L5.1.K1





High Gloss Acrylic Polyurethane

US/08232016L5.1.K1

# Description

# **Technical Data Sheet**

L5.1.K1 is a medium solids high gloss urethane topcoat created for painting of all types of substrates on manufactured items, and refinish projects.

### **Suggested Uses**

As a high performance topcoat over properly prepared primed or sealed substrates and sanded stable coatings, including: Hot and Cold roll steel, Galvanized Steel, Aluminum, fiberglass, plastics and wood where:

- Outstanding Gloss and color retention are desired.
- Outstanding adhesion and flexibility is required.
- Excellent durability and chemical resistance.
- Car finish appearance.
- Excellent DOI and leveling is required.
- Excellent performance when using air-assist airless, pressure pot, cup gun and Roller or brush application.

### **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 auto and van refinish.

### Components

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Base

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GSR-F, GSR-M, GSR-S

AE.002

Fast, Medium, Slow, Urethane Reducer

Hardener

**Mixing Ratio** 

Mix:

Mix three (3) parts base color to one (1) part AE.002 hardener.

Reduce 10%-20% with Selected Reducer.

**Pot Life** 

1.5 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

Airless

Not recommended.

Film Build:

50-62.5 microns – (2.0 - 2.5 mils.) when applied as directed.

**Dry Times** 

Dust Free:

Dry to Touch

Total Hardness

Total Haranes.

Force Dry

Chemical Resistance

30 minutes @ 20° C (68° F)

1 hours @ 20° C (68° F)

24 hours @ 20° C (68° F)

40 minutes @ 60° C (140° F)

Maximum resistance after 7 days

**Surface Preparation** 

Ferrous metals:

Best Case

SA2 sandblast Blow all dust and contaminates off and apply

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directed.

GlobalStar primer within 12 hours followed by topcoat as

Second Best Case

Hot Phosphate wash system, blow dry and apply GlobalStar primer within 8 hours followed by 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, followed by topcoat as directed.

Aluminum:

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

**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
Actual VOC

578.7 g/l (4.8 lbs./gl.) 578.7 g/l (4.8 lbs./gl.)

**Solids** 

By Volume By Weight 33.7%

39.2%

**Specific Gravity** 

0.95 kg/l (7.9 lbs./gl.)

Coverage

270.4 square feet per gallon @ 100% transfer efficiency, @ 50 microns (2 mils.).

25.1 square meters per gallon@ 100% transfer efficiency, @ 50 microns (2 mils.).

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#### Repainting

After 24 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:**

1	AS INVI IIII OI III ation.		
	Test	Results	Test Methods
	Abrasion Resistance	Excellent	ASTM D 4060
	Adhesion	Excellent	ASTM D 4541 (1850 psi)
			ASTM D 3359 A/B (5/5)
1	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 1-1 <mark>0 with</mark>	10	1% Sodium Hydrochloric Acid
	10 best)	10	5% Sodium Hydrochloric Acid
		9	10% Sodium Hydrochloric Acid
		10	Ammonia
		10	Diesel Fuel
		10	1% Hydrochloric Acid
-	_	10	1% Sulfuric Acid
		9	10% Sulfuric Acid
		10	100% Ethanol
		10	1% Phosphoric Acid
	1	9	10% Phosphoric Acid
		10	MEK (Methyl Ethyl Ketone)

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	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)
<u>Flexibility</u>	Excellent	ASTM D 522 Mandrel

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