



LUBE OILS



**ENGINE SYSTEM
SHELL RIMULA OILS**



Product	Viscosity Grades	Key Benefits	Specifications and Approvals
Rimula R6 LM	10W-40	<ul style="list-style-type: none"> • Low emissions • Maintenance saving 	ACEA: E7, E6, E4-99; API: CI-4, CH-4, CG-4, CF-4, CF; Caterpillar: ECF-1-A; Cummins: CES 20077, 72, 71; Deutz: DQC IV-05; Mack: EO-M+; MAN: M3477, M3271-1; Mercedes Benz Approval: 228.51, 226.9; MTU: Category 3.1; Renault Trucks: RD-2; Volvo: CNG, VDS-2
Rimula R6 M	10W-40	<ul style="list-style-type: none"> • Maintenance saving 	ACEA: E7, E4; API: CF; Cummins: CES 20072; Deutz: DQC IV-05; Mack: EO-M+; MAN: M3277; Mercedes Benz Approval: 228.5; MTU: Category 3; Renault trucks: RXD; Volvo: VDS-3, Scania: LDF-2
Rimula R4 L	15W-40	<ul style="list-style-type: none"> • Low emissions • Extra Life - Improved Protection 	API: CJ-4, CI-4+, CI-4, CH-4, CG-4, CF-4, CF; ACEA E9, E7; JASO DH-2; Caterpillar: ECF-2, ECF-3; Cummins: CES 20081, 77, 72, 71; DDC: 93K218; Deutz: DQC-III-05; MACK: EO-O Premium Plus; MAN: M3275; Mercedes Benz Approval: 228.3, 228.31; MTU: Catagory 2; Renault Trucks: RLD-3; Volvo: VDS-4, VDS-3
Rimula R3 X	15W-40	Triple Action Resists: <ul style="list-style-type: none"> • Wear • Deposits • Heat 	API: CH-4, CG-4, CF-4, CF; ACEA: E5, E3; Caterpillar: ECF-1-A; Cummins: CES 20077, 76, 75, 72, 71; DDC: 93K215; Mack: EO-M, EO-M+; MAN: M3275; Mercedes Benz Approval: 228.3; MTU: Category 2; Renault Trucks: RD-2; Volvo: VDS-2
Rimula R3+	SAE 10W SAE 30 SAE 40	<ul style="list-style-type: none"> • Extra Performance Monograde 	Rimula R3 10W: API:CF Rimula R3+ 30: API:CF, MAN: 270 and Mercedes Benz Approval: 228.0 Rimula R3+ 40: API:CF, ACEA: E2, MAN: 270 and Mercedes Benz Approval: 228.0

Available in 1lt and 5lt bottles, 20lt pails, 55lt and 200lt drums, 1m³ tanks.
 Specifications and approvals may vary according to viscosity grade.

