

KEY PRODUCTS

Decorative Paints & Coatings



Classification of our Paint Portfolio in 4 sectors



1. TERPOLYMERS & COPOLYMERS FOR DECORATIVE PAINTS

- Excellent outdoor behaviour
- High UV resistance
- High washability and scrubbability
- Excellent alkali resistance



ECO-ADVANCED PORTFOLIO

- Meet the market demands for low- and zero-VOC
- No demand of coalescents
- Appropriate for hospital, children rooms, schools, interior áreas.



NANOTECHNOLOGY FOR WOOD AND CONCRETE

- Higher penetration due to its particle size
- Can be used as Top coating with excellent sealing properties
- Promote adherence on porous substrates



HIGH PERFORMANCE FOR WOOD & COATINGS

- An alternative for solvent based coatings, lacquers, varnishes
- Based on special acrylics or a two-stage polymerization (core-shell)
- Appropriate for wood, gloss paints, varnishes and special coatings

GLOBAL KEY PRODUCTS CLASSIFIED BY CHEMISTRY

Copolymers Styrene / Acrylic

PRODUCT NAME	MAIN APPLICATION
Mowilith® LDM 6770	Decorative paints
Mowilith® LDM 6768	Decorative paints developed for the Brazilian Market
Mowilith® LDM 6778	APEO-free for decorative paints
Mowilith® LDM 6636	Road marking paints
Mowilith® DM 774	High performance exterior coatings
Mowilith® LDM 7410	Exterior – interior paints – wood coatings
Mowilith® LDM 7460	Exterior – interior paints – wood coatings
Mowilith® LDM 7451	Exterior – interior paints – wood coatings
Mowilith® LDM 7010	Acrylic thickener
Mowilith® LDM 7030	Acrylic thickener

Pure Acrylics

PRODUCT NAME	MAIN APPLICATION
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Copolymers Versatic-esters / Acrylics

PRODUCT NAME	MAIN APPLICATION
Mowilith® LDM 2201	Wood lacquers – coatings
Mowilith® LDM 2250	Wood lacquers – coatings
Mowilith® DM 230	Intumescent paints
Mowilith® LDM 2115	Textures – deep shade paints

Copolymer Vinylacrylic

PRODUCT NAME	MAIN APPLICATION
Mowilith® LDM 5205	Decorative paints – satin paints
Mowilith® LDM 5207	Decorative paints – satin paints

Terpolymers

PRODUCT NAME	MAIN APPLICATION
Mowilith® LDM 2641	Decorative interior – exterior paints
Mowilith® LDM 2349	Decorative interior – exterior paints
Mowilith® LDM 2466	Decorative interior – exterior paints
Mowilith® LDM 2455	Decorative interior – exterior paints
Mowilith® LDM 2955	Decorative interior – exterior paints
Mowilith® LDM 2400	Low-Emission paints/APEO-free
Mowilith® LDM 2401	Low-Emission paints/APEO-free
Mowilith® LDM 2467	Decorative paints/APEO-free
Mowilith® LDM 2270	Hydrophobic paints
Mowilith® LDM 2801	Nanodispersion – primers – sealers



Key Products in different technologies



STYRENE-ACRYLIC

Mowilith® LDM 6778 :

Our Top in Styrene-acrylics, high scrub resistance and appropriate for all Kind of paints

PURE-ACRYLICS & TERPOLYMERS

• **Mowilith® LDM 2400 :**

Our Low- & Zero-VOC alternative that attends GS-11 Norm requirements

- **Mowilith® LDM 774 & LDM 2250 :** Wood – Exterior – Roofing, gloss lacquers are some of the applications of these two specialties, LDM 774 based on pure acrylics, LDM 2250 a terpolymer based on Core-shell technology with high UV-resistance and excellent outdoor behaviour.

• **Mowilith® LDM 2801 NANO:**

Take a look at the penetration properties of our NANO dispersion (slides 13-15) compared to other Technologies; an advanced option for the primer sector, concrete, wood and other substrates. Not only as primer, this product can be used as top coating, adhesion promoter and as an additive.

