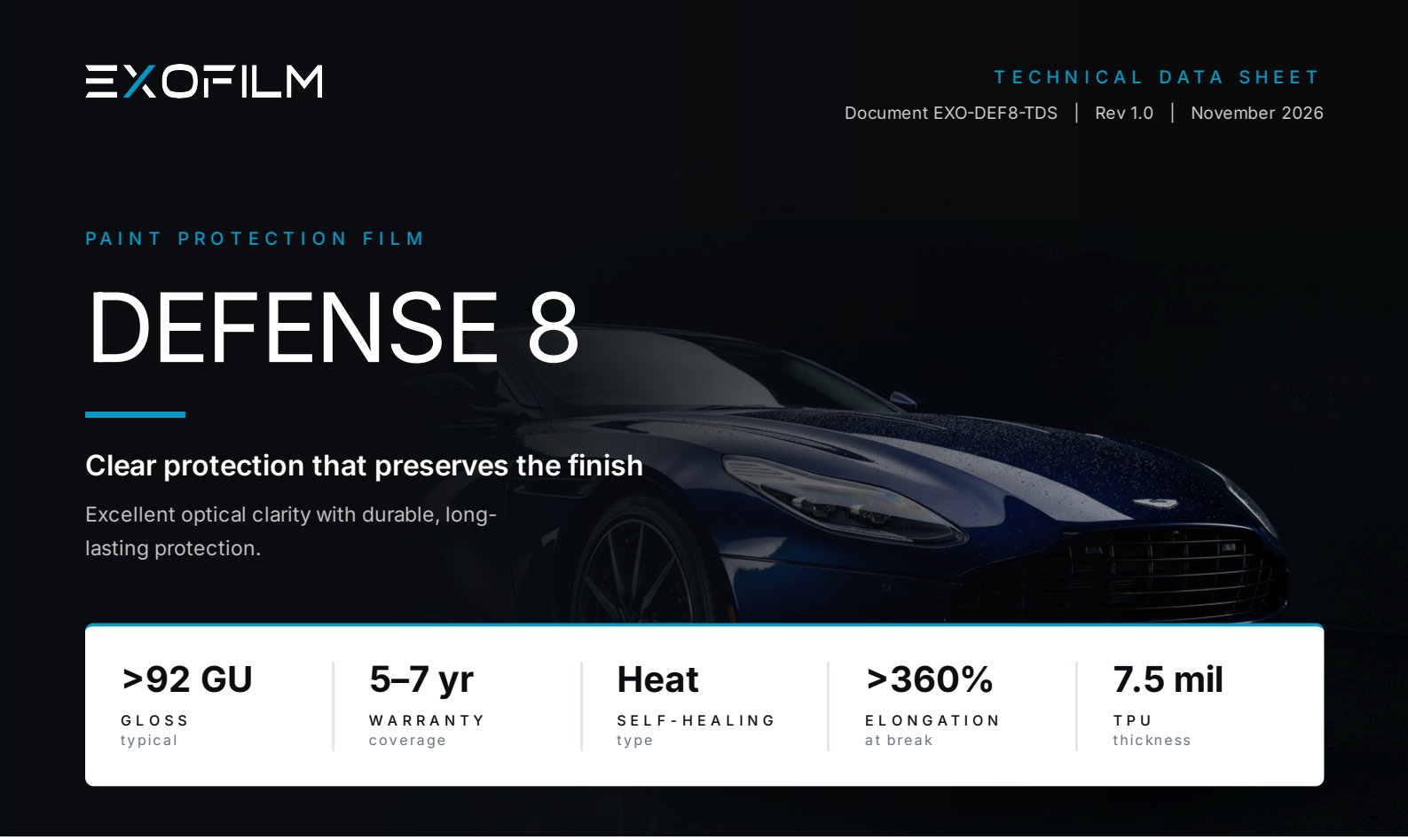
PAINT PROTECTION FILM

DEFENSE 8



Clear protection that preserves the finish

Excellent optical clarity with durable, long-lasting protection.

