

Reagent cases

Reagent cases for special applications	154
Reagent cases for individual solutions.....	158
Accessories for reagent cases	160





Reagent cases for special applications

Compact laboratories for mobile analysis

MACHEREY-NAGEL reagent cases are flexible tools for all areas of water and soil analysis. Catering to our customer needs, we offer a large number of prepacked reagent cases with and without photometer which can be used for a wide area of applications. The rugged cases with premium foam inlays allow a fast and direct analysis at the point of interest. All needed test instructions as well as analytical accessories are already included for especially easy and convenient handling. Particular chemical knowledge or experience is not required to run any of the tests or to use the cases effectively. The color-coded bottles prevent a mixing-up of the reagents.

Consumed reagents can be replaced simple and cost-effective with refill packs.

Reagent cases for water analysis

The reagent cases together with the *VISOCOLOR*® tests give water attendants, fish farmers and other persons that are interested in water analysis the possibility to determine important analytical values for evaluation of water quality within a short time.

The prepacked reagent cases can be used for a wide area of applications like swimming pools, drinking water analysis, schools, monitoring of fishing waters and of course for general water analysis.

Good to know

The *VISOCOLOR*® School reagent case is especially designed for schools. All reagents are approved to be used in schools in Germany (GUV-SR 2004 directive).



Ordering information

Reagent case	REF	Dimensions	Application	GHS	PF-3	PF-12 ^{Plus}	Test
■ <i>VISOCOLOR</i> ® ECO Reagent case	931301	340 x 275 x 83 mm	General	■			<i>VISOCOLOR</i> ® ECO Ammonium 3 <i>VISOCOLOR</i> ® ECO Carbonate hardness <i>VISOCOLOR</i> ® ECO Total hardness <i>VISOCOLOR</i> ® ECO Nitrate <i>VISOCOLOR</i> ® ECO Nitrite <i>VISOCOLOR</i> ® ECO pH 4.0–9.0 <i>VISOCOLOR</i> ® ECO Phosphate
■ <i>VISOCOLOR</i> ® Reagent case	931304	450 x 360 x 140 mm	General	■			<i>VISOCOLOR</i> ® ECO Ammonium 3 <i>VISOCOLOR</i> ® ECO Nitrite <i>VISOCOLOR</i> ® ECO pH 4.0–9.0 <i>VISOCOLOR</i> ® ECO Phosphate <i>VISOCOLOR</i> ® HE Alkalinity AL 7 <i>VISOCOLOR</i> ® HE Total hardness H 20 F <i>VISOCOLOR</i> ® HE Oxygen SA 10
■ <i>VISOCOLOR</i> ® Reagent case for environmental analysis	914353	450 x 360 x 140 mm	General	■		■	<i>VISOCOLOR</i> ® ECO Ammonium 15 <i>VISOCOLOR</i> ® ECO Iron 2 <i>VISOCOLOR</i> ® ECO Nitrate <i>VISOCOLOR</i> ® ECO Nitrite <i>VISOCOLOR</i> ® ECO pH 4.0–9.0 <i>VISOCOLOR</i> ® ECO Phosphate <i>VISOCOLOR</i> ® HE Carbonate hardness C 20 <i>VISOCOLOR</i> ® HE Total hardness H 20 F
■ <i>VISOCOLOR</i> ® Reagent case with PF-3 Pool (Cl ₂ liquid)	934118	340 x 275 x 83 mm	Swimming pool	■	■		<i>VISOCOLOR</i> ® ECO Alkalinity TA <i>VISOCOLOR</i> ® ECO Chlorine 2, free + total <i>VISOCOLOR</i> ® ECO Cyanuric acid <i>VISOCOLOR</i> ® ECO pH 6.0–8.2
■ <i>VISOCOLOR</i> ® Reagent case with PF-3 Pool (Cl ₂ solid)	934119	340 x 275 x 83 mm	Swimming pool	■	■		<i>VISOCOLOR</i> ® ECO Alkalinity TA <i>VISOCOLOR</i> ® ECO Chlorine 6, free + total <i>VISOCOLOR</i> ® ECO Cyanuric acid <i>VISOCOLOR</i> ® ECO pH 6.0–8.2

GHS: Global harmonized system: This product contains harmful substances which must be specially labeled as hazardous. For detailed information please see the SDS.