VINYLACRYLIC

• **Mowilith® LDM 5205 :**

Vinylacrylic with $56\% \pm 1$ solid content, excellent cost benefit for interior paints, satin paints with high quality, high durability, gloss and hardness



Mowilith® LDM 6778 & LDM 5205

A perfect choice for Decorative Paints



STYRENE ACRYLIC FOR HIGH PERFORMANCE – Mowilith® LDM 6778 (APEO-free)



- Mowilith® LDM 6778 is designed for decorative paints and for the use of floor paints due to its high abrasion resistance. Mowilith® LDM 6778 is an universal binder suitable for various coatings in the medium to high PVC range. The dispersion is especially suitable for applications with high demands regarding water resistance and improved scrubability.
- This binder is appropriated for textured coatings, sealer and waterproofing coatings.
- It has an incorporated coalescent to reduce the MFFT (Minimum Film Forming Temperature), is APEO-free and also Ammonia and Formaldehyde-free.

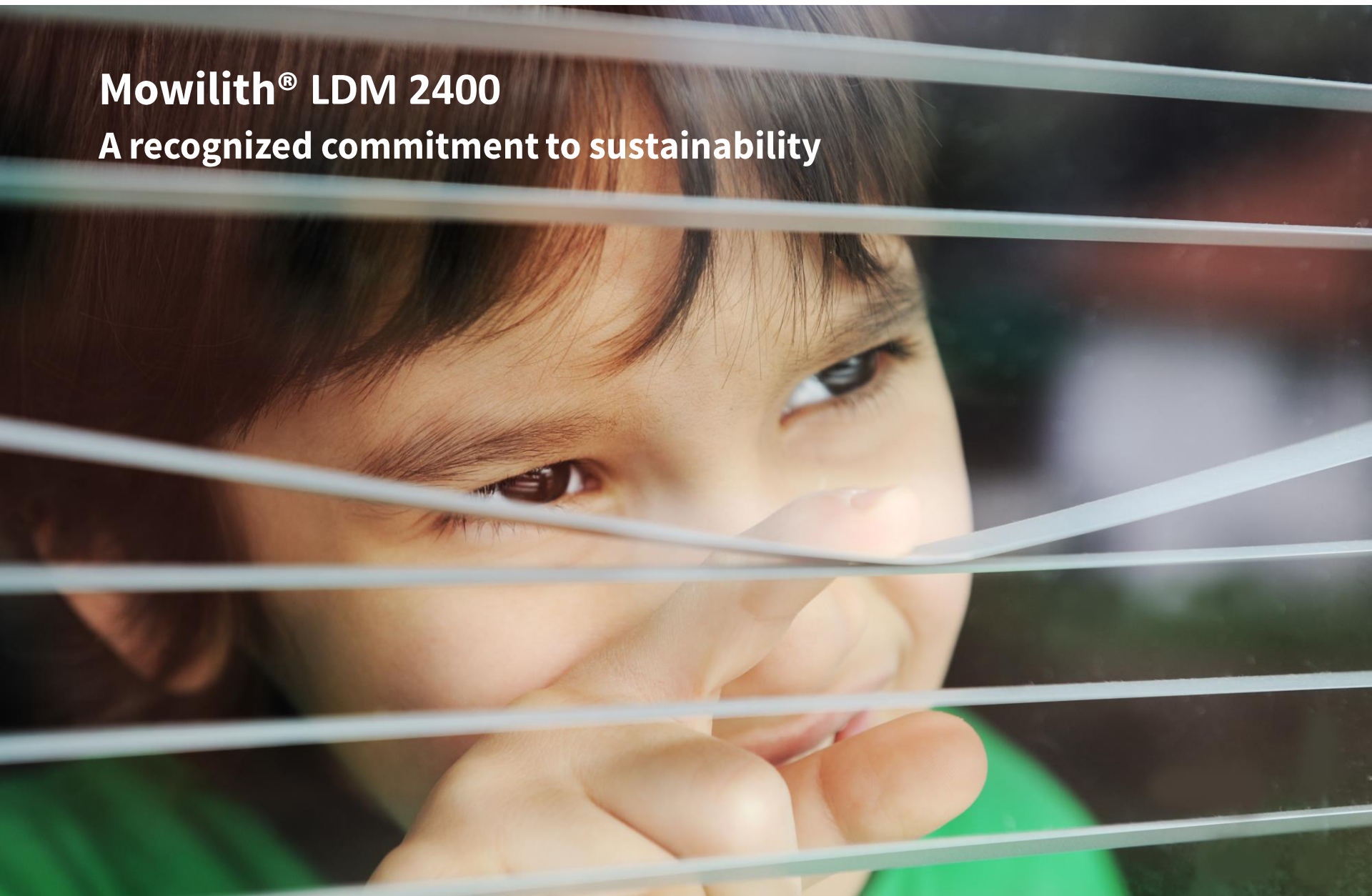
VINYLACRYLIC WITH HIGH FILLER ACCEPTANCE – Mowilith® LDM 5205



- Appropriate for interior and exterior paints
- High filler acceptance
- High mechanical resistance
- Specially developed for high PVC and satin paints
- High abrasion resistance
- Very good compatibility with acrylic thickeners
- With a MFFT of approx. 6°C and 55±1 % solid content.
- Due to its high pigment and filler acceptance can be used for textures and stucco with good durability.

