

Normalab

SCIENTIFIC GLASSWARE

CATALOGUE



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SEE INDEX ON PAGE 25 FOR COMPLETE LIST OF AVAILABLE STANDARDS

VOLATILITY

ASTM D 402 - D 20 - AFNOR T66003 - IP 27 - NF EN 13358

Standard Test Method for Distillation of Cutback Asphalt



19378

REF	DESCRIPTION
19378	Distillation flask (500 mL)
12613	Graduated cylinder with neck (100 mL)

ASTM D 86 - D 1078 - E 133 - IP 123 - IP 191 - DIN 51751 - NF EN ISO 3405

Standard Test Method for Distillation of Petroleum Products and Liquid Fuels at Atmospheric Pressure



24019

REF	DESCRIPTION
FOR NORMALAB NDI 450	
19420	Distillation flask 100 mL (ASTM D 86 - ASTM E 133)
24019	Distillation flask 125 mL
19422	Distillation flask 200 mL (ASTM D 850, D 1078, D86 groups 1&2 and IP 195)
40052	Distillation flask 125 mL black bottom (ASTM D 86)
40043	Distillation flask 200 mL black bottom (ASTM D 1078)
12609EC	Graduated cylinder 5 mL Simax
26111	Cylinder with round-bottom foot 100 mL
24500	Graduated receiver with round-bottom foot engraved 100 mL (all methods)
19426	Cylinder 200 mL



26111



19425

REF	DESCRIPTION
FOR NORMALAB NDI CLASSIC AND NDI BASIC	
24019	Distillation flask 125 mL (minimum order of 5)
19422	Distillation flask 200 mL (ASTM D850, D1078, D86 groups 1&2 and IP 195)
19425	Graduated receiver with hexagonal foot 100 mL
12609EC	Graduated cylinder 5 mL Simax
26111	Cylinder with round-bottom foot 100 mL

ASTM D 86 - D 1078 - E 133 - IP 123 - IP 191 - DIN 51751 - NF EN ISO 3405

Standard Test Method for Distillation of Petroleum Products and Liquid Fuels at Atmospheric Pressure



13142 12852

REF	DESCRIPTION
FOR OPTIDIST	
25030	Distillation flask 125 mL for "Optidist"
50021	Distillation flask 125 mL for "Optidist" without logo
25032	Distillation flask 200 mL for "Optidist"
25031	Graduated receiver 100 mL for "Optidist"
50020	Graduated receiver 100 mL for "Optidist" without logo

FOR OPTIPMD : MICRO DISTILLATION (ASTM D7345 - IP 596 - EN 17306)	
16010	Micro balloon 10 mL for "OptiPMD" (minimum order of 2)
25005	Micro balloon 10 mL for "OptiPMD" (minimum order of 2) without logo

FOR ADU 4	
19429	Distillation receiver with removable brass foot (100 mL) for auto version Brass base (12921), cylinder (12919), joint (30187N)
20082	Distillation flask 125 mL with CN 19/26F and line (minimum order of 5)

OTHER OPTIONS & APPLICATIONS	
23375	Distillation flask 125 mL with shank & holed cork for probe (minimum order of 5)
23376	Distillation flask 200 mL with shank & holed cork for probe
19423	Distillation flask 250 mL
23378	Male/Female shank for condenser tube entry
11174	Receiver conical bottom foot 100 mL for manual version
25641	Graduated receiver (5 mL) Simax 0.4 mL
12609	Graduated receiver (5 mL) Schott 0.9 mL

ASTM D95 - AFNOR T60113 - IP 74 - ISO 3733

REF	DESCRIPTION
12852	Round bottom flask 500 mL - CN 24/29 F
13142	Liebig condenser 400mm - CN 24/29
19413	Dean Stark graduated 2 mL at 1/20e - CN 24/29
21455	Dean Stark graduated 5 mL at 1/10e - CN 24/29
19357	Dean Stark graduated 10 mL at 1/10e - CN 24/29
21456	Dean Stark graduated 25 mL at 1/5e - CN 24/29
12609EC	Graduated receiver 5 mL Simax
12614EC	Graduated receiver 250 mL Simax

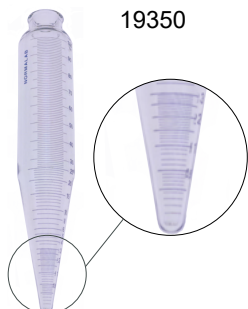


13142

ASTM D 322 - IP 23 - DIN 51565

Standard Test Method for Gasoline Diluent in Used Gasoline Engine Oils by Distillation

REF	DESCRIPTION
12855	Round bottom 1000 mL - CN 24/29 F
13142	Liebig condenser 400 mm - CN24/29
17966	Dean Stark graduated 5 mL - CN 24/29 - 5 mL at 1/10e