Reagent cases for special applications

Reagent cases for soil analysis

Thorough analysis is the basis to support and maintain healthy, productive and biologically active soil. To effectively and efficiently plan all measures that affect the soil (fertilization, liming, etc.) it is crucial to determine the important soil parameters first.

The VISOCOLOR® reagent cases for soil analysis are the perfect companions for economical, fast and convenient soil analysis, both in the field or in the laboratory. The user can choose between a reagent case version with or without compact photometer PF-3 Soil, which was especially developed for soil analysis.

Both case versions contain additional analytical tools, such as scale, sieve, etc. as well as predosed solutions for the production of necessary soil extracts.

Good to know



The reagent cases VISOCOLOR® School, VISOCOLOR® Fish and the VISOCOLOR® reagent case for soil analysis contain detailed manuals. Besides further background information about the most important parameters also information about reaction equations and of the reaction basis are included.



Measuring range (visual)	Measuring range (photometric)	Number of tests	Reagent cases
0 · 0.2 · 0.3 · 0.5 · 0.7 · 1 · 2 · 3 mg/L NH_4^+	–	50	VISOCOLOR® ECO Reagent case
1 drop equals 1.25 °e	–	100	
1 drop equals 1.25 °e	–	110	
0 · 1 · 3 · 5 · 10 · 20 · 30 · 50 · 70 · 90 · 120 mg/L NO_3^-	–	110	
0 · 0.02 · 0.03 · 0.05 · 0.07 · 0.1 · 0.2 · 0.3 · 0.5 mg/L NO_2^-	–	120	
pH: 4.0 · 5.0 · 6.0 · 6.5 · 7.0 · 7.5 · 8.0 · 8.5 · 9.0	–	450	
0 · 0.2 · 0.3 · 0.5 · 0.7 · 1 · 2 · 3 · 5 mg/L $\text{PO}_4\text{-P}$	–	80	
0 · 0.2 · 0.3 · 0.5 · 0.7 · 1 · 2 · 3 mg/L NH_4^+	–	50	VISOCOLOR® Reagent case
0 · 0.02 · 0.03 · 0.05 · 0.07 · 0.1 · 0.2 · 0.3 · 0.5 mg/L NO_2^-	–	120	
pH: 4.0 · 5.0 · 6.0 · 6.5 · 7.0 · 7.5 · 8.0 · 8.5 · 9.0	–	450	
0 · 0.2 · 0.3 · 0.5 · 0.7 · 1 · 2 · 3 · 5 mg/L $\text{PO}_4\text{-P}$	–	80	
0.2–7.2 mmol/L OH^- (1 syringe filling)	–	200	
0.6–25.0 °e / 0–3.6 mmol/L Ca^{2+} (1 syringe filling)	–	200	
0–10.0 mg/L O_2 (1 syringe filling)	–	100	
–	0.5–8.0 mg/L NH_4^+	50	VISOCOLOR® Reagent case for environmental analysis
–	0.04–2.00 mg/L Fe	100	
–	4–60 mg/L NO_3^-	110	
–	0.02–0.50 mg/L NO_2^-	120	
pH: 4.0 · 5.0 · 6.0 · 6.5 · 7.0 · 7.5 · 8.0 · 8.5 · 9.0	–	450	
–	0.2–3.0 mg/L $\text{PO}_4\text{-P}$	80	
0.6–25.0 °e / 0–7.2 mmol/L H^+ (1 syringe filling)	–	200	
0.6–25.0 °e / 0–3.6 mmol/L Ca^{2+} (1 syringe filling)	–	200	
–	0.4–17.5 °e / 5–250 mg/L CaCO_3	100	VISOCOLOR® Reagent case with PF-3 Pool (Cl_2 liquid)
–	0.10–2.00 mg/L Cl_2	150	
–	10–100 mg/L Cya	100	
–	pH 6.1–8.4	150	
–	0.4–17.5 °e / 5–250 mg/L CaCO_3	100	VISOCOLOR® Reagent case with PF-3 Pool (Cl_2 solid)
–	0.05–6.00 mg/L Cl_2	200	
–	10–100 mg/L Cya	100	
–	pH 6.1–8.4	150	

