		System cle	aners		Corrosion p	Corrosion protection																	Personal Care							
					SYNTHETIC					OIL-BASED													SKIN PROTECTION (BEFORE WORK)	SKIN CLEANING						
Product designation		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	Product designation		RENOCLEAN MTS 7001	RENOCLEAN MVS 8015 / MVS 8016	RENOCLEAN MVS 9004	RENOCLEAN MVS 9014	FUCHS MULTICLEAN	RENOCLEAN MVS 8010	RENOCLEAN MVS 7008	Product designation	RENOCLEAN HAND PROTECT MULTI	RENOCLEAN HAND WASH MILD	RENOCLEAN HAND WASH INTENSIVE					
Function		plete product for KSS		cides for system clean-	free corrosion protec-		water test and corro-	al oil-free corro-	rary corrosion	5	water displacing	Corrosion protec- tion concentrates	Function		Cleaner based or modified alco- hols.	n Hydrocarbon cleaner based isoparaffin, virtually aro- matics-free.	low-aromatic	VOC- and low- aromatic hydro-			Hydrocarbon n cleaner, virtually		Silicone-free, mark-free, breathable and universally applicable skin protection cream.	Mild, soap-free, unscented skin cleansing gel.	Abrasive hand cleanser for the strongest soiling.					
			- systems, basic system	ing, in combination with RENOCLEAN FXM 4005 for target- ed application	tion.	protection "All-in- One" for spray, pres- sure flood, high pres- sure cleaning and		sion protection.	mineral oil-free, alkaline.			<ul> <li>for solvent plants.</li> </ul>			nois.	maucs-free.	hydrocarbon cleaner.			y, ally aromatics-	a- aromatics-free.	Application	Before handling with changing working materials (water soluble and water insoluble pollutants and irritants).	For cleansing heavily stressed and sensitive skin, can also be used as shower gel.	Excellent for cleaning very heavily soiled hands in repair shops, mechanical engineering and many other areas.					
			9.0.00			deburring							Remarks		Distillable. Especially designed for	Very narrow resp. narrow k ing cut, fast drying, distillal Especially designed for clos	le. tion, slowly evap	- Universal applica-	tion in industry	for precision	fast drying. Easy		Forms a thin, invisible and protective film on the skin. Active support of the cleaning after work.	Especially suitable where frequent hand washing is necessary. Free of perfume, colorants and preservatives.	With natural scrubbing agents from corncobs, with pleasant orange scent. Is pH-neutral and contains skin care substances.					
Remarks		Contact time 6 – 24 h.	Contact time 8 – 24 h. Separate dosage of	See "Service additives for cooling lubricants" under "Cooling lubri-	borate, suitable for	Very low residue for- mation, very good or temporary corrosion	alkali	tects against cor-	borate, protects	d Emulsion cleaner and corrosion pro- tection emulsion	ids.	Barium-free con-			closed cleaning systems!	cleaning systems!	application, e.g. for the removal	sion protection due to very thin	cable with steam jet, good corro-	n electronic parts cleaning, non-	solvent systems without perma- . nent distillation.	Available packaging	Carton with 20 x 100 ml tube Carton with 6 x 1000 ml pouch bottle	Carton with 25 x 250 ml bottle Carton with 6 x 2000 ml pouch bottle	Carton with 25 x 250 ml bottle Carton with 6 x 2000 ml pouch bottle					
			bactericide. Permanent use to KSS	cants - water-misci-		protection, synthetic,	sion and filling appli-	vapour phase,	in the vapour	for immersion, flush and spray	um-free oily/wax	y cable in many,							properties. Free	Easy application,	1,	Accessories		RENOCLEAN DONA 2000K dispenser (for pouch bottle)						
			without bactericide possible.		spray application.			tory grinding, for immersion, pres- sure flood, flood	for vibratory grinding, for immersion, pres- sure flood, flood	application. Free of barium and	tion film, dip an flood applicatio spraying condi- s tionally possible	d clean solvents.						tion.		:- tems without permanent distil lation.				_						
Application	ς		_		-				-				Application	S									SKIN CARE	_						
S – Spray/Hpressure D – Immersion/Ultrasonic T – Spray + Immersion	D T Others	т	т	Т	т	(T)	D Manual, filling	D (T)	Т	т	D	Analogous to sol- vent	S – Spray/Hpressure D - Immersion/Ultrasonic T - Spray + Immersion	T Others	T Manual	T -	T Manual	T Manual	T Manual, Steam- jet device	T Manual	T Manual	Product designation	RENOCLEAN HAND CARE	_						
Foaming tendency	-	none	none	none	low	lowest	low	strong	low	low to moderate	-		Foaming tendency		none	none	none	none	none	none	none	Function	Silicone-free skin care cream.							