19350

ASTM D 1837 - D 2158 - AFNOR M41012 - IP 317

Standard Test Method for Volatility of Liquefied Petroleum (LP) Gases

REF	DESCRIPTION
19350	Graduated weathering cylinder 100 mL

ASTM D 4006

Standard Test Method for Water in Crude Oil by Distillation

REF	DESCRIPTION
21182	Condenser CN 24/40 M down & CN 14/23 F up
21183	Drying tube (supplied with rubber stopper)
21184	Dean-Stark 24/40 of 5 mL at 1/20e
21185	Flask with round bottom 1 Liter - CN 24/40 F



21184



19357

ASTM E 123 - NF T60113

Standard Specification for Apparatus for Determination of Water by Distillation

REF	DESCRIPTION
19357	Dean-Stark 10 mL at 1/10e cone-shaper - CN 24/29
19418	Dean-Stark 5 mL at 1/10e - CN 24/40
19419	Dean-Stark 10 mL at 1/10e - CN 24/40



12622

IP 188 - AFNOR M07032

Standard Method for Separation of Tetraethyllead and Tetramethyllead in Gasoline

REF	DESCRIPTION
12622	Plugged test tube 100 mL with stopper (Amber graduation) - CN 24/29F
19338	Flask 200 mL - CN 24/29F
19339	Distillation column with cap - CN 24/29M down - GL 14 up - CN 14/23M lat
19340	Condenser with CN 14/23F up

COLD FLOW PROPERTIES

ASTM D 97 - D 2500 - AFNOR T60105 - IP 15 - ISO 3016

Standard Test Method for Pour Point of Petroleum Products



REF	DESCRIPTION
19439	Test tube - 1 line - for manual apparatus
21146	Test tube for Pour Point for automatic apparatus
21147	Test tube for Cloud and Pour Point for apparatus auto, Glass mirror
21150	Test tube for Cloud and Pour Point for apparatus auto, Platinum mirror

ASTM D 1177

Standard Test Method for Freezing Point of Aqueous Engine Coolants

REF	DESCRIPTION
23239	Dewar freezing tube NON silver with 2-hole cork

ASTM D 2386 - NF EN ISO 3013 - IP 16 - DIN 51421

Standard Test Method for Freezing Point of Aviation Fuels



REF	DESCRIPTION
513462	Jacketed sample tube
513463	Stopper for sample tube
513465	Manual stirrer (spiral)
513466	Dewar flask (double wall) NON silver

IP 309 - ASTM D 6371 - NF EN 116 - AFNOR M07042



REF	DESCRIPTION
20882	Manual filtration set
21916	CFPP automatic pipette for NORMALAB version II without RIS without line
23231	Pipette for manual apparatus without RIS with line
17881	Automatic pipette with female RIS without line
20881	Pipette for manual apparatus with RIS with line
20942	RIS male tip for pipette CFPP auto
17885	CFPP test tube

CLEANLINESS

OXIDATION

ASTM D 381 - ISO 6246 - IP 131 - DIN 51784

Standard Test Method for Gum Content in Fuels by Jet Evaporation



REF	DESCRIPTION
16138	Beaker for existent gums 100 mL
19035	Beaker without spout
27113	Graduated receiver Class A - 50 mL (pack of 2)

ASTM D 525 - NF EN ISO 7536 - M07013

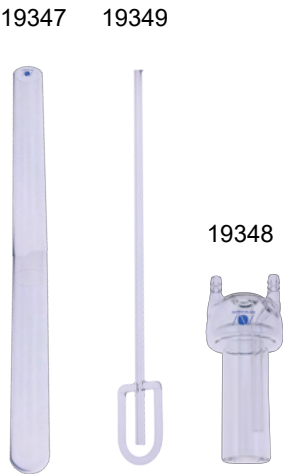
Standard Test Method for Oxidation Stability of Gasoline (Induction Period Method)



REF	DESCRIPTION
21688	Glass test container without cover
513513	Glass test container with cover
513514	Cover for Container

ASTM D 943 - D 2274 - D4310 - NF EN ISO 12205 - 4263 - DIN 51587

Standard Test Method for Oxidation Stability of Gasoline (Induction Period Method)



REF	DESCRIPTION
19347	Test container
19348	Mushroom condenser with vertical barbed fitting
19351	Mushroom condenser with horizontal barbed fitting D 2274
19349	Oxygen delivery tube (D943)
19352	Oxygen delivery tube ASTM D 2274
21696	Complete oxidation cell for ASTM D 943 and D 2893, with condenser with vertical barbed fitting *retail spare parts possible
21697	Complete oxidation cell for ASTM D 2274 and D 4310, with condenser with horizontal barbed fitting *retail spare parts possible
12442EC	Low graduated beaker with spout 1000 mL

ASTM D 2272- IP 229

Standard Test Method for Oxidation Stability of Steam Turbine Oils by Rotating Pressure Vessel



REF	DESCRIPTION
21338	Sample container, made of borosilicate glass
21389	Catalyst copper coil (ready to use) - packed in plastic container
21011	Catalyst iron-copper coil (ready to use) - packed in a glass tube
27667	Catalyst iron coil - 30 spires - packed in sets of 4 in glass tubes