www.mansuetomarine.it



HYDRAULIC SYSTEM SHELL TELLUS OILS



Product	Benefits	Technology	ISO viscosity grades	Specifications and approvals
Tellus S4 ME	<ul style="list-style-type: none"> Extra long life Energy saving 	Synthetic, ashless	HM/22, 32, 46, 68	Approved by Denison Hydraulics, Cincinnati Machine, Eaton (Vickers), Bosch Rexroth and many other equipment manufacturers Industry standards: ASTM D6158, ISO 11158, DIN 51524-2
Tellus S3 V	<ul style="list-style-type: none"> Long life and improved efficiency Versatile application 	Mineral, ashless	HV/32, 46, 68	Approved by Denison Hydraulics, Eaton (Vickers), Cincinnati Machine, Bosch Rexroth and many other equipment manufacturers Industry standards: ISO 11158, DIN 51524-3, ASTM D6158
Tellus S3 M	<ul style="list-style-type: none"> Long life and improved protection Industrial applications 	Mineral, ashless	HM/22, 32, 46, 68, 100	Approved by Denison Hydraulics, Eaton (Vickers), Cincinnati Machine and many other equipment manufacturers Industry standards: ISO 11158, DIN 51524-3, ASTM D6158
Tellus S2 V	<ul style="list-style-type: none"> Extra protection Versatile application 	Mineral, zinc-based	HV/15, 22, 32, 46, 68, 100	Approved by Denison Hydraulics, Cincinnati Machine, Eaton (Vickers) and many other equipment manufacturers Industry standards: ISO 11158, ASTM D6158-05, DIN 51524-3
Tellus S2 M	<ul style="list-style-type: none"> Extra protection Industrial applications 	Mineral, zinc-based	HM/22, 32, 46, 68, 100	Approved by Denison Hydraulics, Cincinnati Machine, Eaton (Vickers), Bosch Rexroth and many other equipment manufacturers Industry standards: ISO 11158, ASTM D6158-05, DIN 51524-2
Hydraulic S1 M	<ul style="list-style-type: none"> Reliable protection Industrial applications 	Mineral, zinc-based	HM/32, 46, 68	ISO 11158
Speciality grades				
Tellus S4 VX	<ul style="list-style-type: none"> Ultra-low temperature Versatile application 	Special base oils, ashless	HV/32	Approved by Komatsu Mining, Komatsu and DIETZ automation (servo valve and proportional valve test equipment)
Tellus S2 VA	<ul style="list-style-type: none"> Extra protection Water tolerant 	Mineral, zinc-based, detergent	L-HV/46	Industry standards: DIN 51502, ISO 6743/4, ISO 11158, ASTM 6158-05
Tellus S2 MA	<ul style="list-style-type: none"> Extra protection Water tolerant 	Mineral, ashless, detergent	L-HM/10, 32, 46	Approved by Mueller Weingarten (ISO 46) Industry standards: ISO 11158, ASTM 6158-05
Irus	A full range of fire-resistant and less flammable fluids for special applications			
Naturelle	A full range of environmentally considerate hydraulic oils			

Available in 1lt and 5lt bottles, 20lt pails, 55lt and 200lt drums, 1m³ tanks. Specifications and approvals may vary according to viscosity grade.



GEAR SYSTEM SHELL OMALA OILS



Product	Benefits	Technology	ISO viscosity grades	Specifications and approvals
Omala S4 GX	<ul style="list-style-type: none"> Extra protection Extra life Special applications 	Synthetic (advanced extreme-pressure, EP system)	68, 100, 150, 220, 320, 460, 680	Approved by or meets Flender, David Brown, GE (wind turbines), Gamesa and many other equipment manufacturers Industry standards: ANSI/AGMA 9005-E02 (EP); ISO 12925-1 CKD; DIN 51517-3 (CLP); US Steel 224
Omala S4 WE	<ul style="list-style-type: none"> Extra protection and life Energy saving Worm drives 	Synthetic (polyalkylene glycol)	150, 220, 320, 460, 680	Approved by or meets Flender, Bonfiglioli, David Brown and many other equipment manufacturers Industry standards: ANSI/AGMA 9005-E02 (EP); ISO 12925-1 CKE
Omala S3 GP	<ul style="list-style-type: none"> Extra protection Standard applications 	Conventional (enhanced EP system)	220, 320, 460, 1500	Approved by or meets David Brown and ArcelorMittal Industry standards: ANSI/AGMA 9005-E02 (EP); ISO 12925-1 CKD; DIN 51517-3 (CLP); US Steel 224
Omala S2 G	<ul style="list-style-type: none"> Extra protection Standard applications 	Conventional (EP)	68, 100, 150, 220, 320, 460, 680, 1000	Approved by or meets David Brown, Cincinnati Machine, and many other equipment manufacturers Industry standards: ANSI/AGMA 9005-E02 (EP); ISO 12925-1 CKD; DIN 51517-3 (CLP); US Steel 224
Omala S1 W	<ul style="list-style-type: none"> Reliable protection Worm drives 	Conventional (compounded fatty oil)	460, 680	Industry standards: AGMA 9005-E02 (CP)
Speciality gear oils				
Omala S4 Wheel	<ul style="list-style-type: none"> Extra protection Geared wheel hubs 	Synthetic (EP)	220, 320, 460, 680	Approved by or meets GE (approved GEK-30375H – ISO 320-680) and David Brown Industry standards: ANSI/AGMA 9005-E02 (EP); ISO 12925-1 CKD; DIN 51517-3 (CLP); US Steel 224
Spirax oils	A range of automotive gear, axle and transmission oils to meet the needs of on- and off-highway vehicles			