Materials Fe – steel, iron, cast iron and stainless steel	Fe Al				X X X	X X <sup>1</sup>	X	X X X	X	X X X	XXX	X X X	Materials Fe – steel, iron, cast iron and stainless steel	Fe Al Zn	X X X	X X X	X X X	X X X	X X X	X X X	X X X	Application	After work, ideally suited as care cream for hands whose natural protective barrier is attacked during work.							
<sup>1</sup> to check first.	Cu Ms Others	Corresponding cooli	ng lubricant		X X All materials <sup>1</sup>	X X Mg <sup>1</sup>		X X <sup>1</sup> X <sup>1</sup> Mg		X X All materials <sup>1</sup>	X X All materials <sup>1</sup>	X X X All materials <sup>1</sup>	<sup>1</sup> to check first.	Cu Ms Others	X X All materials, Plastics <sup>1</sup>	X X All materials, Plastics <sup>1</sup>	X X All materials, Plastics <sup>1</sup>	X X All materials, Plastics <sup>1</sup>	X X All materials, Plastics <sup>1</sup>	X X All materials, Plastics <sup>1</sup>	X X All materials, Plastics <sup>1</sup>	Remarks	Contains nourishing vegetable oils, beeswax and moisture-regulat ing substances. Keeps the skin healthy and strong with regular use.	ng substances.						
<b>Corrosion protection,</b> 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	Evaporation figure (Ether = 1)	ca.	125	93 115	900	900	120	123	200	Available packaging	Carton with 20 x 100 ml tube Carton with 6 x 1000 ml pouch bottle	-						
<b>pH (2 %),</b> 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	-	-	Flash point	in °C		≥ 56 ≥ 62	≥86	≥86	≥61	≥61	≥61	Accessories	RENOCLEAN DONA 2000K dispenser (for pouch bottle)	-						
Concentration standard (range)		(1 % – 3 %)	1,5 % (1 % – 2 %)	-	2 (0,5 – 5)		3 (1 – 5)	3 (0,5 – 5)	2 (0,5 – 5)	4 (3 – 20)	1	typical >3 %				179 - 197 184 - 206	217 - 255	217 - 255	180 - 330	180 - 220	160 – 245									
Temperature standard (range)		Corresponding cooli	ng lubricant		60 (20 – 80)	60 ( <u><b>20</b></u> – 80)	20         60         60           (10 - 50)         (10 - 80)         (20 - 80)		60 (20 – 80)	20 Ambient temper (20 – 60) ature			to sol- Concentration in % standard (range)			100	100	100	100	100	100									
Spray pressure	ca.	Corresponding cooli	ng lubricant		100	500 (at 50 °C)	10	1	300		1		Spray pressure	in bar up to ca.		System-de	endent		-	System	n-dependent									
Demulsifying, Emulsifying		E	E		-	D	-	-	-	E	-		Demulsifying, Emulsifying		-	-	-	-	D	-	-	_								
<b>Density</b> at 15 °C	in kg/m³	1010	1005 ± 15	-	1079 ± 15	1078 ± 20	1068 ± 15	1033 ± 15	1035 ± 15	995 ±20	-	-	Density at 15 ℃	in kg/m³	880	760 763 ±10 ±10	815 ± 20	814 ±20	795 ± 15	766 ± 10	790 ± 25									

## RENOCLEAN

## Perfect Cleaning – Cleaner for Metalworking



	Neutral cleaner O											One-component products Acidic cleaner							Customized products						Builder components								Surfactant components				
Product designation		RENOCLEAN MSO 3011	RENOCLEAN WSA 3002	RENOCLEAN MTO 3002	RENOCLEAN MTO 3001	RENOCLEAN MTO 3003	RENOCLEAN MSO 3004	RENOCLEAN VR 1021 CXV	RENOCLEAN VR 1021	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 SPEZIAL 2000	RENOCLEAN GXA 3004/GXA 4014	RENOCLEAN GSO 3001	RENOCLEAN GTM 3001	RENOCLEAN GXM 3001	RENOCLEAN AKTIV DA	RENOCLEAN MTA 2001	RENOCLEAN MTA 4001	RENOCLEAN FTA 4002	RENOCLEAN ENTFETTER 39	RENOCLEAN FTA 4001	RENOCLEAN VR 3222/VR 2729 K		RENOCLEAN MTT 2003		RENOCLEAN VR 1500	RENOCLEAN MDT 3002		
