

RENOCLEAN

**Perfect Cleaning –
Cleaner for Metalworking**



*LUBRICANTS.
TECHNOLOGY.
PEOPLE.*



System cleaner

Product	GROTANOL FF 1 N	RENOCLEAN SMC/SMC +	RENOCLEAN FXM 4005	ACTICIDE OX / MBS / WB 200
Function	System cleaner with almost pan-European approval	System cleaners	System cleaner biocide and fungicide free	Biocide and fungicide for System cleaners
Physical state	liquid	liquid	liquid	liquid
Emulsifying properties	emulsifying	emulsifying	emulsifying	–
Foaming tendency	none	none	none	–
Application	System cleaner for coolant-supply systems, registered in most European countries!	System cleaner for coolant-supply systems, SMC+ does not contain formaldehyde releasers	System cleaner for coolant supply systems. Base system without biocide/ fungicide	In combination with RENOCLEAN FXM 4005 for targeted application
Comments	–	–	–	–
Notes	Contact time 6–24h	Contact time 8–24h	Contact time 8–24h	–
pH (2%). if applicable	9 at 1 %	9.8 ± 0.3 / 10.4 ± 0.3	10.0 ± 0.5	–
Concentration range in %	1–3	1–2	1–2	–

Fe - steel, iron, cast iron and stainless steel, ¹ to check first

Skin protection before work

Product	RENOCLEAN HAND PROTECT MULTI
Function	Silicone-free, non-marking, breathable, all-purpose skin cream
Application	Before handling with changing working materials (water-soluble and water-insoluble pollutants and irritants)
Comments	Forms a thin, invisible and protective film on the skin
Notes	Active support for cleaning after work
Available quantities	50x 100 ml tube 6x 1,000 ml pouch bottle
Equipment	

Solvents

Product	RENOCLEAN MTS 7001	RENOCLEAN MVS 8015	RENOCLEAN MVS 8016	RENOCLEAN MVS 9014
Function	Cleaner based on modified alcohols	Cleaner based on isoparaffin, aromatics free	Cleaner based on isoparaffin, aromatics free	VOC and aromatics free cleaner with corrosion protection
Physical state	liquid	liquid	liquid	liquid
Flash Point	≥ 61°C	≥ 56°C	≥ 62°C	91 ± 5°C
Boiling range	165–175°C	179–197°C	184–206°C	217–255°C
Density at 15°C	880 ± 10 kg/m ³	760 ± 5 kg/m ³	763 ± 10 kg/m ³	820 ± 20 kg/m ³
Application	Suitable for the removal of polar and non-polar impurities	Very narrow boiling range, fast drying	Narrow boiling range, fast drying	Universal application, good corrosion protection through a very thin film of oil
Materials				all materials ¹ , plastic
Comments	distillable	distillable, recyclable	distillable, recyclable	VOC compliant
Notes	Especially for closed cleaning systems designed!			Good anti-corrosive properties, for solvent systems without distillation

Skin cleaning

RENOCLEAN HAND PROTECT PRO	RENOCLEAN HAND WASH MILD
Silicone-free, water-soluble skin protection cream	Mild, soap-free, unperfumed
Prior to contact with strong water-immiscible contaminants such as oils, greases, lubricants, metal debris, dust and soot	For cleaning heavily stressed skin
Forms a tack-free, thin and protective microfilm on the skin	Particularly suitable where necessary
Includes by the skin well tolerated specialty surfactants, who actively support the subsequent skin cleansing	Free of perfumes, dyes and
50x100 ml tube 6x1,000 ml pouch bottle	25x250 ml tube 6x2,000 ml pouch bottle

