

→ Laboratory automation: see Chapter 9 → Samplers: see Chapter 10 → Process measurement technology: see Chapter 11-20



Test strips



Colour disk



Colour cube



Drop count test



Digital titrator

Colour disks, colour cubes and drop count tests

TYPE OF MEASUREMENT	METHOD	MEASURING RANGE	DETECTION LIMIT	TESTS/ PKG	HAZARD CODE*	ART. NO.
ACIDITY						
Drop count titration	Methyl orange, phenolphthalein	5 – 100 mg/l CaCO ₃ 20 – 400 mg/l CaCO ₃	5 mg/l 20 mg/l	100		222301
ALKALINITY						
Drop count titration	Phenolphthalein	5 – 100 mg/l CaCO ₃ 20 – 400 mg/l CaCO ₃		100		2444301
Drop count titration	Phenolphthalein	385 – 8,500 mg/l CaCO ₃		100		2314500
AMMONIUM						
Colour cube	Nessler's Reagent	0 – 2.5 mg/l NH ₄ -N	0.5 mg/l	25	T+, N	1252400
Colour cube	Salicylate	0 – 0.8 mg/l NH ₄ -N	0.2 mg/l	25	C, Xn	2267100
Colour cube	Salicylate	0 – 0.8 mg/l NH ₄ -N	0.2 mg/l	25		2266900
Colour disk NI-8	Nessler's Reagent	0 – 3 mg/l NH ₄ -N	0.1 mg/l	100	T+, N	224100
Colour disk NI-SA	Salicylate	0 – 2.5 mg/l NH ₄ -N	0.1 mg/l	100	C, Xn	2428700
BROMINE						
Colour cube	DPD	0 – 3.0 mg/l	0.6 mg/l	50		2194000
CHLORIDE						
Drop count titration 8-P	Silver nitrate	5 – 100 mg/l 20 – 400 mg/l	5 mg/l 20 mg/l	100	T, N	144001
Drop count titration CD-51	Silver nitrate	500 – 10,000 mg/l 5,000 – 100,000 mg/l	500 mg/l 5,000 mg/l	100	T, C, N	208601
CHLORINE (free)						
Colour cube	DPD	0 – 2.5 mg/l	0.5 mg/l	50		2060300
Colour disk	DPD	0 – 2.5 mg/l	0.1 mg/l	25		2502050
Colour disk CN-66F	DPD	0 – 3.5 mg/l	0.1 mg/l	100		223102
Colour disk CN-70F	DPD	0 – 0.7 mg/l 0 – 3.5 mg/l	0.02 mg/l 0.1 mg/l	200		1454201
CHLORINE (free + total)						
Colour disk CN-66	DPD	0 – 3.5 mg/l	0.1 mg/l	50/50		223101
Colour disk CN-70	DPD	0 – 0.7 mg/l 0 – 3.5 mg/l	0.02 mg/l 0.1 mg/l	100/100		1454200
Colour disk CN-80	DPD	0 – 0.7 mg/l 0 – 3.0 mg/l 0 – 10 mg/l tot.	0.02 mg/l 0.1 mg/l 0.5 mg/l tot.	100/100		2129000
CHLORINE (total)						
Colour cube	DPD	0 – 2.5 mg/l	0.5 mg/l	50		2060400
Colour disk	DPD	0 – 2.5 mg/l	0.1 mg/l	25		2503050
Colour disk CN-66T	DPD	0 – 3.5 mg/l	0.1 mg/l	100		223103
Colour disk CN-70T	DPD	0 – 0.7 mg/l 0 – 3.5 mg/l	0.02 mg/l 0.1 mg/l	200		1454202
Pipette CN-21P	Thiosulphate	10 – 200 mg/l	10 mg/l	100	Xi	2444400
Pipette CN-65	Thiosulphate	0.2 – 4 mg/l 1 – 20 mg/l	0.2 mg/l 1.0 mg/l	100	Xi	225401

→ *Hazard symbol with description see page 60

Visual tests (2)

Colour disks, colour cubes and drop count tests (2)

