

Rapid Tests



Lovibond®

since 1885

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MINIKIT



Easy handling through complete test set

Tablet reagents long-term stable & easy to dose

Unrestricted shipment

High accuracy

Analysis	Type	Range	Methods Tablet Count	Speed Test	Yes/ No Test
Alkalinity-m	AF444	20 - 800 mg/l CaCO ₃ ≅ 0.4 - 16 mmol/l			
Alkalinity-m	AF413	10- 500 mg/l CaCO ₃ ≅ 0.2 - 10 mmol/l			
Alkalinity-p	AF414	20 - 500 mg/l CaCO ₃			
Calcium Hardness	AF446	20- 800 mg/l CaCO ₃ ≅ 0.4 - 16 mmol/l			
Calcium Hardness	AF416	10- 500 mg/l CaCO ₃ ≅ 0.1 - 5 mmol/l			
Chloride	AF418	5- 5000 mg/l Cl			
Cyanuric Acid	AF422	20- 200 mg/l Cyanuric Acid			
Hardness Total (very low range)	AF426	1- 10 mg/l CaCO ₃ ≅ 0.01 - 0.1 mmol/l			
Hardness Total (low range)	AF425	1- 50 mg/l CaCO ₃ ≅ 0.01 - 0.5 mmol/l			
Hardness Total (Yes/No)	AF423	Limit 4 mg/l, 8 mg/l or 20 mg/l CaCO ₃			
Hardness Total	AF445	20 - 800 mg/l CaCO ₃ ≅ 0.4 - 16 mmol/l			
Hardness Total	AF424	5 - 500 mg/l CaCO ₃ ≅ 0.05 - 5 mmol/l			
Alkalinity Caustic/P	AF415	20 - 500 mg/l CaCO ₃			
Nitrite	AF427	70 -1500 mg/l NaNO ₂			
Organo- Phosphonate	AF411	1 - 20 mg/l active O-P	Drop count method		
QAC (Quaternary Ammonium Comp.)	AF417	0 - 500 mg/l active QAC Limit 200 mg/l (Yes/No)			
Säurekonzentration	AF410	0.75-10% Acid			
Sulphate (low range)	AF432	20 - 200 mg/l Na ₂ SO ₄			
Sulphate	AF431	40 - 200 mg/l SO ₄ (40 - 4000 mg/l by dilution)			
Sulphite (low range)	AF434	2 - 50 mg/l Na ₂ SO ₃			
Sulf t (high range)	AF435	2 - 20 units			
Tannin Index	AF436	2 - 20 units			



The methods

The MINIKITS are designed for tablet based rapid water testing. Most MINIKITS are based on titrimetric methods.

Tablet count method

In the tablet count method, the liquid titration solution and indicator are replaced by Lovibond® tablet reagents. A specific number of tablets is added to a defined sample volume until a chemically induced colour change takes place. The concentration of the parameter being measured is calculated from the number of tablets required. The measuring range can be expanded by varying the sample volume.

Speed test

The speed test is based on reverse titration. After adding a reagent tablet to a calibrated test tube, the water sample is added slowly until the colour of the solution changes (e.g. from red to blue). The user can then obtain the result from the liquid level.

Yes/No test

A Yes/No test tells the user whether a specific ingredient is present in the water and/or if its concentration is higher or lower than a defined level.



Turbidity method

A two-section calibrated test tube is filled with the water sample and a reagent tablet added. The reagent creates a level of turbidity that is proportional to the concentration of the parameter being measured. The inner tube, which has a black dot on its base, is lowered until the dot is obscured by the turbidity. The result is read off from the water level in the inner tube.

