System Cleaner					Corrosion P	rotection				Special Products								
					SYNTHETIC OIL-BASED													
Product name		GROTANOL FF 1 N	RENOCLEAN FXM 4005	ACTICIDE OX/ MBS/WB 200	RENOCLEAN VR 3222	RENOCLEAN MTO 3002	ANTICORIT SKR 42	ANTICORIT SKR 3001	RENOCLEAN VR 2729 K	RENOCLEAN MTE 3001	ANTICORIT DFO/DFW XXXX	ANTICORIT RPC/MPC 5000	RENOCLEAN SPEZIAL 2000	RENOCLEAN GXA 3004/GXA 4014	RENOCLEAN GSO 3001	RENOCLEAN GTM 3001	RENOCLEAN GXM 3001	RENOCLEAN AKTIV DA
Function		System cleaner complete product for KSS supply systems, registered in most European countries!	System cleaner biocide and fungi- cide free, for KSS supply systems, basic system without biocide / fungicide	Biocides and fungi- cides for system cleaning, in combina- tion with RENOCLEAN FXM 4005 for targeted application		Neutral cleaner and synthetic corrosion protection "All-in-One" for spray, pressure flood, high-pressure cleaning and deburring	Synthetic pressure water test and corrosion protection concentrate	Synthetic, mineral oil-free corrosion protection	Synthetic temporary corrosion protection, mineral oil-free, alkaline	Emulsion cleaner, oil containing water miscible corrosion protec- tion concentrate	water displacing corrosion protec-	tion concentrates	Emulsifying universal cleaner for immersion, ultrasonic and manual commercial vehicle, tarpaulin, hall and workshop cleaning	Emulsifying universal cleaner for floors, halls and vehicle fleet	Cleaner for transport containers (KLT) for spray, immersion and manual application	Drying accelera- tor for spray and immersion appli- cation		Demulsifier for separation of emulsified oil
Comments		Contact time 6 – 24 h	Contact time 8 – 24 h. Separate dosage of bactericide. Permanent use to KSS without bactericide possible.	See "Service additives for cooling lubricants" under "Cooling lubricants – water-miscible".		Very low residue formation, very good temporary corrosion protection, synthetic, salt-free, nitrite-free	Stable against salt and alkali carryover, for immersion and filling application, nitrite- free	Nitrite-free, protects against corrosion in the vapour phase, suitable for vibra- tory grinding, for immersion, pres- sure flood, flood and spray appli- cations	borate, protects against corrosion in the vapour phase, suitable for vibratory	for immersion, flush and spray application. Free of barium and boron com- pounds, contains	 Fluids. Forms a thin barium-free oily/ waxy corrosion protection film, dip and flood application, 	Oily film. Barium-free concentrates, applicable in many, preferably Renoclean solvents.	