>92 GU	5–7 yr	Heat	>360%	7.5 mil
GLOSS typical	WARRANTY coverage	SELF-HEALING type	ELONGATION at break	TPU thickness

KEY FEATURES

Excellent optical clarity

>92 GU, maintaining the natural look of the paint.

Aliphatic TPU construction

7.5 mil TPU with >21 MPa tensile strength shields paint from stone chips and road debris.

Heat-activated self-healing

Minor surface marks disappear when exposed to heat.

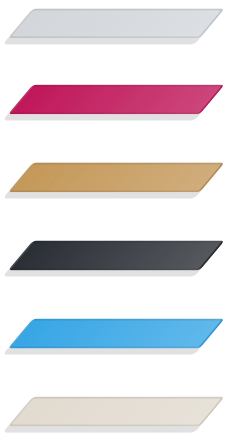
Hydrophobic ExoCoat top-coat

Repels water, dirt and contaminants for easier maintenance.

Stainguard protection

Resists staining and yellowing; no detrimental effect from common chemicals.

CONSTRUCTION



1. **Removable PET film** — Protective capsheet
2. **ExoCoat top-coat** — Hydrophobic self-healing top coat
3. **Stainguard layer** — Anti-staining, anti-yellowing layer
4. **Aliphatic TPU** — 7.5mil TPU film
5. **Pressure sensitive adhesive** — Bonds the film to the paint
6. **Release liner** — Polyester, removed before install

Exploded view, not to scale.

MATERIAL & DURABILITY

Warranty **5–7 Years**	Color **Transparent**	Capsheet material **PET**
Self-healing type **Heat Healing**	Liner **Polyester**	Hydrophobic **Yes**

Typical values for reference; not specifications.

DEFENSE 8 | CLEAR PAINT PROTECTION FILM

Test Results & Performance Data

SURFACE PERFORMANCE

PROPERTY	RESULT	TEST CONDITION
Stain resistance	No detrimental effect	Acetone, Gasoline, Armor All, Diesel, Motor Oil, Soap & Water, 100% Isopropyl Alcohol Immerse for 35 mins, check after 24 h for change
Anti-aging	ΔE<2, >85% gloss retention	Heat Aging, Xenon Weathering, EMMAQUA Aging Exposure to UV, IR and humidity reflecting 3 years of real life use
UV test	6000 Hours Pass	UV exposure
Gloss	>92 GU	Typical value

ELONGATION AT BREAK

typical tensile test

TPU film **>360%**

Track end = 500% elongation. Tensile strength >21 MPa.

ADHESION BUILD

20 minutes **1230 gf/inch**

24 hours **1610 gf/inch**

Peel adhesion increases 31% from 20 minutes to 24 hours. Track end = 2000 gf/inch.

MECHANICAL PROPERTIES

TPU thickness	7.5mil
Tensile strength	>21 MPa
Elongation at break	>360%
Temperature resistance	−40°C ~ 120°C
Application temperature	55–90°F (13–32°C)

ABOUT DEFENSE 8

DEFENSE, the advanced clear paint protection film (PPF) from the EXOFILM range, is engineered to provide durable, long-lasting protection while preserving the vehicle's original finish. Its high performance construction helps shield the paintwork from everyday road hazards such as stone chips, light abrasions, and environmental contaminants. With excellent optical clarity and a smooth, refined surface, DEFENSE maintains the natural look of the paint while enhancing overall surface integrity. Designed for dependable performance, it ensures the vehicle retains a clean, well-protected appearance even under regular driving conditions.

- **Stain resistance** — No detrimental effect
- **Anti-aging** — ΔE<2, >85% gloss retention
- **UV test** — 6000 Hours Pass
- **Application** — Wet only

GLOSS

>92 GU TYPICAL

WARRANTY

5–7 Years Length set by the regional EXOFILM distributor, subject to the published warranty terms.

CONTACT

EXOFILM
5900 Balcones Drive, Suite 14684
Austin, TX 78731, U.S.A.
+1 (667) 222-6567 | www.exofilm.com

NOTES

All values are typical, obtained under laboratory test conditions, and are not specifications. Actual performance varies with surface preparation, installation, environmental exposure and maintenance. Installation by trained professionals is recommended. EXOFILM may revise this data sheet without notice.