



AG800LV ANTI-GRAFFITI

CLEAR NORTHSTAR™

06112013



Superior Performance

Transportation Anti-Graffiti Clear Coat

Description:

AG800LV is a premium, high solids clear coat that offers outstanding chemical resistance, gloss retention, and long-lasting durability. Offers excellent holdout as an anti-graffiti coating on locomotives, automobiles, buses, tractor trailers and fleets. Also ideal for manufacturers and in marine applications like yachts as well as light aircraft. **AG800LV** is compliant with most known applicable air regulations when the proper activator and reducers are used. **AG800LV** has unique nonstick qualities to resist brake dust, graffiti, and other substances from sticking to the film or coating. **AG800LV** is durable enough to withstand harsh cleaners.

Suggested Uses:

As a high-performance anti-graffiti clear-coat or top-coat, as needed over any properly substrate where:

- Long term protection against graffiti of all types
- Excellent gloss retention is required after graffiti removal
- Long term protection from hard water deposits, brake dust, diesel smoke and fuel.
- Long term protection against all types of organic dust impregnation
- Long term protection against harsh chemicals and acidic residues
- Long term protection against coal dust, fertilizer and harsh alkali's

Field Applications:

AG800LV can be used in a multitude of end use applications including but not limited to:

Transit trains, buses and tram systems
Coal cars, shipping containers, chemical containment systems
Construction Equipment, Fleets, Delivery Trucks
Airport Ground Support Equipment
Fertilizer trailers, Cement Trucks, Snow
Plows

Components:

- AG800LV Base Component
- HAG800LV Activator
- S065/075/085 Zero VOC Northstar Reducers

Mixing Ratios:

Mix **1 part AG800LV** Base to **1 Part HAG800LV** Activator. May be reduced up to 10% with selected reducer.

VOC

When mixed 1 Part **AG800LV** Base to 1 Part **HAG800LV** activator, VOC is (2.1 Lbs/Gl.), (250 g/L). Adding Zero VOC Reducers will not alter VOC.

Color:

Clear

Physical Data:

- Solids by Weight 31%
- Solids by Volume 30%
- Gloss (60° Angle) 95+
- Pot Life (@77° F) (25°C) 2 hours

Cure Times (Hours @77) (25°C):

<u>Description</u>	<u>Pressure Pot</u>	<u>Air-Assist Airless</u>	<u>HVLP</u>
DFT	2.8-3.5	2.8-3.5	2-2.5
To Touch	1.0	1.0	0.5
Tack Free	2	2	1.5
To Handle	4	4	3
To Recoat	2	2	1

Hard Dry	24-48	24-48	24
Full Cure	7 days	7 days	7 days

Use of A566 Accelerator will increase rate of dry by as much as 50%. Do not use accelerator with slow reducers.

Theoretical Coverage:

495 ft² (46mtr²) @ 1 mil, (25 microns) DFT "ONE COAT" (100% transfer efficiency)
 247.5 ft² (23 mtr²) @ 2 mils (50 microns) DFT "TWO COATS" (100% transfer efficiency)

Material losses during mixing and application (transfer efficiency) should be taken into consideration when estimating job requirements. For example, HVLP has a transfer efficiency rating of 65%. So, theoretical coverage at 1 mil DFT would be 322 ft² (30 mtr²) utilizing HVLP. Transfer efficiency will vary depending upon object painted and application method.

Application Information

Surface Preparation for Direct to Metal (DTM) "NON-FERROUS METALS" Applications:

Make sure that surface to be painted is clean, dry, and free of foreign contamination. **AG800LV** should not be applied directly over carbon steel surfaces. At minimum, surface should be prepared in accordance with SSPC-SP3 Power Tool cleaning followed by surface cleaner to remove any debris or residue. After surface is clean, dry and free of all foreign contaminants, apply one medium coat of SX01 Stixx Adhesion promoter (see SX01 technical data sheet) and let flash for 15-30 minutes. Then apply two medium wet coats of **AG800LV** allowing a complete flash off between coats. Clean up equipment immediately after second coat is applied. Be sure to follow all 6H rule requirements. (U.S. regulations only).

Surface Preparation for fully cured painted surfaces in bad condition:

Testing for lifting, bubbling, and adhesion is recommended to assure compatibility with unknown coatings.

If painted surface is damaged, over worn, or already graphitized, then repainting of the surface will be necessary. Use the following guidelines and products for optimum performance and compatibility.

