

GlobalStar

5E.1.K1

Scratch Resistant Gloss

HS Acrylic Polyurethane

EU/ROW082320165E.1.K1

Technical Data Sheet

Description

5E.1.K1 is a 2K Scratch Resistant gloss topcoat used for CV, Fleet, Automotive and Industrial applications

Suggested Uses

5E.1.K1 is a high quality Scratch Resistant Acrylic Polyurethane Topcoat designed specifically for the Automotive, Fleet, Transit Authority and Commercial Vehicle Industries. Its high gloss and durability are popular in environments where heavy use and difficult operating conditions are found and cost is a significant factor in the refinish process.

Field Applications

- Light to medium industrial equipment
- Recreational boat refinishes
- Construction equipment
- Airport ground support equipment
- Truck and Trailer Refinishing
- Bus and Transit refinish
- Commercial vehicle and van refinishing.

Components

5E.1. K1

OG.013

OG.030

OA.014

Base

Medium Polyurethane Reducer

Slow Polyurethane Reducer

Hardener

GlobalStar

5E.1.K1

Scratch Resistant Gloss

HS Acrylic Polyurethane

EU/ROW082320165E.1.K1

Mixing Ratio

Mix:

Mix two (2) parts base color to one (1) part 0A.014 hardener.
Reduce with selected reducer up to 5%

Pot Life

3 hours @ 20° C (68° F)

Application

Apply:

Two medium wet coats, allow 10-20 minutes flash between coats.

Spray Gun:

HVLP Gravity Feed – 1.4 – 1.6mm tip and needle
Pressure Pot HVLP – 1.0 – 1.1mm tip and needle
Air Assist Airless – 1.0 – 1.1mm tip and needle
Conventional – 1.4 – 1.7mm tip and needle

Film Build:

50-60 microns – when applied as directed.

Dry Times

Dust Free:

20 - 30 minutes @ 20° C (68° F)

Dry to Touch

3 hours @ 20° C (68° F)

Total Hardness

24 hours @ 20° C (68° F)

Force Dry

30 - 45 minutes @ 60° C (140° F)

Chemical Resistance

Maximum resistance after 7 days

Surface Preparation

Ferrous metals:

Best Case

SA2 sandblast Blow all dust and contaminates off and apply suitable GlobalStar primer, topcoat as directed.

GlobalStar Industrial

GlobalStar

5E.1.K1

Scratch Resistant Gloss

HS Acrylic Polyurethane

EU/ROW082320165E.1.K1

Second Best Case

Hot Phosphate wash system, blow dry and apply suitable GlobalStar primer, topcoat as directed.

Third Best Case

Careful mechanical abrasion. Clean all dust, oil residue, finger prints and contaminates before and after mechanical abrasion with a clean drying wax and grease removal solvent making sure all residue is removed. Apply suitable GlobalStar primer within 8 hours, topcoat as directed.

Aluminum:

Clean surface with clean drying wax and grease remover. Apply GlobalStar Epoxy Primer followed by topcoat as recommended.

Galvanized Steel:

Clean all dust, oil residue, and contaminates from surface using a Clean drying wax and grease remover.
Light Sanding (320P grit) Clean again with clean drying wax and grease remover using a wipe and dry process.
Apply GlobalStar Epoxy Primer followed by topcoat as directed.

VOC

Regulatory VOC National Rule

840 g/l

Actual VOC National Rule

540 g/l

Solids

By Volume

44%

By Weight

52%

Specific Gravity

1.16 kg/l (+ or - 0.08 g/cm²)

Coverage

GlobalStar Industrial

GlobalStar

5E.1.K1

Scratch Resistant Gloss

HS Acrylic Polyurethane

EU/ROW082320165E.1.K1

8 - 10 m² / Kg (theoretical)

Repainting

After 8-12 hours @20° C (68° F). Light sand recommended for best adhesion. After force dry recommendations are completed, allow cool down for 1 hours before sand and recoat.

Storage Stability

One year for A (base) component, 6 months B (Hardener) Component in closed package, in cool dry place, away from any heat source.

Heat Resistance

Once cured 180° C (356° F)

ASTM Information:

Test	Results	Test Methods
Abrasion Resistance	Excellent	ASTM D 4060
Adhesion	Excellent	ASTM D 4541 (1850 psi) ASTM D 3359 A/B (5/5)
Salt Spray Resistance	Excellent	ASTM B 117 (Pass 1500 hours)
Direct Impact Resistance	Very Good	ASTM D 2794 (140 in-lbs.)
Reverse Impact Resistance	Very Good	ASTM D 2794 (50 in lbs.)
Humidity Resistance	Excellent	ASTM D 2247 (Pass 1000 hours)
Film Hardness	3H	ASTM D 3363
Chemical Resistance	Very Good to Excellent	ASTM D 1308
(Rating Scale 1-10 with 10 best)	10	1% Sodium Hydrochloric Acid
	10	5% Sodium Hydrochloric Acid
	9	10% Sodium Hydrochloric Acid
	10	Ammonia
	10	Diesel Fuel
	10	1% Hydrochloric Acid
	10	1% Sulfuric Acid

GlobalStar Industrial

GlobalStar

5E.1.K1

Scratch Resistant Gloss

HS Acrylic Polyurethane

EU/ROW082320165E.1.K1

	9	10% Sulfuric Acid
	10	100% Ethanol
	10	1% Phosphoric Acid
	9	10% Phosphoric Acid
	10	MEK (Methyl Ethyl Ketone)
	10	Gasoline
	9	Skydrol
	9	DOT 3 Break Fluid
QUV A	Excellent	ASTM D 4587 (1500 hours-97%)
Initial Gloss @ 60°	93 min	ASTM D 523
Solvent Resistance	Surpassed	ASTM D 4752 (1000 MHR)
Flexibility	Excellent	ASTM D 522 Mandrel

All Technical advice, recommendations and services are rendered by the Seller gratis. They are based on technical data which the Seller believes to be reliable, and are intended for use by persons having skill and know-how at their own discretion and risk. Seller assumes no responsibility for results obtained or damages incurred from their use by Buyer in whole or in part. Such recommendations, technical advice or services are not to be taken as a license to operate under or intended to suggest infringement of any existing patent.