FUEL CHARACTERISTICS

10143



40546



ASTM D611 - AFNOR M07021 Method II

Standard Test Methods for Aniline Point and Mixed Aniline Point of Petroleum Products and Hydrocarbon Solvents

REF	DESCRIPTION
10142	2-stroke pipette 5 mL 2 lines with safety ball Class A
10143	2-stroke pipette 10 mL 2 lines Class A with safety ball
12780	Test tube with straight edge round bottom
19322	Jacket
513113	Manual stirrer
40546	U-tube for NAE 440, 2 stations aniline point tester - Line at 20 mL

21700



19572



19582



ASTM D1319 - AFNOR M07024 - IP 156 - ISO 3837 - DIN 51791

Standard Test Method for Hydrocarbon Types in Liquid Petroleum Products by Fluorescent Indicator Adsorption

REF	DESCRIPTION
19572	Upper connection RIS 28/12 M for gas supply
19325	FIA True Bore adsorption column - RIS 28/12 F and RIS 12/2 M
19582	Outlet for true bore column RIS 12/2 F
21700	Standard adsorption column (upper part) FIA - RIS 28/12 F
19023	Standard wall tubing (lower part) FIA - length 1230 mm (pack of 10)
21701	Low parts for FIA standard column - length 1215 mm (pack of 25)

20983



20984



ASTM D 2784 - NF EN 24260 - ISO 4260

Standard Test Method for Sulfur in Liquefied Petroleum Gases (Oxy-Hydrogen Burner or Lamp)

REF	DESCRIPTION
20928	Combustion chamber Quartz - CN 19/40 F - RIS 18 M
20983	Absorber with fritted plate for Wickbold - CN 19/26 F up
20984	Trap for Wickbold - RIS up 18/9 F - CN 19/26 M down

IP 227

Determination of the Corrosive Tendencies towards Silver of Aviation Turbine Fuel, Automotive Spark-Ignition Engine Oils or Automotive Gasoline



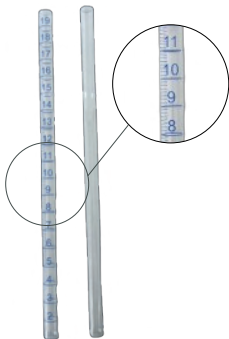
REF	DESCRIPTION
12007	Complete condenser kit - amber glass
12376	Test tube round bottom CN 45/40 F - amber glass
12377	Cold-finger condenser with hook - amber glass
12008	Cradle
20523	Complete condenser kit - clear glass
20524	Test tube round bottom CN 45/40 F - clear glass
20525	Cold-finger condenser with hook - clear glass

COLOR

9415202

ASTM D 156

Standard Test Method for Saybolt Color of Petroleum Products (Saybolt Chronometer Method)



REF	DESCRIPTION
941525	Set of 2 tubes (1 ungraduated, 1 graduated) with connector and tap
9415202	Set of 2 tubes (1 ungraduated, 1 graduated) without connector
941526	Set of 2 tubes (1 ungraduated, 1 graduated) with connector for waxes

ASTM D 1500 - ISO 2049 - IP 196 - DIN 51578

Standard Test Method for ASTM Color of Petroleum Products (ASTM Color Scale)

19353



REF	DESCRIPTION
19353	Color tube with spout

CARBON & SEDIMENTS

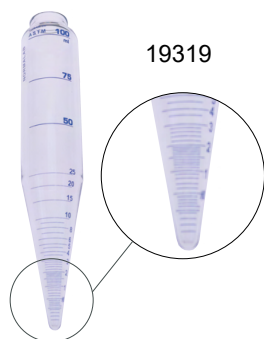
ASTM D 91 - D 96 - D893 - D 1796 - D 4007 - NF ISO 3731 - T60156 - IP 75 - DIN 51793

21194



Standard Test Method of Precipitation Number of Lubricating Oils

19319



REF	DESCRIPTION
19319	8" cone-shaped tube (100 mL)
19435	8" cone-shaped tube (100 mL) with a capillary tip, first graduation: 0,005 mL
19321	6" cone-shaped tube (100 mL)
19437	Pear shaped tube (100 mL) with 3 mL graduated tip
19438	Pear shaped tube (100 mL) with 1,5 graduated tip
21194	Plastic stopper for tubes REF 19435
21784	Rubber stopper for tubes REF 19319 (pack of 50)

ASTM D 473 - ISO 3735 - IP 53 - DIN 51789

Standard Test Method for Sediment in Crude Oils and Fuel Oils by the Extraction Method

10739



REF	DESCRIPTION
10738	Complete set: sediment extractor (supplied with PVC pipe)
10739	Water cup with glass hook
10763	Extraction thimble, alundun
19012	Extraction flask
941282	Condenser
941244	Basket