Function		Neutral cleaner for spray and high-pres- sure cleaning, high- pressure deburring.		and corrosion protection "All- in-One" for	ble neutral cleaner for spray and immersion applications.	ble neutral cleaner for spray and immersion	for spray and	Spray cleaner for spray, pressure flood and high pressure cleaning up to approx. 300 bar.	for spray applica- tion.	Neutral cleaner with very good corrosion protec- tion for ferrous metals, spray application.	capable spray and immersion cleaner, suitable	ing cleaner for	sonic and manual	, Cleaner for immersion, ultra- sonic and manual application in medical technol- ogy.		cleaner for	cification phos- phoric acid for		versal cleaner for immersion, ultra	al -	port containers	tor for spray and immersion appl cation.	<ul> <li>Defoamer, foam</li> <li>regulating addi-</li> <li>tive especially fo</li> <li>cleaning solu-</li> <li>tions.</li> </ul>	separation of	Builder, neutral, for immersion, pressure flood, flood and spray application.	alkaline, for immersion, pres- sure flood, flood	Builder, highly alkaline, for immersion, pres- sure flood, flood and spray appli- cation.	alkaline, silicate, for immersion, pressure flood,	alkaline, for immersion, pres- sure flooding,	Synthetic builders with tection, recyclable, for pressure flood, flood a cation.	r immersion, and spray appli-	for immersion,	ultrasonic and pressure flood		ter, emulsifying		
Remarks		Highly demulsifying, almost foam-free above 25 °C, salt- free.	Virtually foam-free from 30°C.	very good tempo- rary, corrosion	sonic, universally applicable, e.g. before heat treat	cially for the removal of - micro-quantity lubricants (e.g.:	formation, suitable for micro filtration. Virtuall	cleaning (200 bar, 300 bar for y short periods). Nearly foam-free	usable before heat treatment,	mation, usable before heat treat-	cable, e.g. for non-cutting	containing silicate with very good wetting capacity,	parts and aggre- gates (e.g. rail-	Supports stain- free drying. Can be combined with RENOCLEAN MDT 3002. Silicate-free. Non-skin-irri- tating.	parts, e.g.: with difficult to remove forming lubricants. Spray able up to	difficult to remove pigment dirt. Sprayable up to approx. 25 bar (depending on	and germinated cleaning systems. Integrated con- sumption indica-	thermal or ECM	For all manual cleaning, for immersion, suitable for steam-jet and floor cleaning equipment.	For all manual and machine-based applications, especially suitable for floc cleaning equipment. Odourless (GXA 4014 with lime fragrance).	or oil, grease, abra sion and transp dust, designed container clean		long-lasting to defoaming and deaerating effect	defoaming	able.2)	Borate, silicate and surfactant free, microfilter- able. <sup>2)</sup>	and surfactant	Borate and sur- factant free, microfilterable. <sup>21</sup>	and surfactant	Free of nitrite, borate, factants, suitable for h microfilterable, salt fre	high pressure, ee. <sup>2)</sup>	Microfilterable, strongly dependent on membrane and working parame- ters! Sprayable $\geq 40 ^{\circ}\text{C}$ .	strongly dependent on membrane and		Good ultrasonia support, high o and fat absorp- tion.		