RENOCLEAN KLV	RENOCLEAN UWF / FUCHS MULTICLEAN	RENOCLEAN KU	Product	RENOCLEAN VR 3222
VOC-free, free of aromatics	Free of aromatics, environmentally friendly, demulsifying	Cleaner based on isoparaffin, aromatics free	Function	Temporary
liquid	liquid	liquid	Physical state	liquid
≥ 90 °C	≥ 61 °C	≥ 61 °C	Emulsifying properties	–
217–255 °C	180–330 °C	180–220 °C	Foaming tendency	low
810 ± 15 kg/m ³	795 ± 10 kg/m ³	762 ± 10 kg/m ³	Application	Immersion
Universal application, slowly evaporating	Universal application in industry and commerce, applicable with high-pressure-equipment	For precision mechanics and electronic parts cleaning	Materials	all materials
			Comments	Nitrite free, contains boron-amine, suitable for vibratory finishing
			Notes	
			Corrosion protection, chips / filter test 0/0 at x% at _pH (20%), if applicable	temporarily. '3.5 % / 10° dH
			Concentration range in %	8 ± 0.4 (3.5 %)
			Temperature range	0.5–3
			Injection pressure in bar to about	0.1 – ~100
cs ¹				
VOC compliant, distillable. VW approval A29 2819	Free from caustic and corrosive substances	Material-friendly cleaning, not skin-irritating		
Simple application, for example, to remove car wax preservation	Good anti-corrosion properties	Easy to use, for solvent systems without permanent distillation		

RENOCLEAN HAND WASH INTENSIVE

ed skin cleansing gel	Hand cleaner with abrasives for heavy soiling
d and sensitive skin	Ideal for cleaning heavily soiled hands in the areas of auto repair shops, and many mechanical engineering
frequent hand washing is	Includes plastic flour as friction body, low perfumed
preserving agents	pH-neutral set and contains skin care substances
	25x250 ml tube 6x2,000 ml pouch bottle

DNA 2000K Dispenser (for pouch bottle)

on protection

ANTICORIT SKR 3001	RENOCLEAN VR 2729 K	ANTICORIT SKR 42	ANTICORIT MKR 30	ANTICORIT WMC 9000	ANTICORIT DFO / DFW 8101	ANTICORIT RPC 5000
mineral oil-free corrosion protection		Synthetic pressure-test and anti-corrosive concentrate	Emulsion-cleaner, mineral oil-containing anti-corrosion emulsion	Water-miscible corrosion protection concentrate	Solvent-based, water-displacing corrosion protection	Anticorrosion concentrates, dilutable in many, preferably RENOCLEAN solvents
liquid	liquid	liquid	liquid	liquid	liquid	liquid
–	–	–	emulsifying	emulsifying	demulsifying	–
low	low	low	moderate to strong	very strong	low	low
injection, flood and spray application		Dipping and filling application	Preferably immersion and flood application, spraying possible			
Fe, Mg, Al, Zn (Cu, brass) ¹		Fe	Fe, Al, Cu, brass	all materials ¹		
Nitrite free, works in the vapor phase corrosion-protective, suitable for vibratory finishing		Stable against drag in of salt and alkali	Boron and mono-ethanol-amine free	Free of barium, silicone and biocides	Dewatering fluids. Forming a thin barium-free corrosion protection film	Barium-free concentrates, dilutable in many, preferably RENOCLEAN solvents
water-miscible					oily/waxy	oily
temporarily. '2 % / 20° dH	temporarily. '2 % (DI-water)	temporarily. '1.5 % / 20° dH	well '3 % / 20° dH	Concentration-dependently	very well	very well
9.8 ± 0.3	10.8 ± 0.5 at 3 %	10 ± 0.5 (10 %)	8.8 ± 0.4	8.7 (10 %)	–	–
0.5–5	0.5–3	1–5	3–5	5–25	100	typical >3
60 °C (20–80)		20 °C (10–50)	50 °C (20–60)	20 °C (20–60)	room temperature	
0.1–5	0.1–~300	10	2	max. approx. 1	1	–

Skin care

RENOCLEAN HAND CARE

Silicone-free skin care cream

After working perfectly suited as cream for hands, whose natural protective barrier is attacked while working