AIR COMPRESSOR SHELL CORENA OILS

Product	Benefits	Technology	ISO viscosity grades	Specifications and approvals
Corena S4 R	<ul style="list-style-type: none"> Extra long life and improved efficiency Severe applications Rotary air compressors 	Synthetic, advanced ashless	32, 46, 68	Approved by: Shell Corena S4 R 68 is approved by ABB for use in VTR turbochargers with a maximum oil-drain interval of 5,000 hours (HZTL 90617, list 3a) Industry standards: ISO 6743-3A DAJ
Corena S4 P	<ul style="list-style-type: none"> Extra long life and improved efficiency Severe applications Reciprocating air compressors 	Synthetic, advanced additive system	68, 100	Industry standards: ISO 6743-3: 2003 DAB (severe duty); DIN 51506 VDL/DP 6521-L-DAB (medium duty); EN 12021
Corena S3 R	<ul style="list-style-type: none"> Long life Improved efficiency Rotary air compressors 	Conventional, advanced additive system	32, 46, 68	Industry standards: ISO 6743-3A DAH, DAJ
Corena S2 R	<ul style="list-style-type: none"> Reliable protection Standard life applications Rotary air compressors 	Conventional, detergent	46, 68	Industry standards: ISO 6743-3A DAH
Corena S2 P	<ul style="list-style-type: none"> Reliable protection Standard life applications Reciprocating air compressors 	Conventional	68,100, 150	Industry standards: ISO 6743-3A DAA (normal duty)
Speciality compressor oils				
Corena S3 RJ	<ul style="list-style-type: none"> Long life Japanese compressor applications 	Semi-synthetic	32	-
Refrigeration Oils	A range of specialised oils suitable for use in carbon dioxide, ammonia and hydrofluorocarbon refrigeration systems			
Gas Compressor Oils	A range of specialised oils suitable for use in hydrocarbon and chemical gas compression applications			

NOTE FOR ABOVE CHARTS: Available in 1lt and 5lt bottles, 20lt pails, 55lt and 200lt drums, 1m³ tanks. Specifications and approvals may vary according to viscosity grade.



HELIX ENGINE OILS



Product	Application	Benefits	Specifications, approvals and recommendations
Helix Ultra Racing 10W-60 Helix Ultra 5W-40 Helix Ultra Extra 5W-30	<ul style="list-style-type: none"> for fuel-injected petrol engines with emissions control technology and catalytic converters operating in all driving conditions. for turbo-charged and inter-cooled direct injection high performance diesel engines fitted with exhaust gas recirculation and particulate filters. 	<ul style="list-style-type: none"> Shell's ultimate active cleansing technology Long-term oxidation stability Low viscosity, rapid oil flow and low friction Minimises vibration and engine noise High shear stability Extremely low chlorine content 	API – SM/CF; ACEA – A3/B3/B4; ACEA: C2/C3 (A3/B4); BMW: LongLife-04; Mercedes-Benz: 229.51 VW: 504.00/507.00 Chrysler: MS-1106 Porsche: C30 API Service Classification: SN/CF VW: 502.00, 505.00 Mercedes-Benz: 229.5 BMW: LL-01 Fiat: 9.55535 Z2, RN 0700 and 0710 Other approvals: Porsche and Ferrari. Meets the requirements of: <ul style="list-style-type: none"> Ferrari approved VW – 501.1; 505.00 Mercedes-Benz – 229.1; Fiat – 9.55535 H3; 9.55535 S1 BMW – M Cars; PSA: B71 2290
Helix HX7 10W-40 Helix HX7 K 15W-50 Helix HX7 AJ 10W-30	<ul style="list-style-type: none"> for fuel-injected petrol engines fitted with catalytic converters. for turbo-charged and intercooled direct injection diesel engines fitted with catalytic converters. 	<ul style="list-style-type: none"> Enhanced oxidation stability Specially selected synthetic base oils Special active cleansing technology Minimises vibration and engine noise 	API Service Classification: SN/CF API Service Classification: SL/CF API Service Classification: SM/CF ACEA: A3/B4 JASO: SG+ Mercedes-Benz: 229.3 VW: 502.00/505.00 Fiat: 9.55535 G2 Renault: RN 0700 ILSAC: GF-4
Helix HX5 10W-30	Diesel engines	<ul style="list-style-type: none"> Formulated with cleansing technology Good oxidation stability High quality base oils Minimises vibration and engine noise Extra anti-wear agents 	API Service Classification: CF API Service Classification: SL/CF 15W-40 ACEA: A2/B2 ACEA: A2
Helix HX5 K 25W-60	Petrol engines		
Helix HX5 15W-40	Petrol and diesel engines		
Helix HX5 G 15W-40	Dual fuel petrol and gas		
Helix HX3 20W-50	Petrol and diesel engines		