Turbidity	Order code	Reagent	Order code	Quantity
	41 44 40	ALK-TEST	51 55 70 BT	100
	41 41 30	TOTAL ALKALINITY-tablets	51 53 21 BT	250
	41 41 40	Alkalinity-p-tablets	51 51 01	250
	41 44 60	CAL-TEST	51 55 80 BT	100
	41 41 60	CALCIUM HARDNESS	51 51 91 BT	250
	41 41 80	CHLORIDE	51 51 31	250
	41 42 20	CyA-TEST	51 13 70 BT	100
	41 42 60	HARDNESS VLR	51 53 51 BT	250
	41 42 50	HARDNESS LR (BW)*	51 51 71 BT	250
	41 42 30	HARDNESS YES / NO	51 53 61 BT	250
	41 44 50	T HARDNESS-TEST	51 55 90 BT	100
	41 42 40	TOTAL HARDNESS	51 51 61 BT	250
	41 41 50	Alkalinity-p-tablets	51 51 01 BT	250
		Alkalinity-p (BaCl ₂)-tablets	51 51 10 BT	100
	41 42 70	NITRITE No. 1	51 52 00 BT	100
		NITRITE No. 2	51 52 10 BT	100
	41 41 10	ORGANO-PHOSPHONATE No. 2	46 53 51	100 ml
		ORGANO-PHOSPHONATE No. 1	51 29 61 BT	250
	41 41 70	QAC-Test	51 54 10	100
			51 54 11	250
	41 41 00	ACID CONCENTRATION	50 54 20	100
	41 43 20	SULFATE No. 1	51 52 21	250
		SULFATE No. 2	51 52 31	250
	41 43 10	SULFATE	51 54 51 BT	250
	41 43 40	SULFITE No. 1	51 52 71 BT	250
	41 43 50	SULFITE No. 2 HR	51 52 81 BT	250
		SULFITE No. 2 LR (BW*)	51 53 31 BT	250
	41 43 60	TANNIN No. 1	50 35 00	100
		TANNIN No. 2	50 35 11	250

Delivery content

- Kit in a plastic box
- Tablet reagents for an average of 30 tests
- Sample container
- Required accessories
- Instruction manual

 also suitable for seawater
 Green Chemistry (for detailed information see page 86)

MSDS (Material Safety Data Sheets): www.lovibond.com



*Suitable for field
& laboratory
testing*

*For testing cooling
& industrial
process water*

*Fast quantitative
determination*

*Cost-effective
use due to com-
petitively priced
refill packs*

Test Kits

Cooling and Industrial Process Water

Lovibond® test kits are specially developed for testing cooling and industrial process water. They make use of both colorimetric and titrimetric techniques. Each test kit contains all the necessary chemicals and reagents in liquid or powder form to conduct the tests.

The detailed instructions contain a step-by-step explanation of the test procedure. The kits are supplied in a sturdy, compact plastic case. Competitively priced refill reagent packs are available for all Lovibond® test kits.

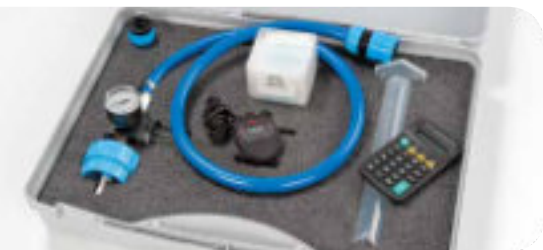
Analysis	Range mg/l	Method	No. of Tests (approx.)	Order Code
Alkalinity PM-1 (p- + m-value)	1 drop = 1 or 0.5 mmol/l ¹⁾	titrimetric	75	2418501
Chloride LRC-1	1 drop = 5 or 2.5 mg/l Cl ⁻¹⁾	titrimetric	100	2418504
Chloride HRC-2	1 drop = 50 or 25 mg/l Cl ⁻¹⁾	titrimetric	100	2418506
DEHA	0,05 – 1 mg/l DEHA	colorimetric	50	24157580
Iron FE-2	0,1 – 2 mg/l Fe, 0,5 – 8 mg/l Fe	colorimetric	250	2418440
Hardness Carbonate (new version)	1 drop = 1 or 0,5 °dH* ¹⁾	titrimetric	25	2418413
Hardness Carbonate KH-1	1 drop = 1 or 0,5 °dH* ¹⁾	titrimetric	50	2418513
Hardness Residual RH-1	1 drop = 0,1 or 0,05 °dH* ¹⁾	titrimetric	50	2418514
Hardness Total (new version)	1 drop = 1 or 0,5 °dH* ¹⁾	titrimetric	25	2418411
Hardness Total GH-1	1 drop = 1 or 0,5 °dH* ¹⁾	titrimetric	50	2418511
Hardness Total (new version) + Carbonate GKH-1	1 drop = 1 or 0,5 °dH* ¹⁾	titrimetric	25	2418412
Carbonic Acid CO-2	1 drop = 5 or 2,5 mg/l CO ₂ ¹⁾	titrimetric	70	2418518
Phosphate (Total) PO-2 (ortho, poly, organic)	2,5 – 25 mg/l PO ₄ ³⁻	colorimetric	90	2418523
Phosphate (ortho) PO-3	2,5 – 25 mg/l PO ₄ ³⁻	colorimetric	70	2418544
Sulphite SUL-1	1 drop = 5 or 2,5 mg/l Na ₂ SO ₃ ¹⁾	titrimetric	80	2418532

* 1.0°dH = 0.18 mmol/l ; 5.6° dH = 1.0 mmol/l ¹⁾ depending on sample volume

Hardness Test Kits

Water hardness can be problematic in various applications. Be it in the household, coffee or tea preparation or in technical applications.