For all manual cleaning, for immersion, suitable for steam-jet and floor cleaning equipment	For all manual and machine-based applications, especially suitable for floor cleaning equipment. Odourless (GXA 4014 with lime fragrance).	oil, grease, abra- sion and transport dust, designed for	Antistatic effect on plastic sur- faces, dosing into rinse for faster drying of plastic boxes	Immediate, long-lasting defoaming and deaerating effect	Demulsifier wi defoaming effect, equip- ment to remov demulsified oil necessary (oil separator etc.)
Application S – Spray/Hpressure D – Immersion/Ultrasonic T – Spray + Immersion	S D T Others	Т	Т	Т	Т	S (T)	D Manual, filling	D (T)	Т	Т	D	Analogous to solvent	T Manual, High pressure device	T Manual, floor cleaning/Steam-jet device	T Manual	Т	T Manual	T Manual
Foaming tendency		none	none	none	low	lowest	low	strong	low	low to moderate			strong	moderate	low	low	none	low
Materials Fe – steel, iron, cast iron and stainless steel 1 to check first.	Fe Al Zn Cu Ms Others	Corresponding cool	Corresponding cooling lubricant		X X X X X All materials ¹	X X¹ X X Mg¹	Х	X X X X¹ X¹ Mg	Х	X X X¹ X X All materials¹	X X X X X All materials ¹	X X X X X All materials ¹	X X¹ X¹ X¹ Mg, Paints¹, Plastics	X¹ X¹ X¹ X¹ X¹ Mg, Paints¹, Plastics	X X X X X Plastics	All materials ¹	-	_
Corrosion protection, Chips/filter test 0/0	at x % in y ° dH	-	-	-	temporary, '3.5 %/10 ° dH	temporary, '2 % / 10 ° dH	temporary, '1.5 %/20°dH	temporary, '2 %/20°dH	temporary, '1.5 %/VE	temporary, '3 %/10 °vdH	very good	very good	-	-	-	-	-	-
pH (2 %), if applicable		ca. 9 ± 1 (1%)	10.0 ± 0.6	-	8.0 ± 0.4 (3.5 %)	9.4 ± 0.5	9.8 ± 1	9.8 ± 0.4	10.8 ± 0.5 (3 %)	8.8 ± 0.5	-	-	10.9 ± 0.4 (3 %)	9.1 ± 0.6 (100 %)	8.5 ± 0.5 (100 %)	8.7 ± 1	8.8 ± 1.2 (100 %)	9.3 ± 0.7 (100 %)
Concentration standard (range)	in %	2 % (1 % – 3 %)	1.5 % (1 % – 2 %)	-	2 (0.5 – 5)	3 (2 – 5)	3 (1 – 5)	3 (0.5 – 5)	2 (0.5 – 5)	4 (3 – 20)	1	typical >3 %	5 (1 – 20)	3 (1–20)	2 (1 – 10)	0.3 (0.2 – 1.0)	0.05 (0.01 – 0.25)	0.2 (0.05 - 1.0)
Temperature standard (range)	in °C	Corresponding cool	ling lubricant		60 (20 – 80)	60 (<u>20</u> – 80)	20 (10 – 50)	60 (10 – 80)	60 (20 – 80)	20 (20 – 60)	Ambient temper- ature	According to solvent	35 (<u>20</u> – 80)	20 (20 – 90)	50 (20 – 80)	50 (20 – 80)	-	-
Spray pressure	in bar up to ca.	Corresponding cooling lubricant			100	500 (at 50°C)	10	1	300	5	1	-	-	-	5	5	-	-
Demulsifying, Emulsifying		Е	E	_	-	D	-	-	-	E	-	-	Е	Е	Е	_	_	D
Density at 15 °C	in kg/m³	1010 ± 15	1005 ± 15	-	1079 ± 15	1078 ± 20	1068 ± 15	1033 ± 15	1035 ± 15	995 ± 20	-	-	1045 ± 20	1047 1036 ± 15 ± 15	1004 ± 15	1017 ± 15	998 ± 15	987 ± 10