Applications, Benefits, Specifications and Approvals may vary according to viscosity grade.



For complete range of fuels, lube oils, coolants and relative equipment see also www.webunker.com



MANSUETO MARINE



NAUTILUS LEISURE MARINE LUBRICANTS



Product	Application	Benefits	Physical Characteristics	Specifications, approvals and recommendations
Nautilus 2-Stroke Premium Oil 1LT, 4LT, 20LT	All 2-stroke petrol outboard motors with or without separate oil tanks	<ul style="list-style-type: none"> Advanced formulation Guarantee of long and reliable engine life 	Kinematic Viscosity ASTM D445 @ 40°C cSt 38.0 @ 100°C cSt 7.0	Certified by NMMA for service TC-W3 at the manufacturer's recommended fuel/oil ratio (up to 100:1)
Nautilus 4-Stroke Premium Oil 10W-40 4LT, 20LT	Premium protection for all 4-stroke petrol and diesel marine inboard and outboard engines.	<ul style="list-style-type: none"> Long oil life Engine cleanliness and low combustion residues Superior viscosity retention Corrosion protection 	Kinematic Viscosity ASTM D445 @ 100°C cSt 14.5	Meets the specification of API service classification SL/CF.



YAMALUBE®



Available in 1lt and 4lt bottles.

Code	Product	Application
MM YAM YMD-63021-01-A3	2-M TCW3-RL	Special mineral based oil suitable for both pre-mix and direct oil injection systems.
MM YAM YMD-63023-01-00	2-W	Semi synthetic 2-stroke engine oil for watercrafts.
MM YAM YMD-63042-01-A3	15W-40 S/D	High performance engine oil developed for both gasoline and diesel inboard engines.
MM YAM YMD-63050-01-00	10W-30 Synthetic	Synthetic high performance engine oil, especially developed for 4-stroke Outboard Engines and 4-stroke Personal Watercrafts for cold-flow performance for less wear at low temperatures.
MM YAM YMD-63060-20-00	10W-40 Synthetic	High performance engine oil, especially developed for 4-stroke Outboard Engines and 4-stroke Personal Watercrafts when performing under normal conditions.
MM YAM YMD-63070-01-00	FC-W 10W-30 Super Synthetic	High performance engine oil, especially developed for 4-stroke Outboard Engines providing improved fuel efficiency.
MM YAM YMD-63080-01-00	FC-W 5W-30 Fully Synthetic	Engine oil with unique top performance Marine Formula for 4-stroke Outboard Engines for improved fuel economy.

