

LABORATORY SERVICES

Update 10/01/2007

Preparation department

The SINAL account doesn't involve the approvation of the products from part of the laboratory and account organization.

Code	Description
11001	Dispersion of concentrated pigment pastas.
11002	Dispersion of paints and varnishes.
11003	Dispersion of inks.
11004	Dispersion of other materials.
11005	Grinding and mixing, grinding tests of concentrated pigment pastas.
11006	Grinding and mixing, grinding tests of paints and varnishes.
11007	Grinding and mixing, grinding tests of inks.
11008	Grinding and mixing, grinding tests of other materials.
11009	Application and controlled drying of paints and other coatings on different substrates by film applicator.
11010	Application and controlled drying of paints and other coatings on different substrates by spray guns.
11011	Application and controlled drying of paints and other coatings on different substrates by spatula.
11012	Application of coloured chart by film applicator.

Quality control department

Code	Description
12001	Determination of wet-scrub resistance and cleanibility of coatings. Methods: UNI 10560:1996 and/or UNI EN ISO 11998:2006 SINAL ACCOUNT
12002	Determination of resistance to abrasion (TABER). Rotating abrasive rubber wheel method. Method: EN ISO 7784-2:2006 SINAL ACCOUNT
12003	Abrasion resistance of organic coatings by falling sand. Method: ASTM D968-05 Internal method: ML038_1
12004	Determination of adhesion of a coating film to substrate by cross-cut adhesion test method with standard cutters. Method: UNI EN ISO 2409:1996 SINAL ACCOUNT

Code	Description
12005	Determination of adhesion of a coating film to substrate by pull-off adhesion test method with a manual traction unit. Method: UNI EN ISO 4624:2006
12006	Determination of gloss of coating with an angular glossmeter 20° 60° 85°. Method: UNI EN ISO 2813:2002
12007	Determination of wear resistance into a controlled humidity cabinet. Salt spray corrosion test. Method: UNI EN ISO 11997-1:2006 o ASTM B117-03 Internal method: ML045_1
12008	Determination of wear resistance into a controlled humidity cabinet. Dry corrosion. Method: UNI 8744:1986
12009	Determination of the resistance of a coating to corrosive gases such as SO ₂ (Kesternich) or CO ₂ . Method: UNI 8903:1986
12010	Determination of the diffusion coefficient of CO ₂ (permeability) in a coating film. Method: DIN EN 1062-6:2003
12011	Paints and varnishes - Laboratory method for testing the efficacy of coating film preservatives against fungi. Method: DIN EN 15457:2006 and/or UNI 11021:2002 (APPENDIX C)
12013	Determination of surface hardness. Buchholz indentation test. Method: UNI EN ISO 2815:2005 Internal method: ML016_1
12014	Determination of surface hardness. Pencil test. Method: ASTM D 3363:05
12015	Determination of surface hardness. Persoz-Konig pendulum test. Method: UNI EN ISO 1522:2001
12016	Determination of drying time using no-pick-up tester of a traffic paint by a rubber wheel. Method: ASTM D711-89 (2004)
12017	Determination of through-dry state and through-dry time. Method: UNI EN 29117:1993 Internal method: ML022_1
12018	Determination of elasticity. Bend test using conical mandrel. Norma: UNI EN ISO 6860:2006 Internal method: ML019_1

Code	Description
12019	Determination of fineness of grind. Method: UNI EN ISO 1524:2005 Internal method: ML018_1
12020	Determination of elasticity. Cupping test. Method: UNI EN ISO 1520:2003 Internal method: ML046_1
12021	Determination of resistance of a coating film in contact with various chemicals (Acids, alkali, solvents, etc.). Method: UNI EN ISO 15710:2006 Internal method: ML042_1
12022	Exposure of coatings to artificial weathering - Exposure to fluorescent UV and water. Method: UNI 10686:1998 Internal method: ML039_1
12024	Determination of the permeability of paints and coatings films to diffusion of water vapour. Method: UNI EN ISO 7783-2:2001 SINAL ACCOUNT
12025	Determination of water permeability of a coating film on a coated porous specimen and water uptake. Method: UNI EN 1062-3:2001 SINAL ACCOUNT
12026	Determination of density - Pyknometer method. Method: UNI EN ISO 2811-1:2003 Internal method: ML017_1
12027	Determination of resistance of a coating to impact by a falling weight. Method: UNI EN ISO 6272-2:2006 Internal method: ML043_1
12028	Determination of resistance of coating film to rapid change in temperature by thermal shock cycles.
12029	Determination of dry film thickness (application on metallic substrate). Method: UNI EN ISO 2808:2002 Internal method: ML061_1
12030	Determination of wet film thickness. Method: UNI EN ISO 2808:2002 Internal method: ML075_1
12031	Determination of PVC (pigment volume concentration).