TYPE OF MEASUREMENT	METHOD	MEASURING RANGE	DETECTION LIMIT	TESTS/ PKG	HAZARD CODE*	ART. NO.
CHROMIUM (III, VI)						
Colour cube CH-12	Diphenylcarbazide hypobromite oxidation	0 – 1.5 mg/l	0.1 mg/l	50/50	T, C	222800
CHROMIUM (VI)						
Colour cube	Diphenylcarbazide	0 – 1.0 mg/l	0.2 mg/l	50	Xi	1252700
Colour disk CH-8	Diphenylcarbazide	0 – 1.5 mg/l	0.1 mg/l	100	Xi	183400
Drop count titration CH-14	Diphenylcarbazide	5 – 100 mg/l 50 – 1,000 mg/l	5 mg/l	100	Xi	222702
COLOUR						
Colour disk CO-1	APHA platinum-cobalt standard	0 – 100 units 0 – 500 units	5 units 25 units			223400
COPPER						
Colour cube	Bicinchoninate/ hydrosulphite	0 – 2.5 mg/l	0.5 mg/l	25	Xn	2182200
Long-path colour cube	Porphyrine	0 – 0.25 mg/l	0.05 mg/l	50	Xn	2193800
COPPER (free + total)						
Colour disk CU-5	Bicinchoninate hydrosulphite reduction	0 – 5 mg/l	0.1 mg/l	100		1421300
COPPER (free)						
Colour disk CU-6	Bicinchoninate	0 – 5 mg/l	0.1 mg/l	100	Xn	2194100
CYANIDE (free)						
Colour cube CYN-3	Pyrdine-pyrazolone	0 – 0.3 mg/l	0.01 mg/l	100		201002
CYANURIC ACID						
Turbidity CY-3	Turbidity	20 – 100 mg/l	20 mg/l	50		185102
DETERGENTS (anionic)						
Colour disk DE-2	Toluidine blue chloroform	0 – 1.0 mg/l	0.05 mg/l	32	Xn	143203
FORMALDEHYDE						
Colour comparison FM-2	MBTH	0; 0.5; 1.5	0.5	100	Xn, N	2267200
Drop count titration FM-1	Thymolphthalein	0.05 – 1% 0.5 – 10%	0.05% 0.50%	100	Xn, Xi, F	2183100
GLUTARALDEHYDE						
Colour disk		0.5 – 4,000 mg/l	0.5 mg/l	100	C, Xn	2587200
GLYCOL in oil or water						
Colouration EG-1	Presence/absence	0 – > 150 mg/l		25	T, C	2185600
HARDNESS (total + Ca + Mg) as CaCO₃						
Drop count titration HA-4P	EDTA	17 – 340 mg/l	17 mg/l	100	C	145700
Drop count titration HA-4P/MG-L	EDTA	20 – 400 mg/l	20 mg/l	100	C	145701

→ *Hazard symbol with description see page 60

→ Laboratory automation: see Chapter 9 → Samplers: see Chapter 10 → Process measurement technology: see Chapter 11-20