ACCESSORIES



Code: MM 3M HP156

- Reusable oil & petroleum sorbent pads
- Size: 48x43cm
- Absorption capacity: 1.4lt/pad
- 100 pads/bag



Code: MM ABK 401000064

- Oil absorbent booms "Oil Only Easy"
- Size: D.20x300cm (other sizes available)
- Absorption capacity: up to 20 times their own weight (269lt/box)
- 4 booms/box



Code: MM SIS 1615010

- STAR SOFT cotton wool cloths/pads
- Size: 40x40cm
- High absorption capacity, solvents and acids resistant
- 200 pads/bag

A large range of petroleum and oil sorbent products of different type and sizes available upon request (rags, pads, pillows, booms and mini booms, rolls, barriers, oil spill kits, other).

www.mansuetomarine.it

AIR OPERATED LUBE OIL TRANSFER PUMP & ACCESSORIES

PNEUMATIC OPERATED PUMP

Suitable for 209 LT Drums
Suction tube length 940 MM

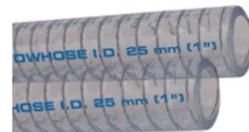


Code	Compression ratio	Delivery at free outlet	Air pressure	Suction tube diameter	Air inlet connection	Oil outlet connection	Oil inlet connection (wall mounted)
MM FAI D6194	6:1	(6 bar)13l/1'	6-8 bar	42 mm	F.1/4"G /Bsp	M.1/2"G /Bsp	F.1"G /Bsp

ACCESSORIES



Code	Description
MM FAI P12FS	Flow control handle with flexible pipe and 1/2" swivel joint
MM FAI P12CFS	Flow meter handle with flexible pipe and 1/2" swivel joint
MM FAI TF1202	Hose 1/2" L= 2 m F.F. LEANLINE W.P. 100 bar
MM FAI T1205	Hose 1/2" L= 5 m M.F. LEANLINE W.P. 100 bar



OIL TRANSFER HOSE

Code	Internal dia	External dia	Weight	Bending radius
MM VET DWHOSE10A	10 mm 3/8"	16 mm	0,16 kg/m	20 mm
MM VET DWHOSE12A	12 mm 1/2"	18 mm	0,18 kg/m	25 mm
MM VET DWHOSE16A	16 mm 5/8"	22 mm	0,23 kg/m	35 mm
MM VET DWHOSE19A	19 mm 3/4"	26 mm	0,32 kg/m	50 mm
MM VET DWHOSE25A	25 mm 1"	33 mm	0,53 kg/m	60 mm
MM VET DWHOSE28A	28 mm 1-1/8"	38 mm	0,60 kg/m	70 mm
MM VET DWHOSE30A	30 mm 1-3/16"	38 mm	0,60 kg/m	70 mm
MM VET DWHOSE32A	32 mm 1-1/4"	40 mm	0,65 kg/m	75 mm
MM VET DWHOSE35A	35 mm 1-3/8"	44 mm	0,73 kg/m	80 mm
MM VET DWHOSE38A	38 mm 1-1/2"	47 mm	0,80 kg/m	90 mm
MM VET DWHOSE40A	40 mm 1-9/16"	49 mm	0,87 kg/m	95 mm
MM VET DWHOSE45A	45 mm 1-3/4"	55 mm	1,10 kg/m	105 mm
MM VET DWHOSE50A	50 mm 2"	60 mm	1,20 kg/m	125 mm



FUEL METERS



OVAL GEAR METERS

	Code	Description	Flow rate range		Max operating pressure		Compatible fluids	IN/OUT connection	Weight Kg	Package mm
			l/min	gal/min	bar	psi				
	MM RIE F0043012A	K200	0,1 - 2,5	0,03 - 0,66	550	7810	O,D,A	1/8"	0,6	310x170x55
	MM RIE F0047500A	K400	1 - 30	0,26 - 7,9	70	994	O,D,A	1/2"	0,5	80x80x75
	MM RIE 000483020	K400 windscreen	1 - 30	0,26 - 7,9	70	994	O,D,A,W	1/2"	0,5	80x80x75
	MM RIE F00496A20	K600/3 oil	6 - 60	1,58 - 15,8	70	994	O,A	3/4"	1,6	200x120x140
	MM RIE F00496A00	K600/3 diesel	10 - 100	2,64 - 26,4	30	426	D,A	1"	1,6	200x120x140
	MM RIE 00049700A	K600/4	15 - 150	3,9 - 39	20	284	D,A	1 1/2"	3,2	200x120x140
	MM RIE 000499000	K900	50 - 500	13,2 - 132	10	142	D,A	3"	12	400x290x200