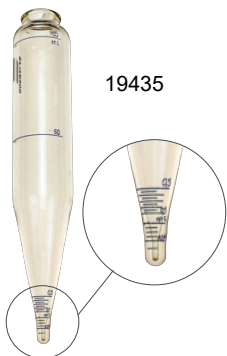
ASTM D 524 - AFNOR T60117 - IP 14

Standard Test Method for Ramsbottom Carbon Residue of Petroleum Products

19365



REF	DESCRIPTION
19365	Heat-resistant glass coking bulb



ASTM D 2273

Standard Test Method for Trace Sediment in Lubricating Oils

REF	DESCRIPTION
19435	Bulb glass cone-shaped capillary 100 mL

ASTM D 4530 - ISO 10370

Standard Test Method for Determination of Carbon Residue (Micro Method)



REF	DESCRIPTION
FOR NORMALAB APPARATUS	
41001	Borosilicate glass sample vials - small model - 2 mL (pack of 150)
41026	Borosilicate glass sample vials - medium model - 4 mL ISO 10370 (pack of 75)
41002	Borosilicate glass sample vials big model 16 mL (pack of 45)
41003	Sample vial ash content Quartz small model 2 mL
41004	Sample vial ash content Quartz big model 16 mL
41047	Vial 2 mL single use (pach of 144)
41046	Vial 16 mL single use (pack of 144)

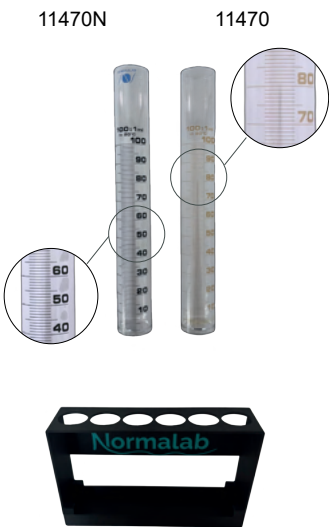
LUBRICANTS

ASTM D 892 - NF ISO 6247 -IP 146 - DIN 51566

Standard Test Method for Foaming Characteristics of Lubricating Oils



REF	DESCRIPTION
19371	Foam test tube - 1 liter amber graduation - height 440mm
19369	Foam test tube - 1 liter amber graduation - height 465mm
9416412	Graduated cylinder 1000 mL with ring ballast for D 892
27077	Foam test tube amber graduation - CN 45/40, type "Petrotest"
24805	Stainless steel diffuser stone (with certificate, supplied without rod)
27518	Foam test tube without foot T 60129
24795	Diffuser stone, calibrated (with certificate, supplied with rod)
24803	Stainless steel diffuser stone (with certificate, supplied with rod)
19366	Drying gas column for foaming test
20740	Borosilicate glass tank 20 liters with spout
9411302	Borosilicate glass vessel for foaming 30 L



ASTM D 1401 - AFNOR T60125 - ISO 6614

Standard Test Method for Water Separability of Petroleum Oils and Synthetic Fluids

REF	DESCRIPTION
11470	Demulsification test tube 100 mL amber graduation
11470N	Demulsification test tube 100 mL black graduation

REF	DESCRIPTION
42504	Holder for 6 demulsification test tubes

ASTM D 3427 - NF ISO 9120 - T60149

Standard Test Method for Air Release Properties of Hydrocarbon Based Oils



REF	DESCRIPTION
12627	Complete sample glassware Impinger (with spherical joints, clamps and barbed fitting)
19379	Complete Impinger graduated receiver without RIS (head + body)
12628	Plunger numbered 5 mL
12629	Plunger numbered 10 mL

BITUMEN, WAXES & GREASES

17487



ASTM D 36 - NF EN 1427 - ISO 4625

Standard Test Method for Softening Point of Bitumen (Ring-and-Ball Apparatus)

REF	DESCRIPTION
17487	Graduated beaker ASTM D 36 - Total volume 770 mL Volume under line 584 mL
17490	Graduated beaker ISO 1427 - Total volume 770 mL Volume under line 561 mL

ASTM D 70 - NF EN 3838 - IP 190

Standard Test Method for Density of Semi-Solid Asphalt Binder (Pycnometer Method)

24624

20847



REF	DESCRIPTION
20847	Pycnometer A - 24/30 mL (Hubbard model)
24624	Pycnometer B - 24/30 mL (Bingham model)
23229	Pycnometer C - 24/30 mL (Warden model)
27667	Pycnometer D - 24/30 mL (Capillary-stopper)

19361



ASTM D 87 - D 402 - AFNOR T60

Standard Test Method for Melting Point of Petroleum Wax (Cooling Curve)

REF	DESCRIPTION
19361	Paraffin test tube (3 mL)

ASTM D 721 - D 3235 - AFNOR T60120 - IP 158 - DIN 515771-2

Standard Test Method for Oil Content of Petroleum Waxes

517565



REF	DESCRIPTION
19367	Complete filter assembly - CN 24/29
517565	Filter with filter rod
21001	Complete filter assembly with certificate (calibrated and numbered) - RIS 35/20
517564	Test container
23240	Weighing bottle 15 mL with ground cap

23680



ASTM D 2872 - EN 12607

Standard Test Method for Effect of Heat and Air on a Moving Film of Asphalt (Rolling Thin-Film Oven Test)

REF	DESCRIPTION
23680	Standardized glass container RTFOT concave
23681	Standardized glass container RTFOT convex