Code	Description
12032	Determination of the content (%) of the glass beads in traffic paint. Method: UNI EN 12802:2001
12033	Evaluation of degradation of paint coatings - Designation of intensity, quantity and size of common types of defect - Rating of degree of chalking by tape method. Method: UNI EN ISO 4628-6:2003
12034	Determination of the rotational viscosity. Brookfield method. Method: UNI EN ISO 2555:2002 Internal method: ML025_1
12035	Determination of the viscosity. Ford cup method. Method: UNI EN ISO 2431:2002 Internal method: ML021_1
12036	Determination of the rotational viscosity. Stormer-Krebs method.
12037	Measurement of haze using reflectometer. Method: UNI EN ISO 13803:2004 Internal method: ML048_1
12038	Measurement of orange peel appearance of a film by a specific reflectometer.
12039	Determination of interfacial surface tension (liquid-liquid and liquid-air systems) using a dynameter. Internal method: ML098_1
12042	Determination of blocking resistance. Internal method: ML036_1
12044	Coating materials and coating systems for exterior masonry and concrete. Determination of crack bridging properties (CBA). Method: UNI EN 1062-7:2005 Internal method: ML077_1
12045	Determination of cleanability. Internal method: UNI 11021:2002
12046	Determination of yellowness after conditioning in black chamber.
12047	Determination of resistance of coating film to rapid change in temperature by freezing cycles. Method: UNI 10686:1998 Internal method: ML078_1
12048	Determination of resistance of coating film to rapid change in temperature by hot/cold cycles. Heat-rain test. Method: UNI 10686:1998 Internal method: ML078_1

Code	Description
12049	Determination of resistance of coating film to rapid change in temperature by hot/cold cycles. Heat-rain test using acid rain. Method: UNI 10686:1998 Internal method: ML078_1
12050	Determination of resistance of coating film to rapid change in temperature by hot/cold cycles. Heat-rain test using salt spray rain. Method: UNI 10686:1998 Internal method: ML078_1
12052	Road marking performance for road users. Measure of RL in dry and wet conditions. Method: UNI EN 1436:2004 SINAL ACCOUNT
12053	Road marking performance for road users. Measure of Qd in dry conditions. Method: UNI EN 1436:2004 SINAL ACCOUNT
12054	Road marking performance for road users. Measure of SRT (Skid Resistance Test). Method: UNI EN 1436:2004 SINAL ACCOUNT
12055	Wrapping coatings for asbestos-cement sheets (CERTIFICATE for external use). Method: UNI 10686:1998
12056	Determination of criteria ECOLABEL n° 2 and n° 3. Method: ECOLABEL n° 2 and n° 3 (European Directive 2002/739/CE) Internal method: ML059_2
12057	Determination of dirty pick-up. Method: UNI 10792:1999 Internal method: ML032_1
12058	Determination of criteria ECOLABEL n. 4 and 5. Method: ECOLABEL n° 4 and n° 5 (European Directive 2002/739/CE) Internal method: ML069_2
12064	Method for total enumeration of bacteria in water paints. Method: UNI 9599:1990 Internal method: ML091_1
12065	Method for total enumeration of bacteria (fungi) in water paints. Internal method: ML092_1
12066	Method for total enumeration of bacteria (Pseudomonas) in water paints. Internal method: ML093_1

Code	Description
12067	Measure of hydrorepellency using static contact angle (SCA) test. Internal method: ML080_1
12068	Wrapping coatings for asbestos-cement sheets (CERTIFICATE for internal use - visible layer). Method: UNI 10686:1998
12069	Wrapping coatings for asbestos-cement sheets (CERTIFICATE for internal use - not visible layer). Method: UNI 10686:1998
12070	Wrapping coatings for asbestos-cement sheets (CERTIFICATE for removable use). Method: UNI 10686:1998
12071	Coating material and coatings systems for rooms with the presence of foodstuff - Requirements and test methods. Method: UNI 11021:2002
12073	Method for total enumeration of bacteria in water. Method: UNI 9599:1990 Internal method: ML091_1
12074	Determination of global migration for food grade with distillate water (agent A).
12075	Determination of global migration for food grade with 3% acetic acid (agent B).
12076	Determination of global migration for food grade with 15% ethanol (agent C).
12077	Determination of global migration for food grade with oliven oil (agent D).
12078	Determination of specific migration for food grade.
12080	Determination of porosity of building materials using Hg porosimeter.
12081	Determination of resistance to liquid. General methods. Method: UNI EN ISO 2812-1:1996 SINAL ACCOUNT
12082	Check of film formation at a fixed temperature. Method: UNI 10793:1999
12083	Determination of the grain size (granularity) based on the size of the largest particles that are dispersed in a coating system. Method: EN 21524 + ISO 787-7 + UNI EN 1062-1:2005
12084	Determination of dry thickness film. Method: UNI EN 1062-1:2005
12085	Determination of VOC (volatile organic contents) in building and car refinishing. European Directive 2004/42/CE (Test method UNI EN ISO 11890-2:2006)
12086	Determination of VOC (volatile organic contents) in 2K paint system in building and car refinishing. Method: ASTM D2369-04
12087	Paints and varnishes - Laboratory method for testing the efficacy of coating film preservatives against algae. Method: DIN EN 15458:2006

