

Crystal Protect 150



Technical Data Sheet

PRODUCT DESCRIPTION

Crystal Protect is a 150µm glossy, optically clear, aliphatic PU film coated on one side with a permanent adhesive.

CONSTRUCTION

Face material:

150µm polyurethane (PU) film protected with a casting sheet (60µm PET)

Adhesive:

Permanent acrylic adhesive.

Liner:

36µm PET siliconized filmic liner.

TYPICAL USES

Totally invisible thanks to its exceptional transparency Crystal Protect 150 is designed for partial or full vehicle protection. The film is specially designed to reduce stone chipping and insect damage on vehicle painted surfaces, for protecting side mirrors, car underbodies, spoilers, rocker panels, etc. It offers equal protection on new or used vehicles when applied to fully cured painted surfaces.

Crystal Protect is a paint protection film with self-healing property. By self-healing we mean the ability to recover under sunlight or another source of heat (e.g. heat-gun) from mar or slight abrasion, not to major key scratches!

EXPECTED DURABILITY

Expected durability of the unprocessed product is up to:

	Zone 1	Zone 2	Zone 3
Vertical exposure	8 years	5 years	2 years
Horizontal exposure	4 years	3 years	1 year

This information is based on successful real life experience and artificial aging according to ISO 4892-3.

Exterior boat application : above data reduced by 30%

Zone 1: North, West, Central & Eastern Europe, North America (excl. desert areas of the USA : Arizona, California, Florida, Nevada, New Mexico, Texas, Utah, as well as Mexico which all belong to zone 3)

Zone 2: South Europe, Central & South America, Asia Pacific, Australian South coastal area (from Perth to Brisbane), New Zealand, all geographical area in Zone 1 which are above 1000 meter altitude

Zone 3: Greater Middle East (e.g. Egypt, Israel, Iran, Maghreb countries, UAE, ...), Africa, Australian Desert areas & North of Perth-Brisbane coastal area, USA (Arizona, California, Florida, Nevada, New Mexico, Texas, Utah), Mexico

Note : Exposure to severe temperatures, ultra-violet light as well as conditions in Southern European countries, tropical, sub-tropic or desert regions will cause more rapid deterioration. This also applies to polluted areas, high altitude and south facing exposure's instructions.

SHELF LIFE

2 years stored at 15 to 25°C and ± 50 % relative humidity.

PHYSICAL PROPERTIES (Typical values)

Thickness (mm) (Film + adhesive) : 0.2 ISO 534
Face Material Data, 23°C DIN ISO 527-3

Tensile strength : > 40 N/15mm

Elongation at break : > 150 %

Adhesive Data, 23°C FTM 1

Peel adhesion 180° on stainless steel (N/25mm)

- 20 min. residence: 17

- 24-hour residence: 22

Dimensional stability FTM 14

Shrinkage : < 0.4 mm

Temperature ranges

Application : min +10°C

End-use : - 40°C to + 120°C

Solvent and chemical resistance

Resistant to water and detergents.

Limited resistance (not recommended for continuous exposure) to solutions containing high concentrations of alcohols (>20%), gasoline and esters.

Not recommended for use in contact with aromatic hydrocarbons, chlorinated solvents, or ketones. For further technical advice, please consult with Mactac.

PROCESSING

Clean and degrease the substrate

All surfaces to which Crystal Protect 150 will be applied must be thoroughly cleaned from dust, grease or any contamination.

Application

Remove the casting sheet if possible a few hours prior to applications.

Use the wet application method avoiding using solutions containing more than 10-15% isopropyl alcohol (IPA).

Follow instructions given in the "Application guide for Paint Car Protection Film", which is posted on our internet website www.mactac.eu

Removability

Once heated at 60 °C, Crystal Protect 150 is easy to remove. Eventual adhesive residues can be removed thanks to isopropyl alcohol. Removability is warranted only on original manufacturer paints.

Important remarks

The self-healing performance is only fully achieved a few hours after casting sheet removal. The compatibility with paints and lacquers should be tested by the end-user, prior to use.

The compatibility with other application liquids or gels than those recommended in the "Application guide for Paint Car Protection Film" should be tested by the end-user, prior to use.



IMPORTANT NOTICE

All MACTac products are subject to careful quality control throughout the manufacturing process and are warranted to be of merchantable quality and free from manufacturing defects.

Published information concerning MACTac products is based upon research which the Company believes to be reliable although such information does not constitute a warranty.

Because of the variety of uses of MACTac products and the continuing development of new applications, the purchaser should carefully consider the suitability and performance of the product for each intended use, and the purchaser shall assume all risks regarding such use. The seller shall not be liable for damages in excess of the purchase price of the product nor for incidental or consequential damages.

All specifications are subject to change without prior notice.