Test strips



Colour disk



Colour cube



Drop count test



Digital titrator

TYPE OF MEASUREMENT	METHOD	MEASURING RANGE	DETECTION LIMIT	TESTS/ PKG	HAZARD CODE*	ART. NO.
HARDNESS (total) as CaCO₃						
Drop count titration 5-EP MG-L	EDTA	20 – 400 mg/l	20 mg/l	100	Xn	145401
Drop count titration 5-B	EDTA	17 – 510 mg/l	17 mg/l	100	Xi	145300
Drop count titration 5-EP	EDTA	17 – 510 mg/l	17 mg/l	100	Xn	145400
Drop count titration HA-71A	EDTA	1 – 20 mg/l	1 mg/l	100	Xi	145201
HYDRAZINE						
Colour disk HY-2	P-dimethylamin-benzaldehyde	0 – 1.0 mg/l	0.02 mg/l	300	C	184900
HYDROGEN PEROXIDE						
Drop count titration	Thiosulphate	0.2 – 2 mg/l 1 – 10 mg/l	0.2 mg/l 1 mg/l	100	Xi	2291700
HYPOCHLORITE						
Drop count titration CH-HR	Thiosulphate	5 – 15% Cl ₂ 50 – 150 g/l Cl ₂	0.05%	100	Xi	2687200
IODINE						
Colour cube	DPD	0 – 2.5 mg/l	0.5 mg/l	50		2193900
IRON						
ACCUVAC kit	1.10 phenanthroline	0 – 10 mg/l	0.2 mg/l	25	Xn	2507050
Colour cube	1.10 phenanthroline	0 – 5 mg/l	1 mg/l	50	Xn	1400800
Colour cube	1.10 phenanthroline	0 – 10 mg/l	2 mg/l	50	Xn	2543500
Colour disk IR-18	1.10 phenanthroline	0 – 5 mg/l	0.1 mg/l	100	Xn	146400
Colour disk IR-18A	1.10 phenanthroline	0 – 1 mg/l	0.02 mg/l	100	Xn	146500
Colour disk IR-18B	1.10 phenanthroline	0 – 10 mg/l	0.2 mg/l	100	Xn	146401
Colour disk IR-21	TPTZ	0 – 0.1 mg/l 0 – 1.2 mg/l	0.01 mg/l 0.05 mg/l	100	Xn	2299300
Colour disk IR-24	FerroZine	0 – 0.2 mg/l 0 – 1.0 mg/l	0.002 mg/l 0.01 mg/l	50	T	255600
IRON (II)						
Colour disk IR-18C	1.10 phenanthroline	0 – 10 mg/l	0.2 mg/l	100	Xn, N	2667200
MANGANESE						
Colour disk MN-5	Periodate	0 – 3.0 mg/l	0.1 mg/l	100	Xi, O	146700
Colour disk MN-PAN	PAN	0 – 0.7 mg/l	0.05 mg/l	50	T, N	2350800
MOLYBDENUM						
Colour disk MO-2	Mercaptoacetic acid	0 – 10 mg/l 0 – 50 mg/l	0.2 mg/l 1 mg/l	100	Xi, Xn	1419301
Colour disk MO-LR	Ternary complex	0 – 3 mg/l	0.1 mg/l	100		2359300
NITRATE						
ACCUVAC, colour disk, colour cube	Cadmium reduction	0 – 50 mg/l NO ₃ -N	1 mg/l	25	Xn	2511050
Colour cube	Cadmium reduction	0 – 50 mg/l NO ₃ -N	10 mg/l	50	T, N	1403700
Colour disk NI-11	Cadmium reduction	0 – 50 mg/l NO ₃ -N	1 mg/l	100	T, N	146803
Colour disk NI-14	Cadmium reduction	0 – 1 mg/l NO ₃ -N 1 – 10 mg/l NO ₃ -N	0.02 mg/l 0.2 mg/l	100	T, N	1416100

→ *Hazard symbol with description see page 60

Visual tests (3)

Colour disks, colour cubes and drop count tests (3)

TYPE OF MEASUREMENT	METHOD	MEASURING RANGE	DETECTION LIMIT	TESTS/ PKG	HAZARD CODE*	ART. NO.
---------------------	--------	-----------------	-----------------	------------	--------------	----------

NITRATE + NITRITE

Colour disk NI-12	Cadmium reduction Diazotization	0 – 50 mg/l NO ₃ -N 0 – 0.5 mg/l NO ₂ -N	1 mg/l 0.01 mg/l	100	T, N	1408100
-------------------	------------------------------------	---	---------------------	-----	------	---------

NITRITE

Colour cube	Diazotization	0 – 1.0 mg/l NO ₂ -N	0.2 mg/l	50	Xi	2059600
Colour disk NI-6	Diazotization	0 – 100 mg/l NO ₂ 0 – 2,000 mg/l NO ₂	2 mg/l 40 mg/l	100	Xi	224000
Colour disk NI-15	Diazotization	0 – 0.5 mg/l NO ₂ -N	0.01 mg/l	100	Xi	2182000

