

3M Science.
Applied to Life.™

3M Automotive and
Aerospace Solutions Division

Spec'd to protect.

Every military mission is a critical mission. It takes training, precision and confidence. That's why your helicopter has to be in top-notch shape. Every rivet. Every rotor. Every detail. Keep your birds in the air with high-performance protective tapes from 3M. They're a cost-effective way to help prevent damage to helicopter rotor blades from erosion due to rain, particles and sand. Battle tested and battle ready.

Rapid repair.

Keep your helicopters flying with 3M™ Scotch-Weld™ Repair Paste 2110. This two-part urethane paste is easy to apply and can be used with 3M's protective tapes and films. Apply paste directly to the damaged area with no need to remove, rebalance or rework blades. It's as durable as the original tape application and ready to fly in as few as 6 hours — or 1 hour with applied heat.

- ▶ Designed to repair 3M polyurethane tapes and coatings
- ▶ Repairing offers significant savings over replacement
- ▶ Decrease maintenance time with on-aircraft repairs
- ▶ Excellent sand and rain erosion resistance
- ▶ Resistant to many aviation fluids



Fly flawless.

These polyurethane protective tapes have been trusted to keep helicopters flying since 1968. So trusted, they're spec'd into many military platforms. It's a simple and cost-effective way to protect helicopter rotors from erosion, abrasion and minor impact damage. They can be installed in minimal time with simple tools. They can be painted or applied over painted surfaces.

3M Legacy Rotor Blade Protection

8681HS

Approximate Applied Thickness*:
0.014 inch (0.36 mm) total thickness

Colors: Transparent, Gray
(multiple shades)

Equipment Required:
Squeegee and application spray

Slit: Skip slit or non-skip slit

8663HS

Approximate Applied Thickness*:
0.018 inch (0.45 mm) total thickness

Colors: Matte Black, Transparent

Equipment Required:
Squeegee and application spray

Slit: Skip slit or non-skip slit

Liner: Available with dual liner

- ▶ Repairable with 3M™ Scotch-Weld™ Repair Paste 2110.

▶ Cost-effective erosion protection

Related Government Regulatory and Industry Specifications

Technical Orders:

AH-64, OH-58, UH-60, AH-1, UH-1 and
CH-47 are authorized in Army technical
bulletin 1-1615-351-23.

CH-53 is authorized in Navy and
Marine tech directive.

*Excludes polyethylene liner that is removed prior to application.



Fix it before it breaks.

Get up to 10X longer life with advanced 3M™ Polyurethane Protective Tapes. These matte black polyurethane protective tapes resist puncture, tearing, abrasion and erosion. Use with pressure sensitive adhesive (HS version) or paste adhesive (NA version). They can be painted or applied over painted surfaces.

3M Advanced Rotor Blade Protection

8542HS or 8542NA

8545HS or 8545NA

Total Thickness:

8542HS: 0.022 inch

8542NA: 0.020 inch

Colors: Matte Black

Equipment Required:

Squeegee and application spray (HS version)

Vacuum paste (NA version)

Total Thickness:

8545HS: 0.042 inch

8545NA: 0.040 inch

Colors: Matte Black

Equipment Required:

Squeegee and application spray (HS version)

Vacuum paste (NA version)

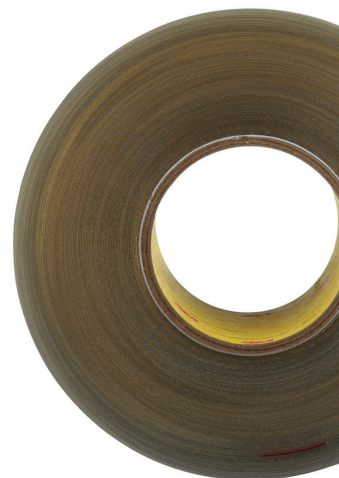
► Repairable with 3M™ Scotch-Weld™ Repair Paste 2110.

Up to
► **10X longer life**
compared to 8663HS or 8681HS



Future-proof your aircraft.

3M™ Cocure is more than a film. It's a revolutionary, erosion-resistant integrated system that can extend the life of composite parts. It withstands extreme temperatures up to 400°F and offers flexible processing options. It lasts 60X longer than paint, and it's repairable. Increase uptime. Minimize repairs. Save money.



NEW — Revolutionary 3M™ Cocure Films

8730NA

Total Thickness:
12 mil

Colors: Matte Black

Equipment Required:
Autoclave OR vacuum, paste
or film adhesive

8732NA

Total Thickness:
24 mil

Colors: Gray

Equipment Required:
Autoclave OR vacuum, paste
or film adhesive

8734NA

Total Thickness:
6 mil

Colors: Gray, Matte Black

Equipment Required:
Autoclave OR vacuum, paste
or film adhesive

► Repairable with 3M™ Scotch-Weld™ Repair Paste 2110.

Get

► **60X better**

erosion protection vs. paint



Product Specifications

3M™ Polyurethane Protective Tape

	Product	Slit	Size	Thickness	Color	3M ID Number
Advanced Leading Edge Erosion Protection	8545NA	–	Custom	40 mils	Matte Black	70-0001-1475-4
	8545HS	–	Custom	43 mils	Matte Black	70-0001-2072-8
	8542NA	–	Custom	20 mils	Matte Black	70-2022-8024-7
	8542HS	–	Custom	22 mils	Matte Black	70-0001-2073-6
Legacy Leading Edge Erosion Protection	8663HS	Skip slit	Custom	18 mils	Matte Black	70-0000-6236-7
		Non-skip slit				70-0000-6237-5
	8681HS	Skip slit	Custom	14 mils	Transparent	70-0000-8032-8
		Non-skip slit				70-0000-8099-7
Non-Leading Edge Erosion Protection	8664HS	Skip slit	Custom	6 mils	Matte Black	70-2022-7225-1
		Non-skip slit				70-2022-7303-6
Erosion Resistant Composite Surfacing	8730NA	–	Custom	12 mils	Matte Black	70-2022-8088-2
	8732NA	–	Custom	24 mils	Gray	70-2022-8120-3
	8734NA	–	Custom	6 mils	Matte Black	70-2022-8073-4

Note: NA = Non-Adhesive (film only), HS = High Shear Pressure Sensitive Adhesive

Repair Products

	Size	3M ID Number	NSN
3M™ Scotch-Weld™ Repair Paste 2110	50 mL	70-0001-1475-4	87-2500-0475-8

For information or to order, contact your 3M representative or call:

1-866-556-5714 (Government Orders)
or 1-800-235-2376 (Commercial Orders)

Installation Kit

	3M ID Number	NSN
3M™ Rotor Blade Protection Kit 8999 K11	70-2022-7197-2	1615-01-529-8073

Designed for the CH-47 Chinook but can potentially be used with other airframes. The kit includes custom cut pieces of 3M™ Polyurethane Protective Tape and application accessories — everything needed for rotor blade protection training or field installation.

Product Use: Many factors beyond 3M's control and uniquely within user's knowledge and control can affect the use and performance of a 3M product in a particular application. Given the variety of factors that can affect the use and performance of a 3M product, user is solely responsible for evaluating the 3M product and determining whether it is fit for a particular purpose and suitable for user's method of application.

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