Contains nursing vegetable oils, beeswax and moisture-regulating substances

Obtains the skin when used regularly, healthy and strong

50 x 100 ml tube
6 x 1,000 ml pouch bottle

Neutral cleaner

Product	RENOCLEAN MSO 3011	RENOCLEAN MTO 3002	RENOCLEAN MTO 3001	RENOCLEAN VR 1021 CXV
Function	Neutral cleaner, salt-free	Neutral cleaner and corr.-protection "all-in-one", salt-free	Neutral cleaner, salt-free, spray and immersible	Neutral cleaner spray and immersible
Physical state	liquid	liquid	liquid	liquid
Emulsifying properties	strong demulsifying effect	demulsifying effect	demulsifying effect	demulsifying effect
Foaming tendency	lowest	lowest	low	lowest
Application	Spray and high pressure cleaning, deburring (~600 bar)	Spray and high pressure cleaning	Spray, immersion and ultrasonic cleaning	Spray, pressure flooding and high pressure cleaning (200 bar, 300 bar short-term)
Materials	Fe, Al, brass, Cu	Fe, Al, brass, Cu, (Al, Mg) ¹	Fe, Al, Zn, (Cu, brass) ¹ , plastics ¹	Fe, Al, brass, Cu, Mg
Comments	High pressure suitable	Residue formation is very low, salt-free	Very low residue formation, salt-free	High pressure suitable, contents hydroxide. VW approval A29 0976
Notes	Highly demulsifying, almost foam-free ≥ 25 °C	Universally applicable, low-foaming application from 20 °C, depending on pressure	Universally applicable, e. g. before heat-treatment, low-foam use from 30 °C, sprayable above ~ 45 °C	Nearly foam free ≥ 30 °C
Corrosion protection, chips / filter test 0/0 at x% at _	temporarily. '2.5 % / 10° dH	temporarily. '2 % / 10° dH	temporarily. '2 % / in VE-water	temporarily. '2 % / 10° dH
pH (2 %), if applicable	9.2 at 3.5 %	9.4 ± 0.4	9.6 ± 0.3	9.8 ± 0.3
Concentration range in %	1–5	1–5	1–5	1–5
Temperature range	50 °C (10–80)	60 °C (20–80)	65 °C (30–80)	65 °C (30–80)
Injection pressure in bar to about	~600	500 (≥ 50 °C)	25	200 (300 short-term)

Fe – steel, iron, cast iron and stainless steel, ¹ to check first

1-Component-Prod

RENOCLEAN MSO 3004	RENOCLEAN MSA 3011	RENOCLEAN VR 1021	RENOCLEAN C 20 K 1427	RENOCLEAN MTA 3003	RENOCLEAN VR 1798 / 2
Neutral cleaner, salt-free	Neutral cleaner	Neutral cleaner, salt-free	Neutral cleaner, salt-free	Spray cleaner, suited for immersion and ultrasonic cleaning	Immersion and ultrasonic cleaner
liquid	liquid	liquid	liquid	liquid	liquid
demulsifying effect	demulsifying effect	demulsifying effect	demulsifying effect	demulsifying effect	slightly emulsifying
lowest	lowest	low	low	moderate	strong
Spray and high pressure cleaning (500 bar)	Spray, pressure flooding and high pressure cleaning	Spray cleaning	Spray cleaning	Spray, immersion and ultrasonic cleaning	Immersion, ultrasonic and manual cleaning
Fe, Al, brass, Cu	Fe, Al, brass, Cu, Mg	Fe, Mg, (Al, Cu, brass) ¹	Fe, (Mg) ¹	Fe, Al, (Zn, Cu, brass) ¹	Fe, (Al, Cu, brass) ¹
Suitable for microfiltration, salt-free, residue formation is very low, high pressure suited	High pressure suitable, contents hydroxide. PSA approval worldwide: MABEC-code Z 000 533 700	Residue formation is very low, salt-free	Very good corrosion protection, low residue formation, salt-free. VW approval A29 2863	Silicate-free, contains hydroxides, phosphates and amines	Contains phosphates, amines and silicates
For example: used before heat-treatment, virtually foam free from 10°C	Low foaming ≥ 30°C, pressure dependent!	For example: used before heat treatment	For example: used before heat treatment	Universally applicable, e.g. for engine preparation	Suitable for manual and floor cleaning from 20°C
temporarily. '2 %/in VE-water	temporarily. '2.5 %/ 10° dH	temporarily. '2 %/10° dH	temporarily. '1.5 %/ 10° dH	temporarily. '3 %/10° dH	(temporarily) '9 %/10° dH
9.8 ± 0.4	9.8 ± 0.3	10.2 ± 0.3	10.2 ± 0.3	9.7 ± 0.3 (3%)	10.8 ± 0.5
1–5	1–5	1–5	1–5	2–7	2–7
60°C (10–80)	60°C (20–80)	65°C (30–80)	65°C (40–80)	65°C (40–80)	65°C (20–80)
500 (≥ 50°C)	500 (≥ 50°C)	~ 20	~ 15	~ 15	–

