 - 20 % 40 - 90 °C 5 - 20 min	mildly alkaline, foaming, disinfectant	all materials	oils, fats sanding and polishing pastes	1 l
					5 l
IBS 020 liquid ready-to-use	100 % 20 - 70 °C 0,1 - 1 min	acidic foaming, strongly brightening	silver, gold brass, copper	oxidized layers, tarnished coloring, oils, fatty contaminations	5 l
					30 l
Citric acid solid powder	1 - 10 % 20 - 50 °C 1 - 5 min	acidic	all materials	limescale	1 kg
					25 kg
Small-parts Wash liquid ready-to-use	100 % 20 °C 1-10 min	neutral, antibacterial, brightening, with tarnish protection	for all materials especially for small parts up to a diameter of 5 cm	oils, polishing pastes	200 ml
					1 l refill bottle
Ammonium oleate viscous concentrate	100 %	alkaline, highly concentrated	cleansing booster, crude material for aqueous organic industrial detergents		1 l
					5 l
					30 l

Aqueous Detergents for Optics

IBS 011 OP liquid ready-to-use	100 % 20-90 °C 0,5 - 10 min	mildly alkaline, hardly foaming	optics, in immersion, wiping and ultrasonic techniques	fingerprints, polishing pastes, pigment contaminations	5 l
					30 l
IBS 050 OP liquid concentrate	1 - 5 % 20 - 70 °C 0,5 - 10 min	mildly alkaline, foaming, good emulsifying properties	all organic and inorganic ophthalmic lenses, as well as weakly alkali-sensitive precision optical glasses, in immersion and ultrasonic techniques	wax, resins, colophony	5 kg
					30 kg

Produkt Name State	Application Concentration Temperature Time	Properties	Usage	Removal	Size
IBS 051 OP liquid concentrate	1 - 5 % 20 - 70 °C 0,5 - 10 min	weakly acidic, foaming, good covering ability, high buffering capacity	all organic and mineral ophthalmic lenses, acid sensitive optical glasses, in immersion and ultrasonic techniques	carried-over alkali residues from previous cleaning step with IBS 050 OP	5 kg
					30 kg

Organic Detergents for Technical Surfaces and Electronics

IBS 100 liquid A I Product	100 % 20 °C	high water-absorbing capacity, absorbs emulsion water condensation water Schwitzwasser (dewatering-effect) evaporation number 5	surfaces of any kind	organic contaminations	5 l
					30 l
IBS 110 liquid A I Product	100 % 20 °C	strong solvent, substitute for methylene chloride and N-methylpyrrolidone	plastic and metal surfaces	oil residues, hydrocarbon resins, tar pitch, bitumen and silicone	5 l
					30 l
IBS 140 liquid A II Product	100 % 20 °C	special solvent, dries without residue, high water displacement, Properties (dewatering-effect) evaporation number 32	model railway, weapon cleansing, area of service, metal, plastic and ceramic surfaces and electronic components	difficult substrates of organic and inorganic origin	100 ml
					5 l
IBS 180 OP liquid A I-Product	100 % 20 °C	special solvent, low surface tension high covering ability especially for minute and capillary spaces evaporation number 2	optics, metal, plastic and ceramic surfaces and electronic components	difficult substrates of organic and inorganic origin	5 l
					30 l

Accessories, Special Applications



Ultrasonic cleaning basket
made from plastics, acid and alkali resistant, lockable lid, divided into compartments
L x W x H 160 x 160 x 55 [mm]



Small parts-Wash 200 ml
ready-to-use, contains surfactant solution for cleansing/solvent for rinsing, drying and dewatering fluid

Titration set

used in simple bath maintenance by determining the concentration suitable for products:
IBS 003, IBS 006, IBS 009, IBS 009-1, IBS 009-2, IBS 010

Universal indicator paper

pH 0 - 14
Number of applications 100

Oil testing paper

quick reference for the presence of oil in water
100 strips

Water hardness determination

testing kit to determine titrimetrically the total hardness of water