OXYGEN

Colour disk/ACCUVAC	Winkler	0 – 1 mg/l	0.05 mg/l	25		2501050
Colour disk/ACCUVAC	Winkler	0 – 15 mg/l	0.2 mg/l	25	Xi	2515050
Drop count titration OX-2P	Winkler	0.2 – 4 mg/l 1 – 20 mg/l	0.2 mg/l 0.2 mg/l	100	C, T, N	146900

OXYGEN SCAVENGER

Colour disk DH-1	Iron reduction	0 – 0.065 mg/l DEHA 0 – 0.375 mg/l DEHA 0 – 1.7 mg/l DEHA	0.001 mg/l 0.005 mg/l 0.023 mg/l	100	C	2168200
------------------	----------------	---	--	-----	---	---------

OZONE

ACCUVAC	Indigo	0 – 0.25 mg/l	0.01 mg/l	12/24	Xn	2516050
ACCUVAC	Indigo	0 – 0.75 mg/l	0.02 mg/l	12/24	Xn	2517050
ACCUVAC	Indigo	0 – 1.5 mg/l	0.05 mg/l	12/24	Xn	2518050
Colour disk OZ-2	DPD	0 – 2.3 mg/l	0.05 mg/l	100		2064400

pH

Colour cube	Phenol red	6.5 – 8.5	0.5	50		1251900
Colour cube	Bromothymol blue	5.5 – 7.5	0.5	50		2067100
Colour disk 17D	Dinitrophenol	3 – 5	0.1	200	T	147004
Colour disk 17F	Bromothymol blue	5.5 – 8.5	0.1	200	T	147006
Colour disk 17H	Phenol red	6.5 – 8.5	0.1	200	T	147008
Colour disk 17J	Thymol blue	7.8 – 10	0.1	200	T	147009
Colour disk 17M	Alizarin yellow	9.7 – 11.6	0.1	200	T	147010
Colour disk 17N	Mixed indicator	4 – 10	0.5	300	T	147011
Colour disk 17S	Bromocresol purple	5.2 – 6.8	0.1	200	T	147014

PHENOL

Colour disk PL-1	Aminoantipyrine	0 – 1 mg/l 0 – 5 mg/l	0.02 mg/l 0.1 mg/l	100	Xi, Xn, O	2483600
------------------	-----------------	--------------------------	-----------------------	-----	-----------	---------

PHOSPHATE (ortho)

Colour cube	Ascorbic acid	0 – 5 mg/l PO ₄	1 mg/l	50	Xi	1252200
Colour disk PO-14	Tin method	0 – 4.5 mg/l PO ₄ 0 – 45 mg/l PO ₄	0.1 mg/l 1 mg/l	100	C	147500
Colour disk PO-19	Ascorbic acid	0 – 1 mg/l PO ₄ 0 – 5 mg/l PO ₄ 0 – 50 mg/l PO ₄	0.02 mg/l 0.1 mg/l 1 mg/l	100	Xi	224800
Colour disk PO-19A incl. filtration	Ascorbic acid	0 – 1 mg/l PO ₄ 0 – 5 mg/l PO ₄ 0 – 50 mg/l PO ₄	0.02 mg/l 0.1 mg/l 1 mg/l	100	Xi	224801
Colour disk/ACCUVAC kit	Ascorbic acid	0 – 5 mg/l PO ₄	0.1 mg/l	25	Xi	2508050

→ *Hazard symbol with description see page 60

→ Laboratory automation: see Chapter 9 → Samplers: see Chapter 10 → Process measurement technology: see Chapter 11-20