Chemical department

Code	Description
13002	Determination of water contents in solvents. Karl-Fisher test.
13003	Determination of ashes of paints and varnishes for wood and wood substrates. Method: UNI 9996:1992 Internal method: ML014_1
13004	Paints, varnishes and plastics - Determination of non-volatile-matter content. Method: UNI EN ISO 3251:2005 Internal method: ML015_1
13005	Determination of the degree of acidity in a chemical by titration. Internal method: ML096_1
13007	Identification by InfraRed spectrometry (FT-IR) of the composition of solids and liquids. Internal method: ML101_0
13008	Analytical determination of components by Gaschromatography (GC) (standard method). Internal method: ML102_0
13009	Analytical determination of components by Gaschromatography with Mass detector (GC-MS).
13010	Analytical determination of metals by atomic absorption spectrophotometry. Internal method: ML100_0
13011	Determination of spectral factor of liquids and solids by UV-visible spectrophotometry.
13013	Measurement of pH value of a solution.
13014	Measurement of the electrical conductivity of a solution.
13017	Sampling and determination of powders from industrial emission. Method: UNICHIM 494 Metodo di lavoro: ML027_1
13018	Determination of VOC (volatile organic contents) expressed ad n-hexane from industrial emission (GC method). Metodo di lavoro: ML002_2
13022	Identification by InfraRed spectrometry (FT-IR) of the emulsion content in a paint Internal method: ML101_0
13028	Determination of mineralogical analysis using XRD diffractometry
13029	Scansion Electronic Microscope (SEM) observation

Environmental department

Code	Description
14001	Water - sampling.
14003	Water - determination of anions (chloride, sulfate, fosphate, etc...).
14006	Water - determination of Byological Oxygen demand (BOD).
14008	Water - determination of Chemical Oxygen demand (COD).
14009	Water - determination of colour grade.

Code	Description
14012	Water - determination of materials in suspension.
14014	Water - determination of solid contents.
14017	Water - determination of surfactanys (ionic and not ionic).
14018	Air - sampling.
14025	Air - determination of powders from emission.
14026	Air - measure of air capacity.
14027	Air - determination of organic compounds (VAM, VCM, ecc...).
14028	Enviromental - sampling.
14029	Enviromental - determination of organic compounds.
14030	Enviromental - determination of noise.
14031	Enviromental - determination of powders.

Colour measurement department

Code	Description
15001	Colour measurement in any colour space: CieLab, XYZ, etc... Comparative tests. Measure of coefficient β . Method: UNI 8941:1987 e UNI EN 1436:2004 Internal method: ML076_1
15002	Determination of contrast ratio (opacity) of light-coloured paints. Method: UNI EN ISO 2814:2006
15003	Analysis, development, identification of formulations for colour matching.
15004	Full studies of coating systems, pigment pastes, coatings converters to create customized colour matching systems and shade cards.
15005	Determination of contrast ratio (opacity) of light-coloured paints at a fixed spreading rate. Method: ISO 6504-3:1998 SINAL ACCOUNT
15006	Determination of hiding power. Kubelka-Munk method for white and light-coloured paints. Method: UNI EN ISO 6504-1:2006 SINAL ACCOUNT
15007	Determination of whiteness, yellowness and chromatic change (ΔE). Method: UNI 8941:1987 Internal method: ML099_0

Plasters department

Code	Description
16001	Determination of consistence of fresh mortar (by flow table). Method: UNI EN 1015-2:2000, UNI EN 1015-3:2000 / ASTM C 230
16002	Determination of consistence of fresh mortar (by plunger penetration). Method: UNI EN 1015-2:2000 e UNI EN 1015-4:2000
16003	Determination of bulk density of fresh mortar.

Code	Description
	Method: UNI EN 1015-6:2000
16004	Determination of air content of fresh mortar. Method: UNI EN 1015-7:2000
16005	Determination of workable life and correction time of fresh mortar. Method: UNI EN 1015-9:2001
16006	Determination of penetration resistance and of starting and finish setting times. Vicat test. Method: UNI 7927:1978
16007	Determination of dry bulk density of hardened mortar. Method: UNI EN 1015-10:2001
16008	Determination of flexural and compressive strength of hardened mortar. Method: UNI EN 1015-11:2001
16009	Determination of adhesive strength to hardened rendering and plastering mortars on substrates. Method: UNI EN 1015-12:2002
16010	Determination of water-soluble chloride content of fresh mortars Method: UNI EN 1015-17:2002
16011	Determination of water absorption coefficient due to capillary action of hardened mortar. Method: UNI EN 1015-18:2004
16012	Determination of water vapour permeability of hardened rendering and plastering mortars. Method: UNI EN 1015-19:2000
16013	Determination of the compatibility of one-coat rendering mortars with substrates. Method: UNI EN 1015-21:2004
16014	Methods for determining design thermal values. Method: UNI EN 1745:2005 / ISO 8301
16015	Hydraulic shrinkage determination. Laboratory test. Method: UNI 6687:1973