OVAL GEAR PULSE METERS

	Code	Description	Pulser		Flow rate range		Operating pressure		Compatible fluids	IN/OUT connection	Weight Kg	Package mm
			p/l	p/gal	l/min	gal/min	bar	psi				
	MM RIE 474000	K600/2	52	197	6 - 60	1,58 - 15,8	70	994	O,D,A	3/4"	2	200x120x140
	MM RIE 472000	K600/3	35	133	10 - 100	2,64 - 26,4	30	426	O,D,A	1"	2,6	200x120x140
	MM RIE 473000	K600/4	26	98	15 - 150	3,9 - 39	20	284	D,A	1 1/2"	3,2	200x120x140
	MM RIE 498000	K700	14	53	25 - 250	6,6 - 66	20	284	D,A	2"	5,5	345x175x255
	MM RIE 499020	K900	10	38	50 - 500	13,2 - 132	20	284	D,A	3"	12	400x290x200

Compatible fluid legend for both charts:
O=Lubricating and transmission oil D= Diesel fuel A=Antifreeze W= Washing windscreen liquid

COOLANTS



EXTENDED LIFE COOLANT (ELC™)



Code	Package Size	Description
MM CAT 2056613	210 Liter Drum	Premixed (50/50)
MM CAT 2056612	25 Liter Canister	Premixed (50/50)
MM CAT 2056611	5 Liter Jug	Premixed (50/50)
MM CAT 2056615	5 Liter Jug	Concentrate*
MM CAT 1195152	Liter Bottle	Coolant Extender**

*ELC Concentrate is used to adjust the coolant for temperatures below -37°C.
 **ELC Extender is added at the half life of the coolant (500,000 km for truck engines and 3,000 hours for other engines).

Cat@ ELC™ Characteristics*	
Appearance	Strawberry Red
Specific gravity ASTM D1122	1.110
pH (33% solution) ASTM D1287	8.3
Reserve alkalinity ASTM D1121	5.5
Ash content, % max. ASTM D1119	5.0
Boiling protection, 1 bar pressure cap	
50% (Cat ELC premixed)	129°C
60% (Cat ELC concentrate)	132°C
Freezing protection	
50% (Cat ELC premixed)	-37°C
60% (Cat ELC concentrate)	-54°C
Nitrites	550 ppm
Molybdates	950 ppm
Silicate, %	0
Phosphate, %	0
Amine, %	0
Borate, %	0
Nitrates, %	0

* The values shown are typical values and should not be used as quality control parameters either to accept or reject product. Specifications are subject to change without notice.



VOLVO PENTA COOLANT

Volvo Penta coolant gives vastly superior corrosion protection in comparison with non-branded products. It also has good anti-freezing properties. The coolant is specially tested in Volvo Penta engines and is recommended for fresh water cooled engines. Ideal for modern engines (diesel and petrol) since the coolant contains additives that protect aluminium and aluminium alloys. Its characteristics also make it suitable for winter engine protection. When mixing the coolant with water, only use clean, high quality water.



Code	Package Size
MM VLV 1141645	1 l. – plastic bottle
MM VLV 1141646	5 l. – plastic bottle

Concentrate - Type 90
 Recommended dilution 40% coolant Type 90 + 60% distilled water.



ADDITIVES

schülke +

GROTAMAR® 82



Preservative for modern B5** - B100** diesel fuel and heating oil

- Fast bactericide and fungicide efficacy (inkl. sulphate-reducing bacteria)
- Enhances anti-corrosion and anti-oxidation properties
- Provides excellent long-term protection against microbial material degradation
- Contains no organically bound chlorine (acc. 19. Bundes-Immissionschutzgesetz)*
- Excellent soluble in biodiesel, diesel fuel and heating oil with biogenic compounds
- Improves storage stability of B5** - B20** diesel blends

