

POLYARMOR®

THERMOPLASTIC COATINGS

Many objects and infrastructures in our daily lives are exposed to harsh elements, whether it is climatic conditions, continual use or extreme corrosive attacks.

The goal is to develop a coating that is durable and warm-to-the-touch without sacrificing flexibility and durability.

POLYARMOR® is a single layer thermoplastic coating solution used in hundreds of different applications with a glossy yet durable finish.



OVERVIEW

How does it **work**?

POLYARMOR® can be formulated as either functionalized polyethylene copolymer for a flexible, tough, and highly durable plastic coating. It can be

applied by fluidized bed, electrostatic spray, flame spray, or extrusion.

Main Features

- The most versatile thermoplastic coating for extensive market applications.
- Repairable coating for extended product life.
- Unique one layer, primer-less coating.
- Chemical, corrosion, and abrasion resistance.
- Sound and electrical insulation.
- Little to no maintenance for reduced costs.

TYPICAL APPLICATIONS

CONSUMER GOODS

- Recreational

ARCHITECTURAL

- Outdoor Furniture
- Fencing, Railing

COLOR OPTIONS

Stock colors

Select one of the many stock colors that are readily available for processing.

Color reference chart

Get inspired from a broad range of standard colors. Request a RAL fan deck or ask one of our experts

Custom formulations

Talk to your coating expert regarding custom formulations to fit your exact needs.

SUPPORT

Compliance

POLYARMOR® can be formulated to be compliant with certain guidelines. Ask our experts to see what different types of compliance, certification, or accreditation is available in your area.

Care & maintenance

To ensure the life of your asset is maximised, a simple and regular maintenance program should be implemented.

Contact our experts for specific tips and advice of cleaning.

Troubleshooting

We stand by our products, even when things don't go quite as planned. From cleaning and phosphating all the way to the final cured film appearance, we are here to help address your issues with proven solutions.

Contact our experts for tailored support.

PROVEN PERFORMANCE

TYPE	METHOD	RESULT
TENSILE STRENGTH	ASTM D638	3496 psi (24 MPa)
ELONGATION	ASTM D638	414 %
VICAT SOFTENING POINT	ASTM D1525	162 °F (72 °C)
IMPACT, DIRECT/RESERVE (INCH LBS)	ASTM D2794	160/160
IMPACT RESISTANCE	ASTM G14 - 04	<77 in.lb. if tup weight 3.2 l
TABER ABRASION	ASTM D4060	28 mg loss, CS10 wheel & 61 mg loss, CS17 wheel
ADHESION	ASTM D4541	>2000 psi (13.78 MPa)
CATHODIC DISBONDMENT	ASTM G95-07	5 mm Average Radial Dispondment
FLEXIBILITY	ASTM D522	1/8 in (3.2 mm), no cracks (>32%) (Conical Mandrel)
SALT SPRAY	ASTM B117	>2000 hrs. No significant under cut or creep
Q-PANEL ULTRAVIOLET (QUV)	ASTM G53	>2000 hrs, No significant change in color or gloss.
HIGH IRRADIANCE XENON-ARC	JIS K 5600-7-7:2008	>1000 hrs, No significant change in color or gloss.
HUMIDITY RESITANCE	ASTM D2247	No blistering or loss of gloss after 1000 hours.
VOLATILE ORGANIC COM- POUNDS (VOCS)		ZERO



FORMULATING THE RIGHT MIX

For more than 45 years, the Protech Group has been developing and manufacturing coatings, paints, and specialty materials. Through quality and innovation, we formulate the right mix to protect and enhance what matters most to our customers. The Protech Group products are manufactured in more than 20 sites worldwide. We serve our customers in countless markets and industries, including construction, infrastructure, transportation, consumer goods, and healthcare.



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