ASTM D 6560 - IP 143 - DIN 51566 - NF T60115

Determination of Asphaltenes (heptane insolubles) in Crude Petroleum and Petroleum Products

23884



REF	DESCRIPTION
10479	Assembly for asphaltenes determination
19364	Condenser CN 34/35 M
23884	Reflux extractor CN 34/35 F - CN 24/29 M
21919	Reflux extractor CN 34/35 F and 29/32 M
21918	Conical flask 500 mL CN 29/32 F
23883	Conical flask 500 mL without stopper CN 24/29 F
14694	Glass evaporation capsule
13226	Glass stopper 24/29
12600	Glass funnel (200 mL)
12612 EC	Graduated cylinder 50 mL
12613 EC	Graduated cylinder 100 mL
23885	Glass rod

ASTM D 6560 - IP 143 - DIN 515595 - NF T60115

24472



Determination of Asphaltenes (heptane insolubles) in Crude Petroleum and Petroleum Products

REF	DESCRIPTION
24472	Complete instrument ASPHAN 02
21364	Lower boiler 500 mL - Rotatex 41/25 F
21365	Upper boiler 1000 mL - with stopper
21366	Double effect condenser
21367	Pressurizing condenser with notch
21368	Condenser of the collector with coil
21369	Solvent collecting flask 500 mL

VISCOSITY



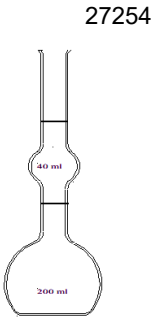
ASTM D 88 - D 224 - E 102

Standard Test Method for SAYBOLT Viscosity

REF	DESCRIPTION
11175	Graduated receiver 20-25-75 mL
11438	Saybolt flask 60 mL

ASTM D 1665

Standard Test Method for ENGLER Viscosity



REF	DESCRIPTION
521155	Engler flask 50 mL
27253	Engler flask 100 + 100 mL, Class A
27254	Engler flask 200 + 40 mL, Class A
11436	Engler flask 100/120 mL Class B
11437	Engler flask 200/240 mL Class B

521341



IP 70

Standard Test Method for REDWOOD Viscosity

REF	DESCRIPTION
521341	Redwood flask 50 mL 1 line

VISCOSITY TUBES

ASTM D 445 - D 446 - D 2171 - 7279 - ISO 3104 - IP 71

The following pages present the various types of viscometric tubes we have been manufacturing for years in our factories and calibration laboratory.

FABRICATION

NORMALAB viscometric tubes are made out of low-expanding borosilicate glass. The tubes are made with high accuracy capillaries (± 0.01 mm). Scores and figures are marked using an indelible process, which makes the viscometers tubes more sustainable. Each tube has a serial number and a unique identification number, it is supplied in individual packaging.

The standard viscometers can be delivered with engraved constant on customer's request.

CALIBRATION

2 OPTIONS ARE AVAILABLE:



Without certificate



With calibration certification:

Our viscometers are calibrated in our laboratory using standard viscometers as references. Those viscometers are checked at regular intervals by means of viscosity oil standards.

NORMALAB has been assessed and registered as meeting the requirements of ISO 9001 for laboratory and associated services of repair, calibration and verification of laboratories devices.

WARRANTY

Our certificates attest to the viscometer date of manufacture. Our packaging is sealed with a tamper-proof seal to guarantee tubes for 10 years (guaranteed only if the box is unopened).

OUR MEASURING & CLEANING DEVICES



Automatic viscometer tube washer
VTW Classic - Ref 18450



Manual viscosity bath
NVB Classic - Ref 23207



Automatic chronometer
Chronotech - Ref 41900

ACCESSORIES FOR VISCOMETERS



REF	DESCRIPTION
17433	Black rubber stopper for viscometers tubes (pack of 12)

CANNON-FENSKE ROUTINE VISCOMETERS FOR TRANSPARENT LIQUIDS

A: WITHOUT CERTIFICATE
B: WITH CALIBRATION CERTIFICATE



SIZE	APPROX. CONSTANT	VISCOSITY (cSt)	REFERENCE A	REFERENCE B
25	0.002	0.5 to 2	14046	14002
50	0.004	0.8 to 4	14047	14003
75	0.008	1.6 to 8	14048	14004
100	0.015	3 to 15	14049	14005
150	0.035	7 to 35	14050	14006
200	0.1	20 to 100	14051	14007
300	0.25	50 to 250	14052	14008
350	0.5	100 to 500	14053	14009
400	1.2	240 to 1200	14054	14010
450	2.5	500 to 2500	14055	14011
500	8	1600 to 8000	14056	14012
600	20	4000 to 20000	14057	14013
650	45	10000 to 40000	14058	14014
700	100	20000 to 80000	14059	14015