Reagent cases for special applications

Reagent case	REF	Dimensions	Application	GHS	PF-3	PF-12 ^{Plus}	Test
■ VISOCOLOR® Reagent case with PF-3 Drinking Water (Cl ₂ liquid)	934124	340 x 275 x 83 mm	Drinking water	■	■		VISOCOLOR® ECO Chlorine 2, free + total VISOCOLOR® ECO Chlorine dioxide VISOCOLOR® ECO Iron 2 VISOCOLOR® ECO Fluoride VISOCOLOR® ECO pH 6.0–8.2
■ VISOCOLOR® Reagent case with PF-3 Drinking Water (Cl ₂ solid)	934125	340 x 275 x 83 mm	Drinking water	■	■		VISOCOLOR® ECO Chlorine 6, free + total VISOCOLOR® ECO Chlorine dioxide VISOCOLOR® ECO Iron 2 VISOCOLOR® ECO Fluoride VISOCOLOR® ECO pH 6.0–8.2
■ Reagent case VISOCOLOR® School	933100	275 x 230 x 83 mm	Schools	■			VISOCOLOR® School Ammonium VISOCOLOR® School Total hardness VISOCOLOR® School Nitrate VISOCOLOR® School Nitrite VISOCOLOR® School pH 4.0–9.0 VISOCOLOR® School Phosphate
■ Reagent case VISOCOLOR® Fish	933101	275 x 230 x 83 mm	Fishing waters	■			VISOCOLOR® Fish Ammonium VISOCOLOR® Fish Total hardness VISOCOLOR® Fish Nitrate VISOCOLOR® Fish Nitrite VISOCOLOR® Fish pH 4.0–9.0 VISOCOLOR® Fish Phosphate
■ Reagent case VISOCOLOR® Fish with PF-3 Fish	934127	395 x 295 x 106 mm	Fishing waters	■	■		QUANTOFIX® Chloride QUANTOFIX® Multi-stick for aquarium owners VISOCOLOR® ECO Ammonium 3 VISOCOLOR® ECO Chlorine 6, free + total VISOCOLOR® ECO Iron 2 VISOCOLOR® ECO Silica VISOCOLOR® ECO Copper VISOCOLOR® ECO Nitrate VISOCOLOR® ECO Nitrite VISOCOLOR® ECO pH 6.0–8.2 VISOCOLOR® ECO Phosphate VISOCOLOR® ECO Oxygen VISOCOLOR® HE Alkalinity AL 7 VISOCOLOR® HE Phosphate
■ VISOCOLOR® Reagent case for soil analysis, with accessories	931601	500 x 420 x 175 mm	Soil	■			pH-Fix 2.0–9.0 QUANTOFIX® Ammonium QUANTOFIX® Nitrate/Nitrite VISOCOLOR® ECO Potassium VISOCOLOR® HE pH 4.0–10.0 VISOCOLOR® HE Phosphate
■ VISOCOLOR® Reagent case for soil analysis with PF-3 Soil, with accessories	934220	500 x 420 x 175 mm	Soil	■	■		pH-Fix 2.0–9.0 QUANTOFIX® Nitrate/Nitrite VISOCOLOR® ECO Ammonium 3 VISOCOLOR® ECO Potassium VISOCOLOR® ECO Nitrate VISOCOLOR® ECO Phosphate
■ VISOCOLOR® Reagent case for soil analysis with PF-3 Soil	934210	340 x 275 x 83 mm	Soil	■	■		VISOCOLOR® ECO Ammonium 3 VISOCOLOR® ECO Potassium VISOCOLOR® ECO Nitrate VISOCOLOR® ECO Phosphate

GHS: Global harmonized system: This product contains harmful substances which must be specially labeled as hazardous. For detailed information please see the SDS.