* German Law on the Prevention of Emissions

** Biodiesel amount in % blended in mineral oil diesel

Code	Product
MM GTM 119642	Grotamar 1 LT Bottle
MM GTM 119650	Grotamar 10 LT Pail
MM GMT 119651	Grotamar 200 LT Drum

Diesel	Prophylactic dosage	Shock dosage
10 l	2.5 ml	10 ml
50 l	12.5 ml	50 ml
100 l	25 ml	100 ml
200 l	50 ml	200 ml
300 l	75 ml	300 ml
400 l	100 ml	400 ml
500 l	125 ml	500 ml
800 l	200 ml	800 ml
1,000 l	250 ml	1 l
2,000 l	500 ml	2 l
4,000 l	1 l	4 l

Physico-chemical properties	
Appearance	colourless – yellowish liquid
Form	liquid
Odour	amine-like
Density (20°C)	0,884 – 0,895 g/ml
Refractive index (20°C)	1,474 – 1,486
Flashpoint (ISO 2719)	> 100 °C
Viscosity (DIN 53 211)	flow time < 15 sec (20 °C)
VOC-Content to Directive 2004/42/EG	20%

Microbiological efficacy							
Bacteria	MIC	Fungi	MIC	Yeasts	MIC	Sulphate-red. bacteria	MIC
Alcaligenes faecalis	0,075	Aspergillus niger	0,300	Candida albicans	0,625	Desulfovibrio desulfuricans	0,250
Enterobacter cloacae	0,150	Fusarium oxysporum	0,300	Rhodotorula mucilaginosa	0,150	Organism found in practice (isolated)	0,625
Escherichia coli	0,150	Penicillium funiculosum	0,015	Saccharomyces cerevisiae	0,625		
Proteus vulgaris	0,150	Hormoconis resinae	0,750	Candida lipolytica	0,300		
Pseudomonas aeruginosa	0,150						
Pseudomonas fluorescens	0,075						
Pseudomonas putida	0,625						
Staphylococcus aureus	0,150						
Legionella pneumophila (prEN 13623)	0,5 (in 60 min)						
Proteus mirabilis	0,200						
Klebsiella pneumoniae	0,200						

ANALYSIS KIT

schülke 

**MIKROCOUNT®
FUEL ANALYSIS TEST KIT**



Code	Description
MM GTM MIKRFU	One test kit contains: 1 test bottle, 1 sample container, 1 pipette, 1 pair of disposable gloves. 1 instruction manual • 1-pack • 5-pack

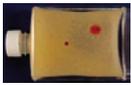
A test method for detection of contaminated diesel fuels.

Application:

Put on the disposable gloves and take a fuel sample from the tank. Using the pipette provided measure a sample into the test bottle. Close the bottle. Tap the mikrocount® fuel bottle a few times against the hand, so that the gel breaks up. Now shake the bottle vigorously for 30 seconds until the fuel sample has mixed completely with the gel. Afterwards tap the bottle against your hand to make a flat layer of gel on the flat bottle side. Lay the bottle flat with the gel layer down in a warm (22-28 °C), dark location. After 1-4 days a positive result will be obvious and can be evaluated with the help of the charts provided.

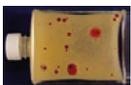
A detailed instruction manual is provided with the test kit. Please follow the instruction carefully. Always take appropriate safety precautions when handling any type of fuel!

Evaluation of the results:



No more than 2 spots = low contamination

Our recommendation: prophylactic dose of grotamar® 82(25 ml per 100 l diesel)



3-25 spots = moderate contamination

Our recommendation: moderate dose of grotamar® 82 (50 ml per 100 l diesel)



More than 25 spots = heavy contamination

Our recommendation: tank inspection and if necessary tank cleaning, then shock dose of grotamar® 82 (100 ml per 100 l diesel)



yachtsamples

WELCOME KIT



5 samples, 1 pump and 1 hose

Code
MM YTS 01

12-SAMPLE PACK



Code
MM YTS 02

FUEL DRIP SAMPLER



2"/2,5"/3" couplings.
Low cost reliable answer to the latest MARPOL ANNEX VI. (Resolution MEPC.96(47)).

Code
MM YTS 03