Solvents

Product name		RENOCLEAN MTS 7001				RENOCLEAN MVS 9014	RENOCLEAN MVS 8201	RENOCLEAN MVS 8202	RENOCLEAN MVS 8010	RENOCLEAN MVS 7008	RENOCLEAN MVS 6201
Function		Cleaner based on modified alcohols	Hydrocarbon clea isoparaffin, virtua free		VOC-compliant, low-aromatic hydrocarbon cleaner	VOC- and low- aromatic hydrocar- bon cleaner with corrosion protec- tion	Low-aromatic hydrocarbon cleaner, environ- mentally friendly, demulsifying	Sustainable hydrocarbon cleaner, iso- paraffin-based, suitable for multi- metals	Hydrocarbon cleaner based on isoparaffin, virtu- ally aromatics- free	Hydrocarbon cleaner, virtually aromatics-free	Rapid metal cleaner, product also available as RENOCLEAN MVS SPRAY
Comments		Distillable. Especially designed for closed cleaning systems!	Very narrow resp. cut, fast drying, d Especially designe cleaning systems!	istillable. ed for closed	Universal application, slowly evaporating. Simple application, e.g. for the removal of automotive wax preservative.	VOC-compliant. Universal application, good corrosion protection due to very thin oil film. For solvent plants without distillation.	Universal applica- tion in industry and trade, appli- cable with steam jet, good corro- sion protection properties. Free of corrosive and caustic sub- stances.	Completely biobased on a mixture of palm oil, rapeseed oil, sunflower oil or used cooking oil Advanced Circular Technologies	Gentle cleaning, for precision mechanics and electronic parts cleaning, non- irritating to skin. Easy application, for solvent sys- tems without permanent distil- lation.	Fine cleaning, fast drying. Easy application, for solvent systems without perma- nent distillation.	Strong cleaning efficiency in removing residues of oil, grease, adhesives. Based on an especially selected combination of solvents.
Application 5 – Spray/Hpressure	S D										
7 - Immersion/Ultrasonic T - Spray + Immersion Thers		T Manual	T -		T Manual	T Manual	T Manual, Steam-jet device	T Manual	T Manual	T Manual	T Manual
Foaming tendency		none	none		none	none	none	none	none	none	none
Materials Fe – steel, iron, cast iron	Fe Al	X X	X X		X X	X X	X X	X	X X	X X	X X
and stainless steel Zn Cu Ms		X X X	X X X		X X X	X X X	X X X	X X X	X X X	X X X	X X X
to check first.	Others	All materials, Plastics ¹	All materials, Plast	tics ¹	All materials, Plastics ¹	All materials, Plastics ¹	All materials, Plastics ¹	All materials, Plastics ¹	All materials, Plastics ¹	All materials, Plastics ¹	^
Evaporation figure Ether = 1)	ca.	125	93	115	900	900	120	130	123	200	-
Flash point	in °C	≥ 61	≥ 56	≥ 62	≥ 86	≥ 86	≥ 61	≥ 61	≥ 61	≥ 61	≥ 12
Boiling range	in °C	165 - 175	179 - 197	184 - 206	217 - 255	217 - 255	180 - 330	180 - 218	180 - 220	160 – 245	_
Concentration tandard (range)	in %	100	100		100	100	100	100	100	100	100
Spray pressure			System-depende	ent		-		System-dependent		-	
D emulsifying, E mulsifying		-	-		-	-	D	_	-	-	-
Density at 15 °C	in kg/m³	880 ± 10	760 ± 10	763 ± 10	815 ± 20	814 ± 20	795 ± 15	752 ± 15	766 ± 10	790 ± 25	760 ± 10

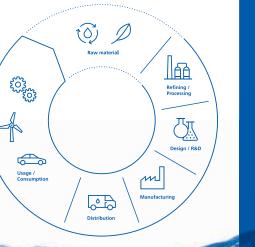
Perfect Cleaning – Cleaner for Metalworking





