

Kappa Clear– Fast & Slow

Technical Data Sheet (TDS)

Product Description

Endura Kappa Clear Fast or Slow are two component highly cross-linked high performance acrylic modified polyester polyurethane clear coat.

Product features:

- High gloss
- Available in 2 temperature ranges
- Extra protection for color coats
- Easy to spray
- Smooth automotive finish
- Excellent polishing qualities
- Exceptional ultraviolet light protection

Recommended Uses

Endura Kappa Clear is intended for industrial applications; either new build or maintenance.

Kappa Clear is suitable for application on all Endura topcoats and existing two component finishes.

Industries:

- Automotive applications
- Oilfield & Energy Services
 - Well Service Vehicles
 - Drilling
 - Tanks
- Cranes and Construction Equipment
- Waste and Recycling Industry
 - Garbage Trucks
- Trailers and Rolling Stock

Kappa Clear [slow] is designed for large surface areas
Kappa Clear [Fast] is designed for small parts and small surface areas.

Mix Ratio

Kappa Clear Fast:

4 parts by volume of component A [FUA0132]
1 part by volume of component B [FUB0132]

Kappa Clear Slow:

4 part by volume of component A [FUA0143]
1 part by volume of component B [FUB0132]

The recommended temperature when mixed is 68-77°F (20-25°C).

Product Characteristics

Gloss: High Gloss 90+ GU at 60 deg.

Volume Solids Mixed:

Kappa Clear Fast: 30% ± 1%
Kappa Clear Slow: 33% ± 1%

Note: The use of Supercat II is not recommended in Kappa Clear Fast.

Pot Life: 4 Hours at 77°F (25°C) and 50% RH

Note: The use of Supercat II is not recommended in Kappa Clear Fast. Use of Supercat II in Kappa Clear Slow will reduce Pot Life.

VOC Mixed (Unreduced): (EPA Method 24):

Kappa Clear Fast: 584 g/l (4.875 lb/gal)
Kappa Clear Slow: 535g/l (4.426 lb/gal)

Component A: 3 years at 77°F (25°C)
Component B: 2 years at 77°F (25°C)

Note: For unopened product

Surface Prep

Kappa Clear Fast and Slow can be applied on EX-2C Topcoat colors without sanding during their topcoat window.

Ensure that surfaces to be clear coated are free of flaws, surface contaminants and other surface imperfections.

If the EX-2C Topcoat has been allowed to cure longer than 24 hours, sanding will be required to achieve inter-coat adhesion.

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Between 24 – 48 hours: sand with 600 grit sandpaper

After 48 hours: sand with 320 – 400 grit sandpaper

Note:

- **Do not sand Metallic or Pearl colors.**
- **Do not mix Clear 100 with metallic color for final coat.**

Application Method

Kappa Clear coats can be applied as soon as the surface has cured enough to wipe with a tack cloth.

Apply 2-3 wet coats with a 15-20 minute flash off between coats.

EX-2C Topcoats require a drying time of 8 – 10 hours before application Kappa Clear.

The drying time of the Endura EX-2C topcoat can be reduced with accelerator. Refer to Super Catalyst II Data Sheet.

Note: Dry Times and wait times are subject to ambient conditions (temperature and humidity) and good airflow and film build of the topcoat.

Note: The use of Super Catalyst II with Endura topcoats will accelerate drying times.

Spray Gun Setup

Feed Type	Fluid Tip	Application Pressures (heel of gun)	Fluid Delivery
Siphon Feed	1.6-1.8 mm	40-50 psi	
Gravity Feed	<1.4 mm	30-40 psi	
Pressure Feed	1.0-1.4 mm	55-65 psi	12-14 oz/min
Air Assist Airless	9-13 Thou	1,000-1,800 psi	
Airless	11-13 Thou	1,700-3,000 psi	

Spray Viscosity

Using a Ford 4 Cup (White)

14 Seconds	Reduce as necessary*
←————→	
Conventional	Airless

Note: Spraying viscosity and thinning will depend on ambient conditions, spray equipment used, and the desired surface finish.

If required, recommended spraying viscosity is achieved by reducing with one of the desired Endura topcoat thinner/reducer.

FTH0086 – EX-2C Thinner / Reducer
FTH0090 – Slo EX-2C Thinner /Reducer
FTH0014 – Medium Topcoat Reducer

Film Build

Kappa Clear has a recommended film build thickness of:

**Wet (unreduced) 3.0 – 6.0 mils wet
(75 – 137.5 microns)**

Dry: 1.0 – 2.0 mils dry (25 – 50 microns)

Theoretical coverage at 1.0 mil (25 microns)
Average DFT: 510 ft² per gallon at 100% transfer efficiency.

Dry Times

Kappa Clear Fast:

	68°F (20°C)	86°F (30°C)	104°F (40°C)
Dust Free	2 Hours	1 Hour	30 Minutes
Polish	24hrs	18 hrs	12 hrs
Full Cure	7-14 Days		

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Kappa Clear Slow:

	68°F (20°C)	86°F (30°C)	104°F (40°C)
Dust Free	4 Hours	2 Hour	60 Minutes
Polish	24hrs	18 hrs	12 hrs
Full Cure	7-14 Days		

Note: Dry Times are subject to ambient conditions (temperature and humidity) and good airflow and film build of the topcoat.

Note: The use of Super Catalyst II with Endura topcoats will accelerate drying times.

For best results surface temperature must be 86°F (30°C) or less before topcoating.

For questions about scheduling please contact your Endura representative.

Clean Up

Clean all equipment immediately after use with Endura high strength gun wash, Endura epoxy reducer or Endura EX-2C thinner.

Follow manufacturer's safety recommendations when using any solvent.

Ordering Information (sizing)

Available in Gallons

Other custom sizes may be available.

Kappa Clear Fast:

5 quarts		
Comp A	FUA0132-030	1 Gal.
Comp B	FUB0132-020	1Qt.

Kappa Clear Slow:

5 Quarts		
Comp A	FUA0143-030	1 Gal.
Comp B	FUB0132-020	1Qt.

Environmental Conditions

For optimum coating performance product, substrate and ambient temperature should be between 68°F-77°F (20°C-25°C). To prevent condensation during application the surface temperature must be 5°F (3°C) or more above the dew point at all times.

Note: For use outside this range please contact your Endura Representative.

Specifications

Hardness	ASTM D3363	4H
Solvent Resistance	ASTM D4752	100 MEK rubs, NO failure
Impact resistance	ASTM D2794	80 in. lbs; NO failure
Flexibility	ASTM D522	1/8" mandrel bend: NO failure

Safety Precautions

Please refer to all Safety Data Sheets (SDS) before using this product. SDS sheets can be found on our website at www.endura.ca.