CANNON-FENSKE REVERSE FLOW OPAQUE VISCOMETERS FOR OPAQUE LIQUIDS

A: WITHOUT CERTIFICATE
B: WITH CALIBRATION CERTIFICATE



SIZE	APPROX. CONSTANT	VISCOSITY (cSt)	REFERENCE A	REFERENCE B
25	0.002	0.4 to 2	12181	14016
50	0.004	0.8 to 4	12182	14017
75	0.008	1.6 to 8	12183	14018
100	0.015	3 to 15	12184	14019
150	0.035	7 to 35	12185	14020
200	0.1	20 to 100	12186	14021
300	0.25	50 to 200	12187	14022
350	0.5	100 to 500	12188	14023
400	1.2	240 to 1200	12189	14024
450	2.5	500 to 2500	12190	14025
500	8	1600 to 8000	12191	14026
600	20	4000 to 20000	12192	14027
650	45	10000 to 40000	12193	14028
700	100	20000 to 80000	12194	14029

CANNON-MANNING VACCUM VISCOMETER

ASTM D 2171

A: WITHOUT CERTIFICATE
B: WITH CALIBRATION CERTIFICATE



SIZE	APPROX. Cst Bulb B	APPROX. Cst Bulb B	VISCOSITY (P)	REFERENCE A	REFERENCE B
4	0.002	0.0006	0.036 to 0.8	18870	18892
5	0.006	0.002	0.12 to 2.4	18871	18893
6	0.02	0.006	0.36 to 8	18872	18894
7	0.06	0.02	1.2 to 24	18873	18895
8	0.2	0.06	3.6 to 80	18874	18896
9	0.6	0.2	12 to 240	18875	18897
10	2	0.6	36 to 800	18876	18898
11	6	2	120 to 2400	18877	18899
12	20	6	360 to 8000	18878	18900
13	60	20	1200 to 24000	18879	18901
14	200	60	3600 to 80000	18880	18902

CANNON-UBBELOHDE VISCOMETERS FOR AVS AND TRANSPARENT LIQUIDS

A: WITHOUT CERTIFICATE
B: WITH CALIBRATION CERTIFICATE



SIZE	APPROX. CONSTANT	REFERENCE A	REFERENCE B
0C	0.003	11179	15253
0A	0.005	11180	15255
1	0.01	11181	15256
1C	0.03	11182	15257
2	0.1	11183	15259
2C	0.3	11184	15260
3	1	11185	15263
3C	3	11186	15264
4	10	11187	15266

UBBELOHDE VISCOMETERS FOR TRANSPARENT LIQUIDS

A: WITHOUT CERTIFICATE
B: WITH CALIBRATION CERTIFICATE



SIZE	APPROX. CONSTANT	VISCOSITY (cSt)	REFERENCE A	REFERENCE B
0	0.001	0.3 to 1	13975	14030
0C	0.003	0.6 to 3	13976	14031
0B	0.005	1 to 5	13977	14032
0A	0.007/8	1.5 to 7	13978	14033
1	0.01	2 to 10	13979	14034
1C	0.03	6 to 30	13980	14035
1B	0.05	10 to 50	13981	14036
2	0.1	20 to 100	13982	14037
2C	0.3	60 to 300	13983	14038
2B	0.5	100 to 500	13984	14039
2A	0.7/0.8	150 to 750	13985	14040
3	1	200 to 1000	13986	14041
3C	3	600 to 3000	13987	14042
3B	5	1000 to 5000	13988	14043
4	10	2000 to 10000	13989	14044
4C	30	6000 to 30000	13990	14045
4B	50	10000 to 50000	13991	13993
5	100	20000 to 100000	13992	13994
REF	DESCRIPTION			
10567	Stainless steel metal support for Ubbelohde viscometers			

BS/IP SL VISCOMETERS FOR TRANSPARENT LIQUIDS

A: WITHOUT CERTIFICATE
B: WITH CALIBRATION CERTIFICATE



SIZE	APPROX. CONSTANT	VISCOSITY (cSt)	REFERENCE A	REFERENCE B
1	0.01	3.5 to 10	19265	19283
1A	0.03	6 to 30	19266	19234
2	0.1	20 to 100	19267	19285
2A	0.3	60 to 300	19268	19286
3	1	200 to 1000	19269	19287
3A	3	600 to 3000	19270	19288
4	10	2000 to 10000	19271	19289
4A	30	6000 to 30000	19272	19290
5	100	20000 to 100000	19273	19291

BS/IP U RF VISCOMETERS FOR OPAQUE LIQUIDS

A: WITHOUT CERTIFICATE
B: WITH CALIBRATION CERTIFICATE



SIZE	APPROX. CONSTANT	VISCOSITY (cSt)	REFERENCE A	REFERENCE B
1	0.003	0.6 to 3	18648	18670
2	0.01	2 to 10	18649	18671
3	0.03	6 to 30	18650	18672
4	0.10	20 to 100	18651	18673
5	0.3	60 to 300	18652	18674
6	1	200 to 1000	18653	18675
7	3	600 to 3000	18654	18676
8	10	2000 to 10000	18655	18677
9	30	6000 to 30000	18656	18678
10	100	20000 to 100000	18657	18679
11	300	60000 to 300000	18658	18680