Test strips



Colour disk



Colour cube



Drop count test



Digital titrator

TYPE OF MEASUREMENT	METHOD	MEASURING RANGE	DETECTION LIMIT	TESTS/ PKG	HAZARD CODE*	ART. NO.
PHOSPHATE (ortho + meta)						
Colour disk PO-23	PhosVer3	0 – 5 mg/l PO ₄ 0 – 50 mg/l PO ₄	0.1 mg/l 1 mg/l	100	C	224902
Colour disk PO-23A incl. filtration	PhosVer3	0 – 5 mg/l PO ₄ 0 – 50 mg/l PO ₄	0.1 mg/l 1 mg/l	100	C	224903
PHOSPHATE (total)						
Colour disk PO-24	PhosVer3, digestion	0 – 1 mg/l PO ₄ 0 – 5 mg/l PO ₄ 0 – 50 mg/l PO ₄	0.02 mg/l 0.1 mg/l 1 mg/l	50	C, O	225001
PHOSPHONATE						
Colour disk PN-10	UV digestion Ascorbic acid	0 – 5 mg/l PO ₄ 0 – 125 mg/l PO ₄	1 mg/l	100		2113302
SILICA						
Colour disk SI-5	Heteropoly blue	0 – 40 mg/l 0 – 800 mg/l	1 mg/l 20 mg/l	100	Xi, Xn	1455400
Colour disk SI-7	Heteropoly blue	0 – 1 mg/l	0.02 mg/l	100	Xn, Xi	2255000
SULPHATE						
Turbidity SF-1	Turbidity	50 – 200 mg/l	50 mg/l	100		225100
SULPHIDE						
Colour disk HS-WR	Methylene blue	0 – 0.55 mg/l 0 – 2.25 mg/l 0 – 11.25 mg/l	0.01 mg/l 0.5 mg/l 2.5 mg/l	60 60 30	T, C	223801
SULPHITE						
Drop count titration SU-5	Iodometry	1 – 20 mg/l 10 – 200 mg/l	1 mg/l 10 mg/l	100	Xi	148002
TANNIN/LIGNIN						
Colour disk TA-3	Tyrosine	0 – 15 mg/l 0 – 150 mg/l	0.5 mg/l 5 mg/l	100	T, F	193701
TRIAZOLES						
Colour disk TZ-1	As benzotriazole	0 – 15 mg/l	0.5 mg/l	50		2167502
WATER in oil						
Volumetric WO-1	Calcium hydride	0 – 1% 0 – 10%	0.05 mg/l 0.2 mg/l	25	F	2237300

→ *Hazard symbol with description see page 60

Visual tests (4)

Tests with cartridges for the digital titrator

MEASURING RANGE	METHOD	DETECTION LIMIT	TESTS/ PKG	HAZ. CODE*	ART. NO.
ACID					
See manual	Titration with lye				
ACIDITY					
10 – 4,000 mg/l CaCO ₃	Methyl orange/phenolphthalein	10 mg/l	100	C	2272800
ACIDS (volatile)					
100 – 2,400 mg/l	Sodium hydroxide	100	100		2460200
ALKALINITY					
10 – 4,000 mg/l CaCO ₃	Phenolphthalein	10 mg/l	100	Xi	2271900
See manual	Acid titration				
CALCIUM					
10 – 160 mg/l	CalVer/EDTA	10 mg/l	100	C	2447200
100 – 4,000 mg/l	CalVer/EDTA	100 mg/l	100	C	2447500
CHLORIDE					
10 – 8,000 mg/l	Mercury nitrate	10 mg/l	100	T+, N	2272600
10 – 10,000 mg/l	Silver nitrate	10 mg/l	50	T, C, N	2288000
CHLORINE (free + total)					
0 – 3.0 mg/l	DPD	0.05 mg/l	100		2445300
CHLORINE (total)					
20 – 2,000 mg/l	Thiosulphate	20 mg/l	100		2272500
CHROMATE					
20 – 400 mg/l	Sodium thiosulphate	20 mg/l	100		2272400
CHROMIUM (VI)					
20 – 400 mg/l	Thiosulphate	20 mg/l	100		2272400
HARDNESS (Ca)					
1 – 16 °dH	CalVer/EDTA	1 °dH	100		2447300
10 – > 100 °dH	CalVer/EDTA	10 °dH	100	C	2447400
10 – 160 mg/l CaCO ₃	CalVer/EDTA	10 mg/l CaCO ₃	100	C	2447200
100 – 4,000 mg/l CaCO ₃	CalVer/EDTA	100 mg/l CaCO ₃	100	C	2447500
HARDNESS (total)					
1 – 16 °dH	ManVer/EDTA	1 °dH	100	Xi	2447800
10 – > 100 °dH	ManVer/EDTA	10 °dH	100	Xi	2447900
10 – 160 mg/l CaCO ₃	ManVer/EDTA	10 mg/l CaCO ₃	100	Xi	2448000
100 – 4,000 mg/l CaCO ₃	ManVer/EDTA	100 mg/l CaCO ₃	100	Xi	2448100
HARDNESS (total + Ca + Mg)					
10 – > 100 °dH	EDTA	10 °dH	100	C	2448500
10 – 160 mg/l CaCO ₃	EDTA	10 mg/l CaCO ₃	100	C	2448600
100 – 4,000 mg/l CaCO ₃	EDTA	100 mg/l CaCO ₃	100	C	2448700