Reagent cases for special applications

Measuring range (visual)	Measuring range (photometric)	Number of tests	Reagent cases
–	0.10–2.00 mg/L Cl ₂	150	VISOCOLOR®
–	0.20–3.80 mg/L ClO ₂	150	Reagent case with PF-3
–	0.04–2.00 mg/L Fe	100	Drinking Water (Cl ₂ liquid)
–	0.1–2.0 mg/L F [–]	150	
–	pH 6.1–8.4	150	
–	0.05–6.00 mg/L Cl ₂	200	VISOCOLOR®
–	0.20–3.80 mg/L ClO ₂	150	Reagent case with PF-3
–	0.04–2.00 mg/L Fe	100	Drinking Water (Cl ₂ solid)
–	0.1–2.0 mg/L F [–]	150	
–	pH 6.1–8.4	150	
0 · 0.2 · 0.5 · 1 · 3 mg/L NH ₄ ⁺	–	50	Reagent case
1 drop equals 1.25 °e	–	50	VISOCOLOR® School
0 · 1 · 5 · 10 · 20 · 50 · 90 mg/L NO ₃ [–]	–	50	
0 · 0.02 · 0.05 · 0.1 · 0.2 · 0.5 mg/L NO ₂ [–]	–	50	
pH: 4.0 · 5.0 · 6.0 · 7.0 · 8.0 · 9.0	–	50	
0 · 0.5 · 1.5 · 3 · 6 · 15 mg/L PO ₄ ^{3–}	–	50	
0 · 0.2 · 0.5 · 1 · 3 mg/L NH ₄ ⁺	–	50	Reagent case
1 drop equals 1.25 °e	–	50	VISOCOLOR® Fish
0 · 1 · 5 · 10 · 20 · 50 · 90 mg/L NO ₃ [–]	–	50	
0 · 0.02 · 0.05 · 0.1 · 0.2 · 0.5 mg/L NO ₂ [–]	–	50	
pH: 4.0 · 5.0 · 6.0 · 7.0 · 8.0 · 9.0	–	50	
0 · 0.5 · 1.5 · 3 · 6 · 15 mg/L PO ₄ ^{3–}	–	50	
0 · 500 · 1000 · 1500 · 2000 · ≥ 3000 mg/L Cl [–]	–	100	Reagent case
Total hardness: 0 · 6.3 · 12.5 · 18.8 · 25.0 · 31.3 °e	–	100	VISOCOLOR® Fish with
Carbonate hardness: 0 · 3.8 · 7.5 · 12.5 · 18.8 · 25.0 °e	–	100	PF-3 Fish
pH: 6.4 · 6.8 · 7.2 · 7.6 · 8.0 · 8.4	–	100	
–	0.1–2.5 mg/L NH ₄ ⁺	50	
–	0.05–6.00 mg/L Cl ₂	200	
–	0.04–2.00 mg/L Fe	100	
–	0.2–3.0 mg/L SiO ₂	80	
–	0.1–5.0 mg/L Cu ²⁺	100	
–	4–60 mg/L NO ₃ [–]	110	
–	0.02–0.50 mg/L NO ₂ [–]	120	
–	pH 6.1–8.4	100	
–	0.2–5.0 mg/L PO ₄ -P	80	
–	1–8 mg/L O ₂	50	
0.2–7.2 mmol/L OH [–] (1 syringe filling)	–	200	
0.0 · 0.05 · 0.10 · 0.15 · 0.20 · 0.3 · 0.4 · 0.6 · 0.8 · 1.0 mg/L PO ₄ -P	–	300	
pH: 2.0 · 2.5 · 3.0 · 3.5 · 4.0 · 4.5 · 5.0 · 5.5 · 6.0 · 6.5 · 7.0 · 7.5 · 8.0 · 8.5 · 9.0	–	100	VISOCOLOR®
0 · 10 · 25 · 50 · 100 · 200 · 400 mg/L NH ₄ ⁺	–	100	Reagent case for soil
Nitrate: 0 · 10 · 25 · 50 · 100 · 250 · 500 mg/L NO ₃ [–]	–	100	analysis, with accessories
Nitrite: 0 · 1 · 5 · 10 · 20 · 40 · 80 mg/L NO ₂ [–]	–	100	
2 · 3 · 4 · 6 · 8 · 10 · 15 mg/L K ⁺	–	60	
pH: 4.0 · 5.0 · 5.5 · 6.0 · 6.5 · 7.0 · 7.5 · 8.0 · 8.5 · 9.0 · 10.0	–	500	
0.0 · 0.05 · 0.10 · 0.15 · 0.20 · 0.3 · 0.4 · 0.6 · 0.8 · 1.0 mg/L PO ₄ -P	–	100	
pH: 2.0 · 2.5 · 3.0 · 3.5 · 4.0 · 4.5 · 5.0 · 5.5 · 6.0 · 6.5 · 7.0 · 7.5 · 8.0 · 8.5 · 9.0	–	100	VISOCOLOR®
Nitrate: 0 · 10 · 25 · 50 · 100 · 250 · 500 mg/L NO ₃ [–]	–	100	Reagent case for soil
Nitrite: 0 · 1 · 5 · 10 · 20 · 40 · 80 mg/L NO ₂ [–]	–	100	analysis with PF-3 Soil,
–	0.1–2.5 mg/L NH ₄ ⁺	50	with accessories
–	2–25 mg/L K ⁺	60	
–	4–60 mg/L NO ₃ [–]	110	
–	0.2–5.0 mg/L PO ₄ -P	80	
–	0.1–2.5 mg/L NH ₄ ⁺	50	VISOCOLOR®
–	2–25 mg/L K ⁺	60	Reagent case for soil
–	4–60 mg/L NO ₃ [–]	110	analysis with PF-3 Soil
–	0.2–5.0 mg/L PO ₄ -P	80	