BAUME VIGNERON VISCOMETERS FOR TRANSPARENT LIQUIDS

A: WITHOUT CERTIFICATE
B: WITH CALIBRATION CERTIFICATE



VISCOSITY (cSt)	REFERENCE A	REFERENCE B
0.63	14719	14740
1	14720	14741
1.6	14721	14742
2.5	14722	14743
4	14723	14744
6.3	14724	14745
10	14725	14746
16	14726	14747
25	14727	14748
40	14728	14749
63	14729	14750
100	14730	14751
160	14731	14752
250	14732	14753
400	14733	14754
630	14734	14755
1000	14735	14756
1600	14736	14757
2500	14737	14758
4000	14738	14759
6300	14739	14760

UF VISCOMETERS FOR TRANSPARENT LIQUIDS

A: WITHOUT CERTIFICATE
B: WITH CALIBRATION CERTIFICATE



VISCOSITY (cSt)	APPROX. CONSTANT	REFERENCE A	REFERENCE B
0.63	0.0035	14761	13755
1	0.0055	14762	13756
1.6	0.0088	14763	13757
2.5	0.013	14764	13758
4	0.022	14765	13759
6.3	0.035	14766	13760
10	0.055	14767	13761
16	0.088	14768	13762
25	0.13	14769	13763
40	0.22	14770	13764
63	0.35	14771	13765
100	0.55	14772	13766
160	0.88	14773	13767
250	1.37	14774	13768
400	2.2	14775	13769
630	3.5	14776	13770
1 000	5.5	14777	13771
1 600	8.8	14778	13772
2 500	13	14779	13773
4 000	22	14780	13774
6 300	35	14781	13775

ACCESSORIES FOR VISCOMETERS



REF	DESCRIPTION
13776	Support for UF and baume

HOUILLON VISCOMETERS FOR TRANSPARENT LIQUIDS

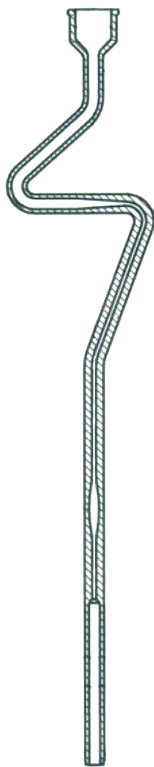
A: WITHOUT CERTIFICATE
B: WITH CALIBRATION CERTIFICATE



SIZE	APPROX. CONSTANT	VISCOSITY (cSt)	REFERENCE A	REFERENCE B
50	0.016	0.8 to 3.2	13923	13932
75	0.032	1.6 to 6.4	13924	13933
100	0.06	3 to 12	13925	13934
150	0.14	7 to 28	13926	13935
200	0.4	20 to 80	13927	13936
300	1	50 to 200	13928	13937
350	2	100 to 400	13929	13938
400	4.8	240 to 960	13930	13939
450	10	500 to 2000	13931	13940

HOUILLON VISCOMETERS FOR OMNITEK & TRANSPARENT LIQUIDS

A: WITHOUT CERTIFICATE
B: WITH CALIBRATION CERTIFICATE



NOMINAL CONSTANT MM ² /S ²	MEASURING RANGE MM ² /S ² (cSt)	REFERENCE A
0.01	0.3 to 2.0	21280
0.02	0.6 to 4.0	21281
0.03	0.9 to 6.0	21282
0.05	1.5 to 10	21283
0.07	2.1 to 14	21284
0.10	3.0 to 20.00	21285
0.20	6.0 to 40.00	21286
0.30	9.0 to 60.00	21287
0.50	15 to 100	21288
0.70	21 to 140	21289
1.00	30 to 200	21290
2.00	60 to 400	21291
3.00	90 to 1000	21292
5.00	300 to 2000	21293
10.00	450 to 3000	21294

GLASSWARE SETS



FILTRATION ASSEMBLY

This set is used to prepare count samples or assess sample's pollution level.



DOUBLE-WALLED GLASS REACTOR & LID

Custom-made design

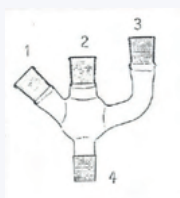
This set is used for organic synthesis (biopharmaceutical, chemical plants, biochemistry), its double wall regulates the reaction temperature using a fluid circulating in the outer wall.



COIL CONDENSER

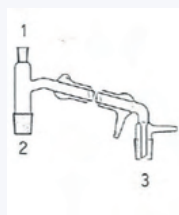
Custom-made design

This set is used to collect and liquefy vapors in order to separate, purify or recycle volatile products.



DISTILLATION ADAPTER - 4 JOINTS

This piece of glassware connects several parts in a distillation assembly. This allows vapors to be redirected and ensures a tight connection.



DISTILLATION COLUMN - 3 JOINTS

This piece is used in fractional distillation and allows liquid mixtures to be separated according to their boiling point.

