## Water-borne rheology expertise 360°

- From powder to liquid form and direct or inverse emulsions.
- From ionic to non-ionic grades.
- From non-associative versatility to associative efficiency.
- From high pseudoplastic to pure newtonian flow behaviour.
- From synthetic to pure natural and hybrid natural-based with improved structures, Lamberti will help provide you the optimum balance of performance / sustainability / cost with our extensive portfolio of additivies VISCOLAM® (acrylic ASE/HASE/HSD), VISCOLAM® PS (HEUR), ESACOL® (HPG) and CARBOCEL® (CMC) rheological modifiers.

# Matt/Soft touch with haptic and mechanical performances toolbox

- ESACOTE® PUDs inherently matt with a variety of haptic effects from silky to rubbery.
- DECOSPHAERA®/SPHEROMERS®
  PU and AC polymeric beads
  for deep matt, burnish resistance,
  scuff & scratch resistance as well
  as for special texturized effect.

- ESACOTE® inherently matt and DECOSPHAERA® matting enhancers also available in BIO based grades.
- ADIWAX, wax emulsions, synthetic or natural-based, for matt or scuff improvement in more economic paint & varnish systems.

#### Performance waterborne binders for waterproofing and cool roofing

- ESACOTE® PUDs and acrylic hybrid-urethane dispersion binders with inherent elasticity for longlasting efficiency of roof & terrace protection.
- Built-in elasticity thanks to polymer structure without use of external plasticizer. Our dispersions provide permanent elasticity and no brittle effect.
- For pigmented (for roofs or cool roofing systems) or transparent systems (on ceramics, natural stones or concrete).
- For thick or thin film membranes.

#### High traffic waterborne binders for floors

- ESACOTE® PUDs for 1K and 2K high traffic concrete or industrial wood floors and parking structures.
- Solutions for anti-tire tracks (hot pneumatic traces) for white and clear colours public parking's.

## Binders for trim paints and varnishes

- ESACOTE® as sole binder for high quality waterborne trim paints for wood, metal, and plastic.
- ESACOTE® as co-binder to boost existing system and excellent compatibility with various other binder chemistries.
- ESACOTE® glossy also available in BIO based grades.