Lovibond® always offers the right solution for rapid and cost-effective testing of total hardness, residual hardness or carbonate hardness.



Test Kit (Silt Density Index, SDI)

- SDI calculations in just 15 minutes
- Ideally suited for reverse osmosis plants
- Enables calculation of membrane fouling time, backwash frequency and membrane lifespan

The Silt Density Index (SDI) is a measure of the solids or particulate content of water and is of specific importance when commissioning reverse osmosis plants. The SDI of the feedwater is required to calculate membrane fouling time, backwash frequency and, ultimately, membrane lifespan. The Lovibond® test kit gives the RO engineer instant SDI values, increasing the speed and effectiveness of the installation.

The kit utilises a membrane/flow meter system to enable SDI calculations in just 15 minutes. Sufficient membranes included for 100 tests.

Article	Tests/Pack	Code
Silt Density Index (SDI) Test Kit	-	56K001901
0.45 µm Pore Filter Circles 47 mm diameter	100	56A007690
On/Of Valve	-	56A007201
Pressure Regulator	-	56A007301
Pressure Gauge	-	56A007401
High Pressure Hose 1 m	-	56A007501
Filter Holder 47 mm	-	56A007701

Non-Oxidising Biocide Kits

Article	Range mg/l	Tests (aprox.)	Code
Bronopol-Kit (2-Bromo-2-nitropropan-1,3-diol)	0 - 50 mg/l	50	56K001101
Bronopol-Reagent Pack	-	50	56R001150
DBNPA-Kit (2,2-Dibromo-3-nitrilopropionamid)	5 - 20 mg/l	50	56K001201
DBNPA-Reagent Pack	-	50	56R001250
Isothiazoline-Kit	0 - 7,5 mg/l	50	56K001401
Isothiazoline Reagent Pack	-	50	56R001450

Arsenic Test Kit (5ppb)

The arsenic test is due to its high sensitivity suitable for the determination of arsenic in drinking water.

The advantages at one view

- Sensitivity is according to the requirements of the WHO for drinking water quality. This test detects 0.005 mg/l Arsenic.
- The removal of the interfering sulfide ions is integrated in the test procedure. To minimize the potential danger for the user of the test kit it doesn't use the highly toxic lead acetate for the sulfide removal.
- A solid acid substance is used in order to avoid any irritation by a corrosive acid on the user's hands.

- The unbreakable plastic reaction vessels are more convenient and safer for on-site testing.
- During the test procedure the reaction vessels are tightly closed. The developing arsine gas cannot escape and therefore does not harm the user.
- The test kit contains a water-proof colour chart which also includes the brief instruction for use in pictograms. Even if there is a lack of knowledge in foreign languages everybody can now handle the test kit.

Three-Chamber-Tester Chlorine / pH

If a fast and particularly cost-effective determination of chlorine or pH value is required, consider our three-chamber chlorine / pH tester. It comes with a pictogram-based manual and is supplied with the associated reagent tablets.



So even untrained laymen can use immediately.

0.1 -3.0 mg/l Chlorine, pH value 6.8 - 8.2

Three-Chamber-Tester Chlorine/pH  **151610**

 Green Chemistry

Resolution:
0 - 0,005 - 0,01 - 0,025 - 0,05 - 0,1 - 0,25 - 0,5 mg As^{3+/5+}/l

Kit for 100 measurements in case.
Order code: 40 07 00



Arsenic Test Kit, ready to use



Drop Test Titration

Derived from laboratory burette methods, the Lovibond® drop test range is an established methodology used across industry and which forms an integral part of the analytical program of many a speciality chemical supplier.

The reagents are quick to use and give results fast, making the drop test the method of choice for many customers.

A number of the methods have been recently adapted to comply with changes in legislation and hazard awareness. As the Lovibond® solutions have been adapted to address these changes, they have also improved in accuracy with their hazard implications reduced. The procedure has also been simplified as part of the Lovibond® commitment to product development.