Products

Acid cleaners

RENOCLEAN WSA 4002	RENOCLEAN FDC 4001	RENOCLEAN MDA 4002	RENOCLEAN FSA 4017	RENOCLEAN FSO 2010	RENOCLEAN FTM 1001
Spray cleaner, suited for immersion and ultrasonic cleaning	Immersion and ultrasonic cleaner	Immersion and ultrasonic cleaner, sprayable	Spray cleaner, suited for immersion and ultrasonic cleaning	Neutral derusting cleaner	Derusting, descaling, contains phosphoric acid
liquid	liquid	liquid	liquid	liquid	liquid
demulsifying effect	slightly emulsifying	demulsifying effect	demulsifying effect	slightly demulsifying	–
low	strong	moderate	low	low	moderate
Spray, immersion, ultrasonic and manual cleaning	Immersion, ultrasonic and manual cleaning	Immersion cleaner, sprayable up to ~8 bar (system-dependent)	Spray, immersion and ultrasonic cleaning	Spray, immersion and ultrasonic cleaning	Immersion, ultrasonic and manual cleaning. Consumption indicator integrated
Fe, Al, (Mg) ¹	Fe, Mg, Titan, plastics ¹	Fe, Fe gal., Mg, (Al) ¹	Fe, (Mg) ¹	Fe, (Al)	Fe
Contains hydroxides, amines and silicates	Combinable with RENOCLEAN MDT 3002	Silicate-free, contains hydroxides and phosphates	Silicate-free, contains hydroxides, amines and phosphates	Applicable after thermal or ECM deburring	Suitable for cleaning calcified and contaminated cleaning equipment
For heavily soiled items and aggregates (e.g. train, engine and chassis components)	For cleaning tasks in medical technology, supports spot-free drying	For cleaning parts, e.g. with difficult to remove forming lubricants	For cleaning parts, e.g. with difficult to remove pigment dirt	Parts are metallic bright after treatment and therefore be fitted immediately with corrosion protection (RENOCLEAN- or ANTICORIT products)	
temporarily. '2.5 % / in VE-water	–	temporarily. '2.5 % / 20° dH	temporarily, '2 % / 20° dH	–	–
12.1 ± 0.4 at 2.5 %	12.1 ± 0.4	12.2 ± 0.3	12.3 ± 0.5	5.9 ± 0.5 (5%)	1.5 ± 0.5 (DI-water)
2–7	2–7	1–7	1–7	2–30	5–50
60°C (30–70)	65°C (50–80)	65°C (40–80)	65°C (35–85)	50°C (20–75)	30°C (20–60)
15	–	8	25	20	5