Reagent cases for individual solutions

Compact laboratories for mobile analysis

With our reagent case program we also fulfill individual customer requests. The user can choose between reagent case versions with tests for visual evaluation and possible combinations with the compact photometers PF-3 and PF-12^{Plus}.

The reagent cases for individual solutions offer a flexible combination of all VISOCOLOR® tests, pH-indicator papers, pH-Fix indicator strips, qualitative test papers and semi-quantitative QUANTOFIX® test strips as well as useful accessories.

The NANOCOLOR® reagent cases can also be equipped with NANOCOLOR® tube tests and the heating blocks NANOCOLOR® VARIO C2, NANOCOLOR® VARIO C2 M and NANOCOLOR® VARIO Mini.

Therefore, the reagent cases for individual solutions are versatily applicable in a variety of areas in water and waste water analysis.

Good to know

Starting at a minimum quantity of 50 cases, we offer entirely individual solutions in different sizes with a foam inlay designed exactly to the customers' specifications and needs.

Good to know

For questions about individual solution of the reagent cases, we are pleased to be of service.



Ordering information

Reagent case	REF	Dimensions	NANOCOLOR® VARIO C2	NANOCOLOR® VARIO C2 M	NANOCOLOR® VARIO Mini	NANOCOLOR® tube tests	VISOCOLOR® alpha
■ Test paper analysis case	913990	280 x 220 x 80 mm					
■ VISOCOLOR® ECO Reagent case	931303	340 x 275 x 83 mm					
■ VISOCOLOR® Reagent case	931305	450 x 360 x 140 mm				■	
■ VISOCOLOR® Reagent case with PF-3 Pool	934102	340 x 275 x 83 mm					
■ VISOCOLOR® Reagent case with PF-3 Drinking Water	934402	340 x 275 x 83 mm					
■ VISOCOLOR® Reagent case with PF-3 Soil	934202	340 x 275 x 83 mm					
■ VISOCOLOR® Reagent case with PF-3 Fish	934602	340 x 275 x 83 mm					
■ VISOCOLOR® Reagent case with PF-12 ^{Plus}	914351	450 x 360 x 140 mm				■	
■ NANOCOLOR® Reagent case with PF-3 COD	919212	534 x 427 x 207 mm	■	■	■	■	
■ NANOCOLOR® Reagent case with PF-12 ^{Plus}	919214	534 x 427 x 207 mm	■	■	■	■	