Mowilith® LDM 2400

A recognized commitment to sustainability



Mowilith® LDM 2400 -Terpolymer for Low- and Zero-VOC paints



Children, babies, school areas, hospitals or even a fresh indoor air quality at home?

These are very good reasons to improve the quality of your indoor air with eco-advanced paints at home, including your long-term health.

Choosing a paint that's low in volatile organic compounds (VOCs) or, even better, zero-VOC and caring about your health.

But keep in mind that even paints labeled "low" or "zero" VOC aren't always created equal. The current standard for a paint to be labeled low-VOC requires that it have fewer than 250 g/L according to EPA Environmental Protection Agency and 50 g/L by the Greenseal organization; zero-VOC paints have to meet a less-than 5 g/L requirement.

Mowilith® LDM 2400 and **Mowilith® LDM 2401** attend the requirements for LOW and Zero-VOC and additional attend all the 7 pillars in our LOW-EMISSION CONCEPT (see details of concept in our global brochure and next slides)

RELATÓRIO DE ENSAIO N° 1 033 668 - 203

CLIENTE: Laboratório de Análises Químicas - CMQ - IPT

NATUREZA DO TRABALHO: Determinação da massa específica

REFERÊNCIA: Solicitação de 01/06/2012

1 DESCRIÇÃO DO MATERIAL

Fornecido pelo cliente com a seguinte designação: "LAQ 3659/12", recebido em 01/06/2012 e identificado no laboratório como LCL 368/12.
Quantidade aproximada de material: 100mL.

2 MÉTODO UTILIZADO

ASTM D 4052-11 (CMQ-LCL-PE-021).

Equipamento:

Densímetro digital, cód.: 38744, Validade da calibração: jan/2014.

3 RESULTADO

Massa específica a 25°C - g/mL 1,2540

São Paulo, 06 de junho de 2012.

Centro de Metrologia em Química
Laboratório de Combustíveis e Lubrificantes

Eng. Química Lúcia A. de Azevedo
Supervisora do Serviço
CREA nº 0801933876 - RE nº 6846.3

Centro de Metrologia em Química
Laboratório de Combustíveis e Lubrificantes

Química MSc. Heloise Burkhardt Gronoff
Responsável pelo Laboratório
CRQ 04118212 - RE 7761.4

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Terpolymer that attend Norm GS-11 for LOW and Zero-VOC

The Green Seal organization sets much more stringent standards than the EPA for acceptable VOC levels in paint.

Due to an advanced technology and post-treatment during polymerization process our product **Mowilith® LDM 2400** was certified by the IPT-Institute attending the Green Seal NORM GS-11 with a value of $1.2 - 1.4 \pm 1$ g/L VOC.

Tabela 1 – Resultado da análise do teor de COV

Material	Compostos orgânicos voláteis (COV) - (g.L ⁻¹)
Tinta Ecológica - Padrão	$1,2 \pm 0,1$

**Mowilith® LDM 2270 - Your best option for
hydrophobic paints**



Hydrophobic paints based on Mowilith LDM 2270



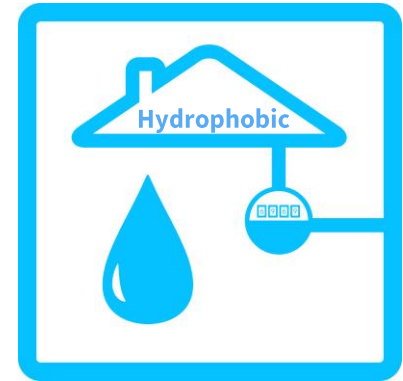
What is an Hydrophobic Paint ?

Hydrophobic Paints avoid water or moisture penetration giving maximum protection to mineral substrates, cement, concrete, bricks and other surfaces

- Hydrophobic paints based on Mowilith® LDM 2270 protect the surface forming a continuous barrier

Characteristics

- Surface tension that provides a repellency or pearl-effect
- Protects the surface from moisture and other agents
- High alkali resistance
- High washability
- Appropriate for satin gloss paints



Mowilith[®] LDM 2801 NANO

A proven innovation power



New Terpolymer for the primer sector – Mowilith® LDM 2801 NANO



Terpolymer Mowilith® LDM 2801 NANO

For the next generation of coatings and primers, Mowilith® LDM 2801 NANO is a new product based on nanotechnology. Due to its nanoparticle size between 35 – 60 nm and a Tg (Glass temperature) of 0 – 5 °C this product can penetrate and seal the substrate more than conventional market primers or diluted dispersions.