Ordering information for the drop test range is as follows:

Test Kit – Ordered using the test kit code in the table below. The kit is supplied with all reagents and equipment to perform the test, housed in a plastic case.

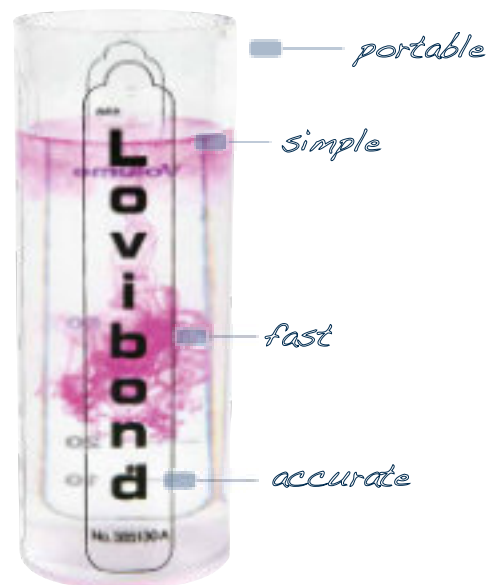
Or

Reagent Pack – Ordered using the reagent pack code in the table below. The pack is supplied in a carton containing test reagents and instruction sheet only.

Or combine reagent packs with a standard case to create your own multi-parameter test kit:

56A001801: A 1501 Compact Plus Case

Supplied with standard equipment and space to add up to 8 reagent packs – simply choose reagent packs from the list below to complete the kit.



Test Kit Code	Reagent Pack	Description	Range	Tests/Pack
56K003501	56R003590	Acidity (P) Drop Test	0-7.5% H ₂ SO ₄	100+
56K003601	56R003690	Alkalinity (M) HR Drop Test	200-2400mg/l CaCO ₃	100+
56K003701	56R003790	Alkalinity (M) LR Drop Test	50-600mg/l CaCO ₃	100+
56K003801	56R003890	Alkalinity (P+M) LR Drop Test	50-600mg/l CaCO ₃	100+
56K003901	56R003990	Alkalinity (P+OH) HR Drop Test	200-2400mg/l CaCO ₃	100+
56K004001	56R004090	Alkalinity (P) HR Drop Test	200-2400mg/l CaCO ₃	100+
56K004101	56R004190	Alkalinity (P) HR Drop Test	0.25-6.0% NaOH	100+
56K004201	56R004290	Alkalinity (P) LR Drop Test	50-600mg/l CaCO ₃	100+
56K004301	56R004390	Alkalinity (P) LR Drop Test	250-6000mg/l NaOH	100+
56K004401	56R004490	Alkalinity (P, M + OH) HR Drop Test	200-2400mg/l CaCO ₃	100+
56K004501	56R004594	Alkalinity (P, M + OH) LR + HR Drop Test	50-2400mg/l CaCO ₃	200+
56K004601	56R004690	Alkalinity (P, M + OH) LR Drop Test	50-600mg/l CaCO ₃	100+
56K004701	--	Alkalinity Total (Disposable)	9-540mg/l CaCO ₃	50+
56K025401	56R025490	Carbon Dioxide Drop Test	10-300mg/l CO ₂	100+
56K004801	56R004890	Chloride HR Drop Test	200-12,000mg/l Cl ⁻	100+
56K004901	56R004990	Chloride LR + HR Drop Test	20-12,000mg/l Cl ⁻	100+
56K005001	56R005090	Chloride LR Drop Test	20-400mg/l Cl ⁻	100+
56K005101	56R005190	Chlorine (Free) HR Drop Test	15-300mg/l Cl ₂	100+
56K005201	56R005290	Chlorine (Free) LR Drop Test	1-30mg/l Cl ₂	100+
56K005301	--	Chlorine Spot Tester Kit (Disposable)	Trace Cl ₂	500+
56K005401	56R005450	Chlorine (Semi-quantitative) Test	0.1-50mg/l Cl ₂	50