Reagent cases for individual solutions



VISOCOLOR® ECO	VISOCOLOR® HE	pH-Fix	PE-HANON®	Indicator papers	Duotest and Tritest	QUANTOFIX®	AQUADUR®	Qualitative test papers	Thermometer	Oxygen bottle	Pipettes	Reagent case
		■		■	■	■	■	■				Test paper analysis case
■								■	■			VISOCOLOR® ECO Reagent case
■	■	■	■	■	■	■	■	■	■	■		VISOCOLOR® Reagent case
■												VISOCOLOR® Reagent case with PF-3 Pool
■												VISOCOLOR® Reagent case with PF-3 Drinking Water
■												VISOCOLOR® Reagent case with PF-3 Soil
■												VISOCOLOR® Reagent case with PF-3 Fish
■	■	■	■	■	■	■	■	■	■	■		VISOCOLOR® Reagent case with PF-12 ^{Plus}
											■	NANOCOLOR® Reagent case with PF-3 COD
											■	NANOCOLOR® Reagent case with PF-12 ^{Plus}

Accessories for reagent cases

The complete analysis from one source

The MACHEREY-NAGEL reagent cases are perfectly suited for mobile analysis. With our wide range of accessories they can be refilled quickly and easily.

Good to know

For general accessories for the VISOCOLOR® reagent cases see page 82



Ordering information

Description	REF	Content	GHS
Accessories for Reagent case VISOCOLOR® School			
■ VISOCOLOR® School refill pack	933200	1 piece	
■ VISOCOLOR® School color scale	933300	1 piece	
■ VISOCOLOR® School manual	933150	1 piece	
Accessories for Reagent case VISOCOLOR® Fish			
■ VISOCOLOR® Fish refill pack	933201	1 piece	
■ VISOCOLOR® Fish color scale	933301	1 piece	
■ VISOCOLOR® Fish manual for reagent case VISOCOLOR® Fish	933151	1 piece	
■ VISOCOLOR® Fish manual for reagent case VISOCOLOR® Fish with PF-3 Fish	933161	1 piece	
Accessories for VISOCOLOR® Reagent cases for soil analysis			
■ 100 mL CaCl ₂ stock solution	914612	3 pieces	■
■ 100 mL CAL stock solution	914614	4 pieces	
■ Reagent set VISOCOLOR® HE Phosphorus in soil	920183	1 piece	■
■ Color chart VISOCOLOR® HE Phosphorus in soil	920383	1 piece	
■ 30 mL pyrophosphate solution	914611	3 pieces	
■ Folded filters MN 616 1/4, 18.5 cm Ø	532018	100 pieces	
■ Soil sieve (2 mm mesh size)	914650	1 piece	
■ Plastic bottle 500 mL with spraying attachment	91689	1 piece	
■ Balance 250 g	914651	1 piece	
■ Sample beaker 250 mL	914652	5 pieces	
■ Wide neck bottles 500 mL for soil samples	914653	5 pieces	
■ Shaking bottle 300 mL	914654	5 pieces	
■ Measuring cylinder 100 mL with base	914655	2 pieces	
■ Plastic scoop	914656	1 piece	
■ Funnel 80 mm Ø, plastic	914657	3 pieces	
■ Sedimentation tubes with screw caps	914659	2 pieces	
■ Syringe 10 mL with tube	914660	1 piece	
■ Manual for VISOCOLOR® Reagent cases for soils analysis	914602	1 piece	
■ Thermometer -10 °C to +60 °C	914497	1 piece	

GHS: Global harmonized system: This product contains harmful substances which must be specially labeled as hazardous. For detailed information please see the SDS.