BULLCREM LACK
POWDER COATINGS
SAVID
STABILIMENTO E SEDE LEGALE
Via del Lavoro, 20 - 31039 Riese Pio X (TV) - Italy
Tel: +39 0423 755 547 - www.bullcrem-lack.com

ISO 9001 BUREAU VERITAS Certification

PRODUCT TECHNICAL DATA SHEET

Edition: 02/2026

CODE: **QLI110020001** | DESIGNATION: **PES GIALLO L 1002**

APPROVAL: QUALICOAT Class 1 (Approval N° P-1541)

Product Description

Thermosetting powder coating based on saturated polyester resins, selected additives, and pigments with high thermal and photochemical stability. The system is specifically formulated for outdoor architectural and industrial applications, ensuring excellent gloss retention, colour stability, and weather resistance.

Fields of Use

Architectural aluminium extrusions and sheets (facades, doors, and windows), street furniture, garden furniture, road signage, and metallic artifacts intended for outdoor exposure.

Chemical-Physical Characteristics of the Powder

- **Surface Appearance:** Smooth / Gloss
- **Color:** Yellow 1002
- **Gloss (60°):** 80 – 90 gloss
- **Theoretical Density:** 1.45 - 1.65 g/cm³
- **Average Particle Size (d50):** 35 - 45 µm (LASER spectrometry method)
- **Fluidity (SAMES):** > 140
- **Storage and Stability:** 36 months in original sealed packaging, stored in a dry environment at a temperature < 30°C and protected from heat sources/direct light.

Theoretical Consumption Calculation:

Consumption (g/m²) = Average Specific Gravity (g/cm³) × Required Thickness (µm)

Coating Performance (Test Conditions)

All application tests are performed under standardized laboratory conditions. Mechanical tests are conducted on AA 5005-H24 aluminium alloy panels (thickness 0.8 - 1.0 mm). Corrosion tests are conducted on AA 6060 alloy panels with a dry film thickness complying with QUALICOAT requirements (60 - 80 µm).

1. Mechanical and Adhesion Properties

Test / Property	Reference Standard	Requirement / Result
Adhesion (Cross-Cut)	EN ISO 2409 (2 mm pitch)	Gt0 (No detachment)
Erichsen Cupping Test	EN ISO 1520	PASS ≥ 5 mm
Mandrel Bending Test	EN ISO 1519 (Cylindrical)	PASS 5 mm (No cracks)
Impact Resistance	EN ISO 6272-2 / ASTM D2794	PASS 2,5 Nm (Indirect Impact, indenter Ø 15,9 mm)
Buchholz Hardness	EN ISO 2815	> 80