Application S – Spray/Hpressure D – Immersion/Ultrasonic T – Spray + Immersion	S D T Others	S	S	S (T)	T HD-Gerät	т	S	S (T)	S	S	т	T Manual, floor clean- ing equipment	S (T) Manual, Steam- jet device	D	D (T)	S (T)	, 5	T Manual, High pressure device	T Manual, High pressure device	T Manual, floor cleaning/Steam-jet device	T Manual	т	T Manual	T Manual	т	т	т	т	т	тт		т	D	S	D		
Foaming tendency		lowest	lowest	lowest	low	lowest	lowest	lowest	low	low	moderate	strong	low	strong	moderate	low	moderate	low	strong	moderate	low	low	none	low	none	none	none	none	none	none no	one	low	moderate to strong	very low	strong		
<b>Materials</b> Fe – steel, iron, cast iron and stainless steel	Fe Al Zn Cu	× × ×	x x x	X X <sup>1</sup> X	X X X <sup>1</sup> X <sup>1</sup>	X X X X	x x x	X X <sup>1</sup> X <sup>1</sup>	x x x	Х	X X X <sup>1</sup> X <sup>1</sup>	X X X <sup>1</sup> X	X X X <sup>1</sup> X	X X X <sup>1</sup>	X X <sup>1</sup> X X <sup>1</sup>	х	X X1	X X X <sup>1</sup>	X X <sup>1</sup>	X <sup>1</sup> X <sup>1</sup> X <sup>1</sup> X <sup>1</sup>	X X X X				X X <sup>1</sup> X	$\begin{array}{c} X\\ X^1\\ X^1\\ X^1 \end{array}$	X	X X X <sup>1</sup> X	X X <sup>1</sup>	X X X X X X X X X X X X X X X X X X X	1	X X X X	X X X X	X X X X	X X X X		
<sup>1</sup> to check first.	Ms Others	X Plastics <sup>1</sup>	X Plastics <sup>1</sup>	X Mg <sup>1</sup>	X <sup>1</sup> Red brass, Plastics <sup>1</sup>	X Plastics <sup>1</sup>	X Mg <sup>1</sup>	X <sup>1</sup> Mg <sup>1</sup>	X Mg <sup>1</sup>	Mg <sup>1</sup>	X <sup>1</sup> Plastics <sup>1</sup>	X Plastics <sup>1</sup>	X Mg <sup>1</sup>	X <sup>1</sup> Titan, Mg <sup>1</sup>	X <sup>1</sup> Mg	Mg <sup>1</sup>	Mg, Plastics <sup>1</sup>	X <sup>1</sup> Mg, Plastics <sup>1</sup>	X <sup>1</sup> Mg, Paints <sup>1</sup> , Plastics	X <sup>1</sup> Mg, Paints <sup>1</sup> , Plastics	X Plastics	All materials <sup>1</sup>	-	-	X Plastics	X <sup>1</sup> Plastics, Mg <sup>1</sup>	Mg, Plastics <sup>1</sup>	X Mg, Plastics <sup>1</sup>	X <sup>1</sup> Mg, Plastics <sup>1</sup>	X Plastics Pla	astics	X All materials <sup>1</sup>	X All materials <sup>1</sup>	X All materials <sup>1</sup>	X All materials <sup>1</sup>		