Substrates

- Wood
- Concrete
- Gypsum
- Mineral Substrates

New Terpolymer for the primer sector – Mowilith® LDM 2801 NANO



Features and benefits

- New generation of terpolymer
- Eco-advanced technology
- APEO-free
- Superior penetration and adhesion for primers and sealers
- Zero coalescent demand
- Low-VOC
- Good alkali resistance
- For mineral substrates and wood

Not only as primer, this advanced Dispersion can be uses as:

THE TOP KEY APPLICATIONS



Penetration
primer



Top coating



Adhesion
promoter



Additive

Mowilith® DM 774

High performance for exterior coatings



Success case for Acrylics

Mowilith® DM 774 – PURE ACRYLIC WITH EXCELLENT PERFORMANCE



Recommended uses

- Gloss Paints
- Sheen Paints
- Paving Paints
- Wood Stains and Varnishes
- Roof Coatings
- Waterbased Metal Primers

Mowilith® DM 774 is particularly suitable as a binder for gloss, sheen, roof and wood coatings. Due to its excellent adhesion even under humid conditions it can be used in the manufacture of metal coatings, primers and brick sealers. It has excellent alkali and water resistance which makes it suitable for application over fresh plasters and cementitious substrates. Results of accelerated and outdoor weathering tests demonstrate that coatings based on **Mowilith® DM 774** exhibit excellent resistance to UV radiation.

Mowilith® LDM 2250

A core-shell technology with high UV- and Water-resistance



Mowilith® LDM 2250 - Terpolymer based on Core-shell technology

HIGH PROTECTION FOR WOOD AND COATINGS



As alternative to pure acrylics we offer for the wood and coating sector a new product based on 3 monomers and Core-shell technology.

Applications

- Wood lacquers and varnishes
- Wood stains
- Exterior coatings with high water resistance
- Roof coatings
- High gloss paints

Key properties

- High durability
- Alternative to pure acrylics
- Excellent water and blocking resistance
- High gloss
- Excellent UV-resistance



Low Emission Concept

A recognized commitment to sustainability



LOW-EMISSION CONCEPT



Our Low-Emission Concept comprises seven pillars with the main focus of offering environmentally advanced products such as our water based Mowilith® Emulsions, free of plasticizers and solvents, our APEO-free dispersions for special applications and our new terpolymers for the development of low-odor paints and low-VOC formulations.

This Concept is based on a compilation of the main requirements of recognized Institutes and organizations for eco-advanced solutions.

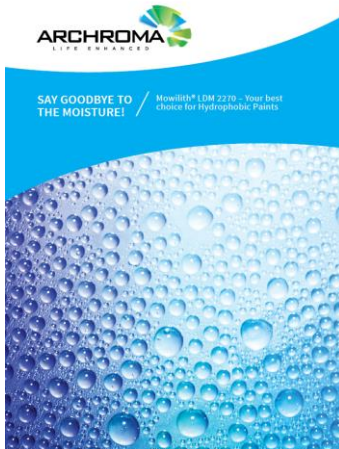
The 7 pillars of the LOW-EMISSION CONCEPT are:

- APEO-free
- Low-Odor
- Solvent-free
- Low-Formaldehyde
- Low-VOC / Zero-VOC
- Ammonia-free
- Non-toxic Compounds

Key products Promotional material

These material can be downloaded in our internal Emulsions-Sharepoint or requested to our Archroma business units globally

Mowilith LDM 2270



Mowilith LDM6778



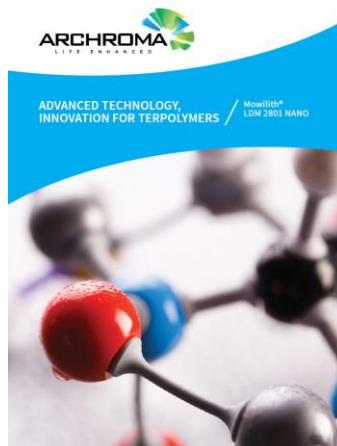
Mowilith LDM 2250 / DM 774



Mowilith LDM 5205



Mowilith LDM 2801 NANO



Mowilith LDM 2400