2. Chemical, Corrosion and Weathering Resistance

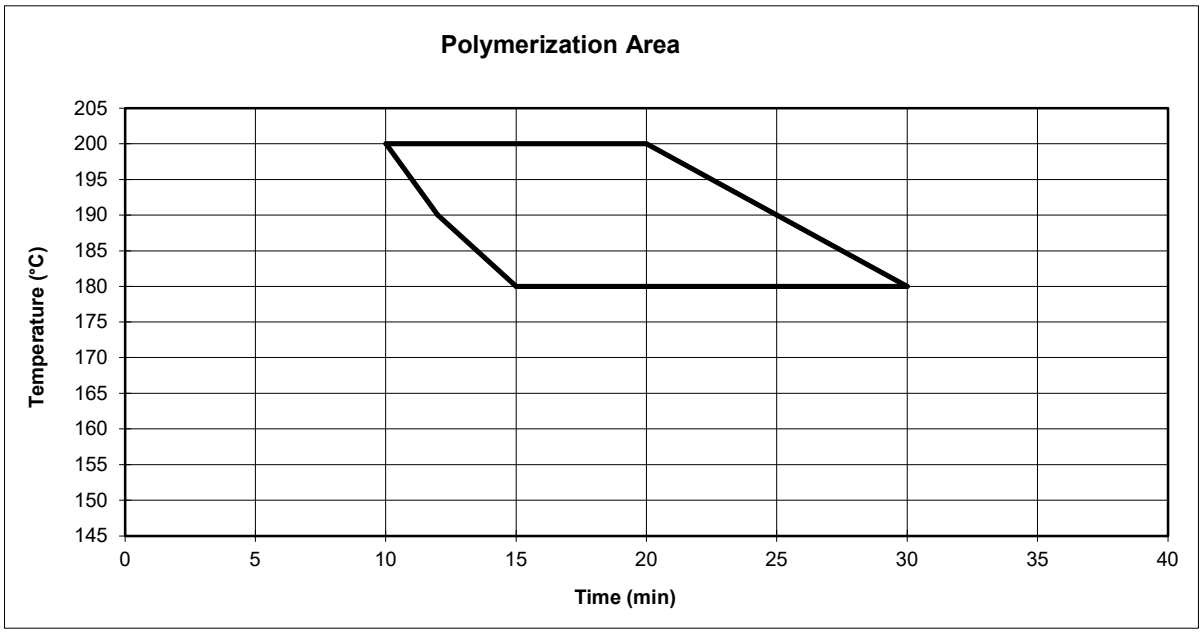
Test / Property	Reference Standard	Specifications and Acceptance Limits
UV-B Weathering	EN ISO 16474-3 (ex ISO 11507)	QUV B 313 lamps (300 hours) → Gloss Retention > 50%
Xenon-Arc Weathering	EN ISO 16474-2	1000 hours exposure → Gloss Retention > 50%
Natural Weathering	ISO 2810	Florida exposure (1 year) → ΔE and gloss parameters comply with Qualicoat Cl. 1
Acetic Acid Salt Spray (AASS)	EN ISO 9227	1000 hours → Blistering ≤ S2 (ISO 4628-2); max infiltration ≤ 1 mm per side

Test / Property	Reference Standard	Spetifications and Acceptance Limits
Moisture Resistance	EN ISO 6270-2	1000 hours (Humidity chamber) → No macroscopic alterations; blistering ≤ S2 (ISO 4628-2)
Humidity Atmosphere with SO2	EN ISO 22479 Metod B	24 cycles (Kesternich) → Infiltration ≤ 1 mm; blistering ≤ S2 (ISO 4628-2)
Mortar Resistance	EN 12206-1	No change in appearance or detachment after 24 hours of contact
Reaction to Fire Euroclass	EN 13501-1:2018	Classification A2, s1, d0 for dry film thicknesses ≤ 120 µm
Gross Calorific Value	EN ISO 1716:2018	PCS Value within the range 17 – 27 MJ/kg

Curing Specifications (Effective object temperature)

- **180°C:** 15 – 30 minutes | **190°C:** 12 – 25 minutes | **200°C:** 10 – 20 minutes

Technical Notes: In case of using gas-fired direct-flame ovens, please contact our technical support service in advance.



STABILIMENTO E SEDE LEGALE
Via del Lavoro, 20 - 31039 Riese Pio X (TV) - Italy
Tel: +39 0423 755 547 - www.bullcrem-lack.com

Application Guidelines

- **Surface Preparation:** The metallic substrate must undergo industrial degreasing and deoxidizing cycles. To maximize outdoor corrosion resistance, the application of a suitable chemical conversion treatment is recommended (e.g., chrome-free passivation or QUALICOAT-approved phosphochromating).
- **Spraying Techniques:** Suitable for application with automatic or manual electrostatic systems, using both Corona and Tribo charging methods.
- **Compatibility:** Do not mix this product with powder coatings of a different nature or different batches to avoid contamination, gloss reduction, or cratering phenomena.
- **Powder Recycling:** For solid colors, the powder can be recovered and recycled into the coating system, but it is necessary to use at least 70% virgin powder.
- **Safety:** Product for professional use only; consult the relevant Safety Data Sheet (SDS).

Legal Notes & Disclaimer

The information provided in this technical data sheet reflects the current state of our knowledge and results from rigorous laboratory testing. The data refer exclusively to the materials described and do not exempt the user from performing preventive checks on their own production line in relation to specific process variables. We reserve the right to modify technical data without prior notice within the framework of continuous product improvement.