MOVING YOUR WORLD

		Neutral Cleaner									1-Component Products							Acid Cleaner Builder Components							Surfactant Components			
Product name		RENOCLEAN MSO 3011	RENOCLEAN MTO 3002	RENOCLEAN MTO 3001	RENOCLEAN MTO 3003	RENOCLEAN MSO 3201	RENOCLEAN MSO 3004	RENOCLEAN VR 1021 CXV	RENOCLEAN C 20 K 1427	RENOCLEAN MTA 3003	RENOCLEAN MDA 4201	RENOCLEAN WSA 4002	RENOCLEAN FDC 4001	RENOCLEAN MDA 4002	RENOCLEAN FSA 4017	RENOCLEAN FTM 1001	RENOCLEAN FSO 2010	RENOCLEAN MTA 2001	RENOCLEAN MTA 4001	RENOCLEAN FTA 4002	RENOCLEAN ENTFETTER 39	RENOCLEAN FTA 4001	RENOCLEAN VR 3222/VR 2729 K		RENOCLEAN TENSID 161	RENOCLEAN MTT 2003	RENOCLEAN VR 1500	
Function		Neutral cleaner for spray and high- pressure cleaning, high-pressure deburring	Neutral cleaner and corrosion protection "All-in-One" for spray, pressure flood, high pres- sure cleaning and deburring	applications	Multi-metal capable neutral cleaner for spray and immersion applications	Multi-metal capable neutral cleaner, suitable for high pressure		Spray cleaner for spray, pressure flood and high- pressure cleaning up to approx. 300 bar	with very good corrosion protec-	Multi-metal capable spray and immersion cleaner, suitable for ultrasonic cleaning	Multi-metal capable emulsify- ing cleaner for immersion, ultra- sonic and manual application	Cleaner for spray, immersion, ultra- sonic and manual application	immersion, ultra-		Alkaline spray cleaner for ferrous metals	Derusting, decalcification phosphoric acid for immersion, ultrasonic and manual applica- tion		Builder, neutral, for immersion, pressure flood, flood and spray application	Builder, medium alkaline, for immersion, pressure flood, flood and spray application.	Builder, highly alkaline, for immersion, pressure flood, flood and spray application	Builder, highly alkaline, silicate, for immersion, pressure flood, flood and spray application	Builder, highly alkaline, for immersion, pressure flood- ing, ultrasonic and spray clean- ing, electrolyte degreasing, dephosphating			Cleaning booster for immersion, ultrasonic and pressure flood cleaning	Cleaning booster for immersion, pressure flood, ultrasonic and spray cleaning	Cleaning booster for spray cleaning, neutral cleaner	
Comments		Highly demulsifying, almost foam-free above 25°C, salt-free	Residue forma- tion very low, very good tempo- rary, corrosion protection, salt-free	Suitable for ultra- sonic, universally applicable, e.g. before heat treat- ment, salt-free	especially for the removal of	Developed for cleaning steel, stainless steel, cast iron, non- ferrous metal and aluminum surfaces	filtration. Virtually foam-free from	High-pressure cleaning (200 bar, 300 bar for short periods). Nearly foam-free from 30 °C	Low residue formation, usable before heat treat- ment, salt-free	Universally applicable, e.g. for non-cutting formed parts or for engine reconditioning	Alkaline cleaner containing silicate with very good wetting capacity, supports clean, stain-free drying. Manual and floor cleaning from 20 °C.	For heavily soiled parts and aggre- gates (e.g. rail- road, engine and chassis parts)	Supports stain- free drying. Can be combined with RENOCLEAN MDT 3002. Silicate-free. Non-skin-irri- tating.	For cleaning of parts, e.g.: with difficult to remove forming lubricants. Sprayable up to approx. 8 bar (depending on the system).	For cleaning of parts, e.g.: with difficult to remove pigment dirt. Sprayable up to approx. 25 bar (depending on system).	and germinated cleaning systems. Integrated		Borate, silicate and surfactant free, microfilter- able ²⁾	Borate, silicate and surfactant free, microfilter- able ²⁾	Borate, silicate and surfactant free, microfilter- able ²⁾	Borate and sur- factant free, microfilterable ²⁾	Borate, silicate and surfactant free, microfilter- able ²⁾			Microfilterable, strongly dependent on membrane and working parame- ters!	Microfilterable, strongly dependent on membrane and working para- meters! Sprayable ≥ 40°C.	As neutral cleaner free from corrosion protection components	