ASTM STANDARDS

ASTM D 20.....	P.4
ASTM D 36.....	P.14
ASTM D 70.....	P.14
ASTM D 86.....	P.4/5
ASTM D 87.....	P.14
ASTM D 88.....	P.16
ASTM D 91.....	P.11
ASTM D 95.....	P.5/7
ASTM D 96.....	P.11
ASTM D 97.....	P.7
ASTM D 156.....	P.10
ASTM D 224.....	P.16
ASTM D 322.....	P.6
ASTM D 381.....	P.8
ASTM D 402.....	P.4/14
ASTM D 445.....	P.17-23
ASTM D 473.....	P.11
ASTM D 524.....	P.11
ASTM D 525.....	P.8
ASTM D 611.....	P.9
ASTM D 721.....	P.14
ASTM D 892.....	P.13
ASTM D 893.....	P.11
ASTM D 1078.....	P.4/5
ASTM D 1177.....	P.7
ASTM D 1319.....	P.9
ASTM D 1401.....	P.13
ASTM D 1500.....	P.10
ASTM D 1665.....	P.16
ASTM D 1796.....	P.11
ASTM D 1837.....	P.6
ASTM D 2158.....	P.6
ASTM D 2171.....	P.17-23
ASTM D 2272.....	P.8
ASTM D 2273.....	P.12
ASTM D 2386.....	P.7
ASTM D 2500.....	P.7
ASTM D 2784.....	P.9
ASTM D 2872.....	P.15
ASTM D 3525.....	P.14
ASTM D 3427.....	P.13

ASTM D 4006.....	P.16
ASTM D 4007.....	P.6
ASTM D 4530.....	P.6
ASTM D 6560.....	P.11
ASTM D 7279.....	P.12
ASTM E 102.....	P.15
ASTM E 123.....	P.17-23

IP STANDARDS

IP 14.....	P.11
IP 15.....	P.7
IP 16.....	P.7
IP 23.....	P.6
IP 27.....	P.4
IP 53.....	P.11
IP 70.....	P.16
IP 71.....	P.17
IP 74.....	P.5/6
IP 75.....	P.11
IP 123.....	P.4/5
IP 131.....	P.8
IP 143.....	P.15
IP 146.....	P.11
IP 156.....	P.9
IP 158.....	P.14
IP 188.....	P.6
IP 190.....	P.14
IP 191.....	P.4/5
IP 196.....	P.10
IP 227.....	P.10
IP 229.....	P.8
IP 317.....	P.6

NF STANDARDS

NF M07013.....	P.8
NF M07021.....	P.9
NF M07024.....	P.9
NF M07032.....	P.6
NF M41012.....	P.6
NF T60.....	P.14
NF T60105.....	P.7
NF T60113.....	P.5/7

NF T60115.....	P.15
NF T60117.....	P.11
NF T60120.....	P.14
NF T60125.....	P.13
NF T60149.....	P.13
NF T60156.....	P.11
NF T66003.....	P.4

EN STANDARDS

EN 1427.....	P.14
EN 3828.....	P.14
EN 13358.....	P.4
EN 24260.....	P.9

DIN STANDARDS

DIN 51421.....	P.7
DIN 51565.....	P.6
DIN 51566.....	P.13/15
DIN 51751.....	P.4/5
DIN 51578.....	P.10
DIN 51784.....	P.8
DIN 51789.....	P.11
DIN 51791.....	P.9
DIN 51793.....	P.11
DIN 515595.....	P.15
DIN 515771-2.....	P.14

ISO STANDARDS

ISO 2049.....	P.10
ISO 3016.....	P.7
ISO 3104.....	P.17-23
ISO 3405.....	P.4/5
ISO 3733.....	P.5/7
ISO 3735.....	P.11
ISO 3837.....	P.9
ISO 4260.....	P.9
ISO 4625.....	P.14
ISO 6614.....	P.13
ISO 7536.....	P.8
ISO 10370.....	P.12
ISO 6247.....	P.13

MAIN ANALYZERS

NPM TECH 2

ASTM D 93, IP 34, ISO 2719

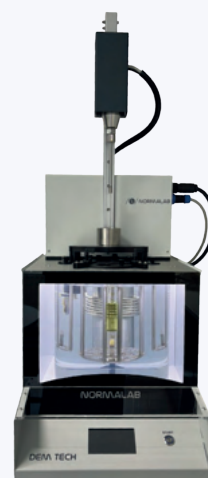
Automated flash point -
Pensky Martens



DEM TECH

ASTM D 1401, ISO 6614, IP 412

Semi automatic
demulsibility tester



NBA 450

ASTM D 36, ASTM E 28, EN
ISO 1427, DIN 52011

Automated softening point
tester - ring & ball method



NSB TECH

ASTM D 3230, IP 265

Automated salt in crude
analyzer for oil and
bitumen



TOST CLASSIC

ASTM D 943, D 2274, D 2893,
D 4310, IP 157, IP 388, ISO
4263 1-2-3, ISO 12205

Oxidation characteristics



NPN TECH

ASTM D 5, D 217, D 1321, D
1403

Semi automatic
penetrometer





CONTACT



Prüfgeräte für Petrochemie,
Gefahrgutanalytik und mehr

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