Corrosion protection, Chips/filter test 0/0	at x % in y ° dH	temporary, '2 %/DI water	temporary, '2,5 % /10°dH	temporary, '2 %/10° dH	temporary, '2 %/DI water	temporary, '2 %/DI water	temporary, '2 %/DI water	temporary, '2 %/10°dH	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		, ,		-	-	-	-	-	-	-	-	-	-	temporary, te '3,5 %/10°dH '3	emporary, 9 %/10 ° dH	Product	s comply with Regula No. 648/2004	lation ( European C 4 on detergents	ommunity)		
<b>pH (2 %),</b> if applicable		9.2 ± 0,4 (3.5 %)	9.2 ± 0.4	9.4 ± 0.5	9.5 ± 0.4	9,5 ±0.4	9.8 ± 0.4	9.8 ± 0.3	10.2 ± 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		5.9 ± 0.5 (5 %)	10.9 ± 0.4 (3 %)	9.1 11.7 ± 0.6 (100 %) ± 0.5 (1 %)	8.5 ± 0.5 (100 %)	8.7 ± 1	8.8 ± 1.2 (100 %)	9.3 ± 0.7 (100 %)	7.7 ± 0.8	10.0 ± 0.6	12.5 ± 0.5	12.8 ± 0.6	12.9 ± 0.6 (1 %)	8.0 10 ± 0.4 (3.5%) ±	0.8 0.5 (3 %)	7.9 ± 1.2 (1 %)	9.1 ±0.6	8.5 ±0.5	9.8 ± 1.0 (3 %)		
Concentration standard (range)	in %	3 (1 – 5)	2 (1 – 5)	3 (2 – 5)	2,5 (1 – 7)	3 (2 – 7)	2,5 (1 – 5)	3 (1 – 5)	2 (1 – 5)	2 (1 – 5)	3 (2 – 7)	4 (2 – 7)	3 (2 – 7)	5 (2 – 33)	4 (1 – 7)	3 (1 – 7)	10 (5 – 50)	10 (2 – 30)	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)	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 (0.3 – 5)	1 (0.3 – 2)		
Temperature standard (range)		( <u><b>20</b></u> – 80)	65 (30 – 80)	60 ( <u><b>20</b></u> - 80)	60 (30 – 80)	60 (30 – 80)	60 ( <u><b>10</b></u> – 80)	65 (30 – 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)	35 ( <u><b>20</b></u> -80)		50 (20 – 80)	50 (20 – 80)	-		7.8 ± 0.8		65 (20 – 80)		65 (20 – 85)			65 (20 – 80)	65 (20 – 80)	65 (30 – 80)			
Spray pressure	in bar up to	600	30 HD 350	500 (at 50°C)	15	300 (500 short-term)	500 (at 50 °C)	200 (300 short-term)	20	15	15	-	15	-	8	25	5	20 (HD 200)	-	-	5		-	-		<sup>2)</sup> Obs	serve product inform	ation – Use with app	propriate surfactant c	omponent		15 (25 at > 65 °C)		25	0.5		
Demulsifying, Emulsifying		D	D	D	D	D	D	D	D	D	D	E	D	E	D	D	D	D	E	E	E	-	-	D	-	-	-	-	-	-		D	D	D	E		
<b>Density</b> at 15 °C	in kg/m³	1036	1082 ± 15	1078 ± 20	1035 + 15	1050 + 15	1038 + 15	1053 + 15	1040	1044	1120 ± 15	1058 + 20	1092	1090 + 15	1145 ± 15	1168	1360	1265 ± 20	1045 ± 20	1047 1036 ±15 ±15	1004 ± 15	1017 ± 15	998 + 15	987 ± 10	1335	1579 ± 25	1435 + 20	1410 ± 20	1433 ± 20	1079 10 ± 15 ±	035	1020 ± 20	1025 ± 20		1050 ± 20		

## Note

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