| Water based resins as binders        |   |                         |                |          | chemica                     | al proper   | ties                      |  |   | film properties                          |   |                            |  |
|--------------------------------------|---|-------------------------|----------------|----------|-----------------------------|---|---------------------------|--|---|--|---|----------------------------|--|
| for architectural information & type |   | Archi co-binder         | Water proofing | Flooring | Chemical nature             | Solvent (%)   | Solventtype               | Dry content (%)                          | Нď  | MFFT (°C)                                | König (K)<br>Persoz (P)<br>hardness (sec) | Elongation<br>at break (%) |  |
| Water based acrylic emulsio          | ns  |                         |                |          |                             |   |                           |  |   |  |   |                            |  |
| AC 200                               | FCMD - Self crosslinking                                    | х                       | x              |          | AC                          | 0   | Solvent free              | 40                                       | 8.0-10.0  | 12                                       | 38 (K)                                    | ≈300                       |  |
| Water based urethane acryli          | ic dispersions  |                         |                |          |                             |   |                           |  |   |  |   |                            |  |
| PU 147                               | Glossy/hard and versatile                                   | х                       |                | х        | PE                          | 5   | NEP                       | 35                                       | 7.5-8.5   | ~0                                       | 136(K)/254(P)                             | ≈230                       |  |
| PU 148                               | Glossy/hard and versatile                                   | х                       |                | х        | PE                          | 4.5   | DPGDME                    | 35                                       | 7.0-9.0   | ~0                                       | 93(K)/180(P)                              | ≈230                       |  |
| ESATEC 612                           | 2K flooring anti-tiretracks in parking structures           |                         |                | х        | AC/PC                       | 4.5   | DPGDME                    | 38                                       | 7.0-9.0   | NA                                       | NA  | NA                         |  |
| Water based BiOBASED pol             | lyurethane dispersions                                      |                         |                |          |                             |   |                           |  |   |  |   |                            |  |
| BIO 4900*                            | 62% Bio based carbon content - highly flexible binder       | х                       |                |          | PES                         | <1  | MEK                       | 35                                       | 7.0-9.0   | 15                                       | 88 (K)                                    | ≈270                       |  |
| BIO 118                              | 33% Bio based carbon content - hard binder                  | х                       |                | x        | PES                         | 8   | DPGDME                    | 35                                       | 7.0-9.0   | 15                                       | 88 (K)                                    | ≈270                       |  |
| BIO 148                              | 28% Bio-based carbon content                                | х                       |                | х        | PE                          | 30  | DPGDME                    | 35                                       | 7.0-9.0   | ~0                                       | 93(K)/180(P)                              | ≈230                       |  |
| Water based INHERENTLY               | MATT polyurethane dispersions                               |                         |                |          |                             |   |                           |  |   |  |   |                            |  |
| PU 940                               | Matt, transparent and UV resistant                          | х                       |                |          | PC                          | 2   | DPGDME                    | 35                                       | 7.0-9.0   | ~0                                       | 38(K)/57(P)                               | ≈420                       |  |
| PU 980                               | Matt with silky touch                                       | х                       |                |          | PE                          | 0   | Solvent free              | 32                                       | 8.0-9.0   | ~0                                       | 35(K)/65(P)                               | ≈250                       |  |
| BIO 9001                             | 66% Bio based carbon content - Matt with silky touch        | x                       |                |          | PE                          | 0   | Solvent free              | 32                                       | 8.0-9.0   | ~0                                       | 35(K)/65(P)                               | ≈250                       |  |
| Water based polyurethane of          |   |                         |                |          |                             |   |                           |  |   |  |   |                            |  |
| MD 23                                | CATIONIC - Anti migration stain                             | х                       |                |          | PES                         | <1  | Acetone                   | 30                                       | 3.5-5.5   | 45                                       | 28(K)                                     | ≈200                       |  |
| PU 71                                | Excellent film formation / hardness                         |                         |                | X        | PC                          | 8   | NMP                       | 35                                       | 7.0-9.0   | ~0                                       | 130(K)/215(P)                             | ≈200                       |  |
| PU 470                               | Water proofing  | x                       | х              | ^        | PE                          | 4   | NEP                       | 40                                       | 7.0-9.0   | ~0                                       | 31(K)/62(P)                               | 600                        |  |
| PU 475                               |   |                         |                |          | PE                          | 4   | NEP                       | 40                                       | 7.0-9.0   | ~0                                       |   | 800                        |  |
|                                      | Water proofing, better flexibility                          | X                       | X              |          | PE                          | 4   | NBP                       | 40                                       | 7.0-9.0   |  | 29(K)/54(P)                               | 500                        |  |
| PU 5181                              | Water proofing, high flexibility, lowest water uptake       | X                       | Х              |          |                             |   |                           |  |   | ~0                                       | 35(K)                                     |                            |  |
| UR 115                               | High hardness, self crosslinking                            |                         |                | Х        | PES                         | 8   | NEP                       | 32                                       | 7.0-8.5   | ~0                                       | 170(K)/290(P)                             | NA                         |  |
| PU 61                                | Antiscratch / Flooring 1K                                   | X                       |                | Х        | PC                          | 8   | DPGDME                    | 35                                       | 7.0-9.0   | 25                                       | 127(K)                                    | ≈200                       |  |
| ST 47                                | Wider pH stability, high solids                             | Х                       | X              |          | PES                         | <1  | Acetone                   | 50                                       | 8.0-10.0  | ~0                                       | 8(K)/23(P)                                | ≈800                       |  |
| PU 77                                | Improved mechanical / chemical resistances                  | Х                       |                | х        | PC                          | <0.5  | MEK                       | 35                                       | 7.0-9.0   | 35                                       | 105(K)                                    | ≈250                       |  |