1. Clean surface to be painted with Solvent based wax and grease remover.
2. Sand surface down with 320-400 grit sandpaper, using an orbital sander.

3. Next do any repair or bodywork necessary and feather out around all repairs with 180 grit sand-paper.
4. Prime and block sand all repair areas using NorthStar GTP310 2K urethane primer, GTP210 2K Low VOC Primer, or QP210 Quickee Prime. (See appropriate NorthStar TDS).
5. Apply 1-2 coats of NorthStar EP210 epoxy primer and let flash off for 30-45 minutes. (See EP210 TDS)
6. Apply 2 coats of NorthStar 928 Series topcoat allowing proper flash between coats. (See 928 Series TDS)
7. Apply 2 coats of NorthStar **AG800LV** Anti-Graffiti Clear allowing proper flash between coats.

Surface Preparation for fully cured surfaces in good condition:

Testing for lifting, bubbling, and adhesion is recommended to assure compatibility with unknown coatings.

Clean painted surface by using a solvent based wax and grease remover, then a soap-based hot pressure wash system. Scotch Brite painted surface with a Gray or Green Scotch Brite pad.

Wipe and dry with NorthStar S10 Cleanwipe. (See S10 TDS)

Apply one medium wet coat of NorthStar SX01 Stixx adhesion promoter to painted surface and let flash off completely for 10-20 minutes.

Apply two coats of **AG800LV** Anti-Graffiti Clear allowing proper flash off between coats.

Graffiti Removal

S88 Erasol is an anti-graffiti remover to be used exclusively to remove graffiti from **AG800LV** anti-graffiti clear where permitted.

Using S88 Erasol to remove graffiti from any other type of coating can cause severe damage to the surface coating.

S88 Erasol anti-graffiti remover complies with all VOC regulations as a Specialty Product. Check with local authorities for further information.

Compatibility with Other Coatings:

Recommended NorthStar Series Topcoats that may be applied underneath AG800 Anti-Graffiti Clear.

MP Series
928 Series
935 Series
BC3 Series
990 Series
777 Series

Activation:

See Mix Ratio section for proper activation.

Reduction:

See Mix Ratio section for proper reduction.

Maximum Service Temperature:

250-275° F (121-135° C) for continuous service depending on color
300° F (148° C) in intermittent heat

Shelf Life:

2 years from date of manufacture. Store in a well-ventilated area. Storage conditions should be between 35° F (2° C) and 120° F (48° C).

Application Conditions:

Do not apply if the surface temperature of the object to be painted is below 45° F (7° C) or above 110° F (43° C).

Application Equipment:

Contact your Lusid Representative for specific application equipment recommendations.

Performance Properties:

Abrasion and Mechanical	Excellent	Color & Gloss Retention	Excellent
Alkalis	Excellent	Salts	Excellent
Solvents	Excellent*	Weather	Excellent
Acids	Excellent	Humidity	Excellent

(*) Contact Lusid for specific solvent testing properties

ASTM Information:

Test	Results	Test Methods
Abrasion Resistance	Excellent	ASTM D 4060
Adhesion	Excellent	ASTM D 4541 (1850 psi) Excellent ASTM D3359 A/B (5/5) Excellent
Salt Spray Resistance	Excellent	ASTM B 117 (Pass 1500 hours)
Direct Impact Resistance	Excellent	ASTM D 2794 (140 in-lb)
Reverse Impact	Excellent	ASTM D 2794 (50 in-lb)
Humidity Resistance	Excellent	ASTM D 2247 (Pass 1000 hours)
Film Hardness	4H	ASTM D 3363
Chemical Resistance (Rating Scale 1-10 with 10 best)	Excellent 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10	ASTM D 1308 1% Sodium Hydroxide 5% Sodium Hydroxide 10% Sodium Hydroxide 10% Ammonia Diesel Fuel 1% Hydrochloric Acid 1% Sulfuric Acid 10% Sulfuric Acid 100% Ethanol 1% Phosphoric Acid 10% Phosphoric Acid MEK (Methyl Ethyl Ketone) Gasoline Skydrol DOT 3 Brake Fluid
QUV A	Surpassed	ASTM D 4587 (2500 hours-98%)
Initial Gloss @ 60°	93 min	ASTM D 523
Solvent Resistance	Surpassed	ASTM D4752 (1000 MHR)
Flexibility	Excellent	ASTM D 522 Mandrel