Application S – Spray/Hpressure D – Immersion/Ultrasonic T – Spray + Immersion	S D T Others	S	S (T)	T HD-Gerät	Т	S	S	S (T)	S	Т	T Manual, floor clean- ing equipment	S (T) Manual, Steam-jet device	D	D (T)	S (T)	T Manual, High pressure device	T Manual, High pressure device	Т	Т	T	Т	Т	Т	Т	D	T	S	
Foaming tendency		lowest	lowest	low	lowest	lowest	lowest	lowest	low	moderate	strong	low	strong	moderate	low	moderate	low	none	none	none	none	none	none	none	moderate to strong	low	very low	
Materials Fe – steel, iron, cast iron and stainless steel 1 to check first.	Fe Al Zn Cu Ms Others	X X X Plastics ¹	X X¹ X X Mg¹	X X X¹ X¹ Red brass, Plastics¹	X X X X Plastics ¹	X X X X X Plastics ¹	X X X X Mg ¹	X X¹ X¹ Mg¹	X Mg¹	X X X¹ X¹ Plastics¹	X X X¹ X X Plastics¹	X X X¹ X X Mg¹	X X X ¹ X ¹ Titan, Mg ¹	X X ¹ X X ¹ X ¹ Mg	X Mg¹	X X¹ Mg, Plastics¹	X X X ¹ X ¹ Mg, Plastics ¹	X X¹ X X Plastics	X X¹ X¹ X¹ Y¹ Plastics, Mg¹	X Mg, Plastics ¹	X X X¹ X X Mg, Plastics¹	X X¹ X¹ Mg, Plastics¹	X X X X Plastics	X X¹ Plastics	X X X X X All materials ¹	X X X X X All materials ¹	X X X X All materials ¹	
Corrosion protection, Chips/filter test 0/0	at x % in y ° dH	temporary, '2 %/DI water	temporary, '2 %/10° dH	temporary, '2 %/DI water	temporary, '2 %/DI water	temporary, '2 %/DI water	temporary, '2 %/DI water	temporary, '2 %/10°dH	temporary, '1,5 %/10° dH	temporary, '3 %/10° dH	-	temporary, '2,5 %/20° dH	-	temporary, '2,5 %/20° dH	temporary, 2 %/20° dH	after treatment a tected with corro	metallically bright nd immediately pro- sion protection from or ANTICORIT range.	-	-	-	-	-	temporary, temporary, '3,5 %/10°dH '3 %/10°dH		Products comply with Regulation (European Co No. 648/2004 on detergents			
pH (2 %), if applicable		9.2 ± 0,4 (3.5 %)	9.4 ± 0.5	9.5 ± 0.4	9.5 ± 0.4	9.7 ± 0,3	9.8 ± 0.4	9.8 ± 0.3	10.2 ± 0.4	9.7 ± 0.4 (3 %)	10.7 ± 0.5	12.0 ± 0.5 (2.5 %)	12.1 ± 0.5	12.2 ± 0.3	12.3 ± 0.5	1.5 ± 0.5 (DI water)	5.9 ± 0.5 (5 %)	7.7 ± 0.8	10.0 ± 0.6	12.5 ± 0.5	12.8 ± 0.6	12.9 ± 0.6 (1 %)	8.0 ± 0.4 (3.5 %)	10.8 ± 0.5 (3 %)	9.1 ± 0.6	7.9 ± 1.2 (1 %)	8.5 ± 0.5	
Concentration standard (range)	in %	3 (1 – 5)	3 (2 – 5)	2.5 (1 – 7)	3 (2 – 7)	2.5 (1 – 5)	2.5 (1 – 5)	3 (1 – 5)	2 (1 – 5)	3 (2 – 7)	4 (2 – 7)	3 (2 – 7)	5 (2 – 33)	4 (1 – 7)	3	10 (5 – 50)	10 (2 – 30)	4 (2 – 8)	4 (2 – 8)	4 (2 – 8)	5 (1 – 20)	5 (2 – 20)	2 (0.5 – 5)	*	0.4 (0.1 - 1)	1 (0.4 – 5)	1 (0.3 – 5)	
Temperature standard (range)	in °C	50 (20 – 80)	60 (<u>20</u> - 80)	60 (30 – 80)	60 (30 – 80)	60 (30 – 80)	60 (<u>10</u> – 80)	65 (30 – 80)	65 (40 – 80)	65 (40 – 80)	65 (20 – 80)	60 (30 – 80)	65 (20 – 80)	65 (40 – 80)	65 (35 – 85)	30 (20 – 60)	50 (20 – 70)	7.8 ± 0.8	65 (20 – 80)	65 (20 – 80)	65 (20 – 80)	65 (20 – 85)	60 (20 – 80)		65 (20 – 80)	65 (20 – 80)	65 (30 – 80)	
Spray pressure	in bar up to	600	500 (at 50°C)	15	300 (500 short-term)	300 (500 short-term)	500 (at 50°C)	200 (300 short-term)	15	15	-	15	-	8	25	5	20 (HD 200)		²⁾ Obse	serve product information – Use with appropriate surfactant component				2 (>60°C)	15 (25 at > 65°C)	25		
Demulsifying, Emulsifying		D	D	D	D	D	D	D	D	D	Е	D	E	D	D	D	D	-	-	-	-	_	-		D	D	D	
Density at 15 °C	in kg/m³	1036 ± 15	1078 ± 20	1035 ± 15	1050 ± 15	1037 ± 15	1038 ± 15	1053 ± 15	1044 ± 15	1120 ± 15	1058 ± 20	1092 ± 15	1090 ± 15	1145 ± 15	1168 ± 15	1360 ± 15	1265 ± 20	1335 ± 25	1579 ± 25	1435 ± 20	1410 ± 20	1433 ± 20	1079 ± 15	1035 ± 15	1025 ± 20	1020 ± 20	1047 ± 15	



Advanced Circular Technologies

ACT, Advanced Circular Technologies, answers
the challenge to transform our value chain from linear
to circular - without compromising on performance!

ACT sums up everything we do for this transformation process: starting with raw materials to the application of our lubricant solutions and up to recycling at the end of the life cycle.

TIME TO ACT: we gradually replace finite raw materials with renewable, bio-based or recycled ones. This also applies to our packs. As of 2024, our FUCHS small packs are made of 100% recycled materials.

Vote

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