Special products

RENOCLEAN SPEZIAL 2000	RENOCLEAN GXA 4014	RENOCLEAN GSO 3001	RENOCLEAN GTM 3001	RENOCLEAN AKTIV DA	Entschäumer GXM 3001
Emulsifying universal cleaner	Universal cleaner for floors, halls and vehicle fleet	Cleaner for transport boxes (KLT)	Drying accelerator	Demulsifier	Defoamer
liquid	liquid	liquid	liquid	liquid	liquid
emulsifying	emulsifying	demulsifying	–	demulsifying	–
strong	moderate	low	low	low	none
Immersion, ultrasonic and manual cleaning of commercial vehicle, tarpaulins, indoor and workshop	Floor cleaning machine or manually, plant, vehicle and hall cleaning	Spray and manual cleaning	Spray and immersion application	Separation of emulsified oil	Foam-control additive for cleaning solutions
all materials ¹	all materials ¹	all materials ¹	all materials ¹	–	–
Contains phosphates. Specifications: FORD 800 51 007	Lemon scent	To remove oils, grease, abrasion and dust from transport	Antistatic effect on plastic surfaces	Demulsifier with defoaming properties	Based on paintable polysiloxanes
Suitable for all manual cleaning, for immersion, for steam jet and floor cleaning equipment	For machine and manual cleaning of workshop, vehicle park, etc.	Designed for container cleaning equipment	Dosage in a rinse, e. g. for faster drying of plastic boxes	Installations for the removal of demulsified oil are necessary (oil separator etc.)	Immediate, long-lasting defoaming and deaeration effect
–	–	–	–	–	–
10.9 ± 0.4 (3%)	11.7 ± 0.5 (1%)	8.5 ± 0.5 (100%)	8.7 ± 1	9.3 ± 0.5 (100%)	7.4 ± 1 (100%)
2–20	1–20	1–10	0.2–1.0	0.05–10	0.01–0.25
35°C (20–80)	20°C (20–80)	60°C (20–80)	50°C (20–80)	10–90°C	10–90°C
–	–	5	5	–	–

Builder components

RENOCLEAN MTA 2001	RENOCLEAN MTA 4001	RENOCLEAN FTA 4002	RENOCLEAN ENTFETTER 39	RENOCLEAN FTA 4001	RENOCLEAN VR 3222
Builder, neutral	Builder, moderate-alkaline	Builder, highly alkaline	Builder, highly alkaline with silicate	Builder, highly alkaline	Builder with corrosion protection, recyclable, salt-free
liquid	liquid	liquid	liquid	liquid	liquid
–	–	–	–	–	–
none	none	none	none	none	none
Immersion, injection, ultrasonic and spray cleaning	Immersion, injection, ultrasonic and spray cleaning	Immersion, injection, ultrasonic and spray cleaning	Immersion, injection, ultrasonic and spray cleaning, electrolytic degreasing	Immersion, injection, ultrasonic and spray cleaning, electrolytic degreasing, dephosphating	Immersion, injection, ultrasonic and spray cleaning, pressure rated
Al, Cu, brass, (Zn) ¹ , plastics	Fe, (Mg, Al, Cu, brass, Zn) ¹ , plastics	Fe, Mg, plastics ¹	Fe, Mg, Al, (Cu, brass, Zn) ¹ , plastics ¹	Fe, Mg, (Cu, brass) ¹ , plastics ¹	all materials
Free of borate, silicate and surfactant, contains phosphates, usable with microfiltration	Free of borate, silicate and surfactant, contains phosphates, usable with microfiltration	Free of borate, silicate and surfactant, contains hydroxide and phosphates, usable with microfiltration	Borate-free, contains hydroxides, phosphates and silicates	Borate-free, contains hydroxides, usable with microfiltration	Free of nitrite, boron, silicate and surfactant, contains amines, usable with microfiltration
Note product info – use with appropriate surfactant					
–	–	–	–	–	temporarily. '3.5 % / 10° dH
7.8 ± 0.8	10 ± 0.5	12.5 ± 0.5	12.6 ± 0.6	12.9 ± 0.6 (1%)	8 ± 0.4 (3.5%)
2–7	2–7	2–8	1–20	2–18	2–5
65 °C (20–80)	65 °C (20–80)	65 °C (20–80)	65 °C (20–80)	65 °C (20–80)	60 °C (20–80)
–	Applicable injection pressure accordingly used surfactant componen				