| PU 24                                | Concrete top coat anti-carbonation                          | Х                       |                | Х        | PE                          | 5.5   | DPGDME                    | 35                                       | 7.5-9.5   | ~5                                       | 60(K)                                     | ≈330                       |  |
| Crosslinkers                         |   |                         |                |          | Chemico-physical properties |   |                           |  |   |  |   |                            |  |
| CATALYST AT5/N                       | High MW polyaziridine crosslinker for extended pot life     |                         |                |          |                             | 35  | DPGME                     | 65 Water soluble - for AC and PUDs       |   |  |   |                            |  |
| CROSSLINKER 08                       |   |                         |                |          |                             | 30 Propylene carbonate 70 Easily dispersible - for AC and PUDs                    |                           |  |   |  |   |                            |  |
| Adhesion Promoter                    |   |                         |                |          |                             |   |                           |  |   |  |   |                            |  |
| CROSSLINKER PU                       | Water dispersible organosilane improved adhesion on di      | ficult                  | mine           | ral sub  | strates thi                 | rough ch  | nemical bonding           |  |   |  |   |                            |  |
| Plasticizers                         |   |                         |                |          |                             | Chemico-physical properties   |                           |  |   |  |   |                            |  |
| ESAPLAST G12                         | Polymeric plasticizer phthalate-free for AC/ST binders      |                         |                |          |                             | Blend   | of Polymeric Plasticizers | Impro                                    | Improve binder elongation, specially in waterproofing |  |   |                            |  |
| ESAPLAST ECO 30                      | Polymeric plasticizer phthalate-free for AC/ST binders      |                         |                |          |                             | Blend   | of Polymeric Plasticizers | Alternative to G12 without any labelling |   |  |   |                            |  |
| LAGOFLEX C-1                         | EX C-1 Polymeric plasticizer phthalate-free for PUD binders |                         |                |          |                             | Blend of Polymeric Plasticizers Improve applicability of our PUD at low temperatu |                           |  |   |  | erature                                   |                            |  |
| Rheological modifiers                |   |                         |                |          |                             | Chem  | ico-physical properties   |  |   |  |   |                            |  |
| CARBOCEL®                            | Low/Mid-Shear CMC (Technical & Purifed grades)              |                         |                |          | CMC                         | 0   | Powder                    | 100                                      | Ionic - KU b  | uilder a                                 | nd film former                            |                            |  |
| ESACOL® ED 5, 15, 16, 18             | Mid-Shear HPG - Easy Dispersible                            |                         |                |          | HPG                         | 0   | Powder                    | 100                                      | Non-ionic - KU builder with open-time                 |  |   | ne                         |  |
| ESACOL® ED 30x, 50x*                 | New generation high viscosity Mid-Shear HPG                 |                         |                |          | HPG                         | 0   | Powder                    | 100                                      | Non-ionic - KU builder high efficiency                |  |   | у                          |  |
| ESACOL® ED MAX*                      | Mid-Shear + antispattering control HPG                      |                         |                |          | HPG                         | 0   | Powder                    | 100                                      | Non-ionic - KU-builder antispattering                 |  |   | g                          |  |
| ESACOL® HD 15                        | Mid-Shear HPG - Hyper Dispersible                           |                         |                |          | HPG                         | 0   | Powder                    | 100                                      | Non-ionic - KU builder                                |  |   |                            |  |
| ESACOL® HS 30r                       | Mid-Shear HPG - Improved alkali resistance                  |                         |                |          | HPG                         | 0   | Powder                    | 100                                      | Biocide-free  | Biocide-free systems and silicate paints |   |                            |  |
| ESACOL® CAT 10 OR 30                 | Mid-Shear HPG - Cationic modified                           |                         |                |          | HPG                         | 0   | Powder                    | 100                                      | Cationic - Antistatic and blocking properties         |  |   |                            |  |
| VISCOLAM® CMD 50                     | Very Low-Shear HSD  |                         |                |          | AC                          | 0   | VOC-free                  | 48                                       | Anionic - stabilisation - ideal for putties           |  |   | es                         |  |
| VISCOLAM® 330                        | Low + High-Shear ASE  |                         |                |          | AC                          | 0   | VOC-free                  | 30                                       | Anionic - polyvalent, not binder dependant            |  |   | endant                     |  |
| VISCOLAM® 630                        | Low + Medium Shear HASE                                     | Low + Medium Shear HASE |                |          |                             | 0   | VOC-free                  | 30                                       | Anionic - anti-sagging / anti-settling                |  |   |                            |  |
| VISCOLAM® 600                        | Mid-Shear HASE  |                         |                |          | AC                          | 0   | VOC-free                  | 30                                       | Anionic - KU builder                                  |  |   |                            |  |
| VISCOLAM® 635                        | Mid-High-Shear HASE   |                         |                |          | AC                          | 0   | VOC-free                  | 30                                       | Anionic - KU + ICI builder                            |  |   |                            |  |
| VISCOLAM® NT74                       | High-Shear HASE   |                         |                |          | AC                          | 0   | VOC-free                  | 30                                       | Anionic - ICI builder                                 |  |   |                            |  |
| VISCOLAM® PS 166                     | Low/Mid-Shear HEUR  |                         |                | PU       | 24                          | 2 Butoxyethanol   | 40                        | Non-ionic associative PU - KU builder    |   |  |   |                            |  |
| VISCOLAM® PS 167                     | Low/Mid-Shear HEUR  |                         |                | PU       | 24                          | Butyl carbitol  | 40                        | Non-ionic associative PU - KU builder    |   |  |   |                            |  |
| VISCOLAM® PS 170 AIR                 | Mid-Shear HEUR  |                         |                | PU       | 0                           | VOC-free  | 46.5                      | Non-ionic associative PU - KU builder    |   |  |   |                            |  |
| VISCOLAM® PS 202                     | High-Shear HEUR   |                         |                |          | PU                          | 0   | VOC-free                  | 20                                       | Non-ionic associative PU - ICI builder                |  |   |                            |  |
|                                      |   |                         |                |          |                             |   |                           |  |   |  |   |                            |  |

development product acrylic polyurethane polycarbonate polyether

polyester not applicable PES FCMD

food contact material declaration available DPGME dipropylene glycol methyl ether DPGDME dipropylene glycol dimethyl ether

This information is given in good faith and to the best of our knowledge. Every user of our products is responsible as regards the observation of all legal regulations including patent laws. Detailed information on handling and specific precautions to be observed in the use of the product can be found in our relevant Health and Safety Information Sheets.