

Torian LightShield TPU Light Protection Film

Professional Application Guide

(For certified installers and advanced detailing professionals)

The Torian LightShield Series is a premium range of thermoplastic polyurethane (TPU) headlight protection films designed to provide both functional protection and cosmetic enhancement for modern automotive lighting. Combining advanced impact resistance with stylish optical tint finishes, LightShield delivers the perfect balance of durability, clarity, and design, ideal for custom black packs and motorsport aesthetics.



✓ Key Features

- High-Impact TPU Construction that protects headlight lenses from stone chips, debris, and road abrasion.
- Self-Healing Surface Technology that eliminates light surface scratches and swirl marks with gentle heat or sunlight.
- UV, Weather & Chemical Resistant that will prevent yellowing, fading, or cracking for long-lasting optical performance.
- Hydrophobic Coating that repels water, dust, and grime for easier cleaning and improved visibility.
- Optically Clear Adhesive System to ensure distortion-free light projection and flawless finish.
- Easy Installation & Clean Removal the flexible TPU allows precise application and residue-free removal, ideal for customisers and professional installers.
- Enhances vehicle aesthetics with a choice of stylish tint levels.

- Provides protection from impact damage, extending the life of expensive headlight units.
- Allows easy personalisation without permanent modification.
- Ideal for motorsport, black pack, and premium vehicle styling applications.
- Maintains optical clarity and beam performance in all lighting conditions.

✓ 1. Tools Required

- Spray bottle with Slip Solution (Distilled water + 2–3 drops of baby shampoo per litre).
- Tack Solution (Distilled water + 10% IPA).
- Heat gun (adjustable, low to medium setting).
- PPF squeegees – hard and soft edge.
- Microfibre towels.
- Sharp precision blade or scalpel.

✓ 2. Inspection & Cleaning

- Check compatibility with headlight or tail light casing. (beware on Porsche)
- Ensure lights are free of cracks, chips, or oxidation before installation.
- Confirm the film type and tint level are compliant with local road regulations.
- Wash the surface with a pH-neutral cleaner, then wipe with isopropyl alcohol (IPA 70%).
- Use lint-free microfibre cloths — any residue can cause adhesion issues.
- Avoid silicone-based cleaners or waxes before installation.
- Application Temperature: 18°C–28°C (64°F–82°F)
- Humidity: Below 70%
- Work in a clean, dust-free, well-lit environment.

✓ 3. Application Steps.

Step 1 – Film Preparation

- Measure and pre-cut film with 10–15mm excess around the light housing.
- Handle the film using gloves to avoid fingerprint contamination on adhesive side.

Step 2 – Wet Application

- Mist both the light casing and adhesive side of the film with the slip solution.
- Position the film centrally over the light, ensuring even coverage and alignment.

Step 3 – Initial Positioning

- Gently position and slide the film into place.
- Anchor the film at the centre using firm squeegee strokes.
- Work outward in smooth, overlapping motions to remove slip fluid and air.

Step 4 – Conforming to Shape

- Apply gentle, controlled heat (50–70°C) to soften the TPU and activate its elasticity.
- Use your squeegee or gloved hand to guide the film into recesses, curves, and corners.
- Avoid overstretching — allow the film's elasticity to conform naturally.

Step 5 – Tack & Edge Sealing

- Once positioned, switch to tack solution and squeegee out remaining fluid.
- Post-heat all edges to 80–90°C to ensure full bond and edge memory set.
- Trim excess film with precision, maintaining a 1–2mm offset from light edges.

Step 6 – Final Inspection

- Check for trapped moisture or air pockets.
- Any minor haze or small bubbles will dissipate within 24–48 hours.
- Wipe surface clean with a dry microfibre cloth.

✓ 4. Aftercare & Maintenance

- Do not wash or expose the vehicle to rain for 24 hours post-installation.
- Avoid high-pressure washing for 7 days.
- Clean only with pH-neutral shampoo and a soft microfibre mitt.
- Do not use abrasive pads or ammonia-based cleaners.
- The film's self-healing properties can be reactivated using warm air or sunlight.
- Maintain surface protection with Torian PPF NanoShield Sealant or hydrophobic coating every 3–6 months.

✓ 7. Summary

The series includes four distinct finishes for customised visual enhancement and protection:

Chromatic Clear-to-Black – Colour-shifting effect with dynamic depth under light

Light Grey – Subtle tint with minimal light reduction

Light Black – Balanced smoke tone for modern black-pack styling

Smoked Black – Deep, rich tint for aggressive aesthetics and strong light diffusion control

Torian LightShield is designed for decorative and protective use on off-road, display, and motorsport vehicles

Ensure compliance with local vehicle lighting and road safety regulations before use on public highways

Torian accepts no liability for improper application or use beyond recommended guidelines

Torian LightShield – The Clear Advantage in Light Protection

Engineered for performance Designed for protection

✓ For installation training please contact sales@torian.group.

Torian® Warranty

Due to the great variety of substrates and the growing number of new applications, the installer must check the suitability of the product for each application. In case of doubt, please request an expert evaluation of the compatibility of the film and the surface in question. All of the published information is based on measurements regularly performed in the laboratory. The published information does not however constitute a binding guarantee. The seller cannot be held liable for indirectly related damages and assumes no liability for claims that are higher than the replacement value of the purchased product. All specifications are subject to potential changes without prior notice.