Surfactant components

RENOCLEAN VR 2729 K	RENOCLEAN MST 2001	RENOCLEAN TENSID 161	RENOCLEAN VR 1500	RENOCLEAN MDT 3002
Builder with corrosion protection, recyclable, salt-free	Cleaning booster, spray and submersible	Cleaning booster, submersible	Cleaning booster, sprayable, neutral cleaner	Cleaning booster, emulsifying, submersible
liquid	liquid	liquid	liquid	liquid
–	demulsifying	demulsifying	demulsifying	emulsifying
none	low	moderate to strong	very low	very strong
Immersion, injection, ultrasonic and spray cleaning, pressure rated	Immersion, injection, ultrasonic and spray cleaning	Immersion, injection, and ultrasonic cleaning	Spray cleaning	Immersion and ultrasonic, conditional pressure flood cleaning
Fe, Mg, Zn, plastics	all materials	all materials	all materials	all materials
Free of nitrite, boron, silicate and surfactant, contains amines, usable with microfiltration. Works in the vapor phase as corrosion protection	Microfilterable, highly dependent on membrane and operating parameters!	Microfilterable, highly dependent on membrane and operating parameters!	Use also as a neutral cleaner, free of corrosion protection components	Good ultrasonic support, high oil and fat absorption
	Accordance with regulation (EC) no. 648/2004			
temporarily. '2 % / 10° dH	–	–	–	–
10.8 ± 0.5 (3 %)	6 ± 1	8.6 ± 0.5	8.5 ± 0.5	9.8 ± 0.8 (3 %)
2–5	0.3–3	0.1–1	0.3–4	0.3–2
60 °C (20–80)	65 °C (40–80), spray min. 50 °C	65 °C (40–80)	65 °C (30–80)	65 °C (20–80)
nt	5 (7.5 at > 65 °C)	2 (> 60 °C)	25	–

Note

The information contained in this product information is based on the experience and know-how of FUCHS SCHMIERSTOFFE GMBH in the development and manufacturing of lubricants and represents the current state-of-the-art. The performance of our products can be influenced by a series of factors, especially the specific use, the method of application, the operational environment, component pre-treatment, possible external contamination, etc. For this reason, universally-valid statements about the function of our products are not possible. Our products must not be used in aircrafts/spacecrafts or their components, unless such products are removed before the components are assembled into the aircraft/spacecraft. The information given in this product information represents general, non-binding guidelines. No warranty expressed or implied is given concerning the properties of the product or its suitability for any given application.

We therefore recommend that you consult a FUCHS SCHMIERSTOFFE GMBH application engineer to discuss application conditions and the performance criteria of the products before the product is used. It is the responsibility of the user to test the functional suitability of the product and to use it with the corresponding care.

Our products undergo continuous improvement. We therefore retain the right to change our product program, the products, and their manufacturing processes as well as all details of our product information sheets at any time and without warning, unless otherwise provided in customer-specific agreements. With the publication of this product information, all previous editions cease to be valid.

Any form of reproduction requires express prior written permission from FUCHS SCHMIERSTOFFE GMBH.

© FUCHS SCHMIERSTOFFE GMBH. All rights reserved.

Contact:

FUCHS SCHMIERSTOFFE GMBH
Friesenheimer Straße 19
68169 Mannheim/Germany
Phone: +49 621 3701-0
Fax: +49 621 3701-7000
zentrale@fuchs-schmierstoffe.de
www.fuchs.com/de/en

Export Division
Friesenheimer Straße 19
68169 Mannheim/Germany
Phone: +49 621 3701-1713
Fax: +49 621 3701-7713
export@fuchs-schmierstoffe.de