→ More information about the digital titrator: see page 77

→ Laboratory automation: see Chapter 9 → Samplers: see Chapter 10 → Process measurement technology: see Chapter 11-20



Test strips



Colour disk



Colour cube



Drop count test



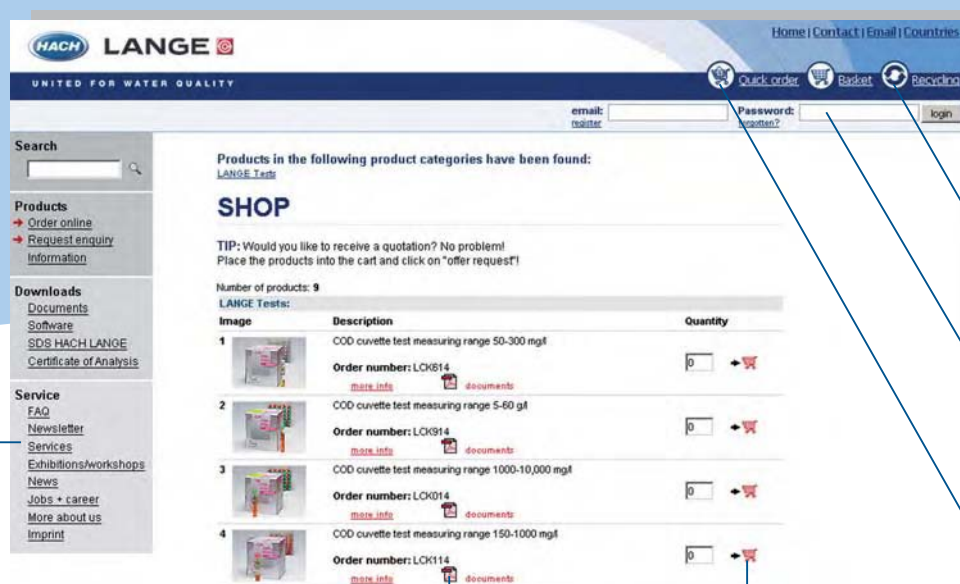
Digital titrator

MEASURING RANGE	METHOD	DETECTION LIMIT	TESTS/ PKG	HAZ. CODE*	ART. NO.
HYPOCHLORITE					
50 – 150 g/l Cl ₂	Iodometric	50 g/l	100		2687000
IRON					
10 – 100 mg/l	Sulphosalicylic acid/EDTA	10 mg/l	100		2449200
100 – 1,000 mg/l	Sulphosalicylic acid/EDTA	100 mg/l	100		2449300
MAGNESIUM					
1 – 20 mg/l	EDTA	1 mg/l	100	C	2447200
20 – 200 mg/l	EDTA	20 mg/l	100	C	2447500
NITRITE					
100 – 2,500 NaNO ₂	Cerimetric		C.100		2270701
OXYGEN					
1 – 10 mg/l	Winkler	1 mg/l	50	T, C, N	2272200
SULPHITE					
10 – 800 mg/l	Iodometric	0.4 – 4 mg/l	100	Xi	2272300



www.hach-lange.co.uk
www.hach-lange.com

Order simply and quickly



Simple navigation

Documents and accessories for each product

Choose your product and request a quotation

Request reagent recycling

Easy login

Contents of your shopping basket

→ More information about the digital titrator: see page 77 → For more information about ordering on the Internet see page 146
→ Order simply and quickly