Test Kit Code	Reagent Pack	Description	Range	Tests/Pack
56K005501	56R005590	Chlorine (Total Available) HR Drop Test	0.2-15% Cl ₂	100+
56K005601	56R005690	Chlorine (Total Available) LR+ HR Drop Test	0.01-15% Cl ₂	100+
56K005701	56R005790	Chlorine (Total Available) LR Drop Test	100-2400mg/l Cl ₂	100+
56K005801	56R005890	Chlorine Dioxide HR Drop Test	25-350mg/l ClO ₂	100+
56K005901	56R005990	Chlorine Dioxide MR Drop Test	10-150mg/l ClO ₂	100+
56K006001	56R006090	Chlorine Dioxide LR Drop Test	0.08-30 mg/l ClO ₂	100+
56K006101	56R006190	EDTA (Free) Drop Test	0-2000mg/l EDTA	100+
56K006201	56R006290	Hardness (Calcium) HR Drop Test	50-600mg/l CaCO ₃	100+
56K006301	56R006390	Hardness (Calcium) LR Drop Test	5-60mg/l CaCO ₃	100+
56K006401	56R006490	Hardness (Total) LR+ HR Drop Test	5-600mg/l CaCO ₃	100+
56K006501	56R006590	Hardness (Total) HR Drop Test	50-600mg/l CaCO ₃	100+
56K006601	56R006690	Hardness (Total) LR Drop Test	5-60mg/l CaCO ₃	100+
56K006701	56R006790	Hardness (Total/Calcium) HR Drop Test	50-600mg/l CaCO ₃	100+
56K006801	56R006890	Hardness Raw Water Drop Test	50-600mg/l CaCO ₃	100+
56K006901	56R006990	Hardness Stop/Go Drop Test	4mg/l CaCO ₃	100+
56K007001	--	Hardness (Temporary) Drop Test (Disposable)	9-540mg/l CaCO ₃	50+
56K007101	56R007190	Hardness Total/Calcium LR+HR	5-600mg/l CaCO ₃	100+
56K007201	56R007250	Hardness Yes/No Test Pack	8-20mg/l CaCO ₃	250
56K007301	56R007390	Hydrogen Peroxide Drop Test	15-500mg/l H ₂ O ₂	100+
56K007401	56R007490	Iron Spot Tester Drop Test Pack	Trace Fe	100+
56K007501	56R007590	Molybdate HR Drop Test (New)	25-400mg/l MoO ₄	100+
56K007601	56R007690	Molybdate MR Drop Test (New)	10-200mg/l MoO ₄	100+
56K007701	56R007790	Molybdate LR Drop Test (New)	5-40mg/l MoO ₄	100+
56K007801	56R007890	Molybdate LR Drop Test	2.5-20mg/l MoO ₄	100+
56K007901	56R007990	Nitrite Drop Test	10-2000mg/l NaNO ₂	100+
56K008001	56R008090	Oxygen (Available) Drop Test	0-500mg/l O ₂	100+
56K008101	56R008190	pH (Universal Indicator)	pH 4-10	100+
56K008201	56R008290	Peracetic Acid Drop Test	0-450mg/l CH ₃ CO ₃ H	100+
56K008301	56R008350	Phosphonate Drop Test	4-20mg/l HEDP	50+
56K008401	56R008490	Phosphonate Drop Test	4-20mg/l HEDP	100+
56K008501	56R008550	Polyacrylate Single Phase HR Drop Test	0-20mg/l PAA**	50+
56K008601	56R008650	Polyacrylate Single Phase LR Drop Test	0-20mg/l PAA**	50+
56K008701	56R008750	Polyacrylate Two Phase HR Drop Test	0-20mg/l PAA**	50+
56K008801	56R008850	Polyacrylate Two Phase LR Drop Test	0-20mg/l PAA**	50+
56K008901	56R008990	Quaternary Ammonium Compounds HR Drop Test	60-1800mg/l C.T.A.B.*	100+
56K009001	56R009090	Quaternary Ammonium Compounds LR Drop Test	40-300mg/l C.T.A.B.*	100+
56K009101	56R009190	Sulphite Drop Test	25-150mg/l Na ₂ SO ₃	100+
56K009201	56R009290	Tannin Drop Test	50-300mg/l Tannin	100+
56K009301	56R009390	Total Chelant Drop Test	0-2000mg/l EDTA	100+
56K009401	56R009490	Total Oxidant Drop Test (Chlorine Dioxide)	0.2-6.0mg/l ClO ₂	100+
56K009501	56R009550	Zinc (Free Soluble) Drop Test	1-10mg/l Zn ²⁺	50
56K009601	56R009650	Zinc (Total Complex) Drop Test	1-10mg/l Zn ²⁺	50

* Cetyl trimethyl ammonium bromide

** Polyacrylic Acid