



General Industrial Coatings

CC-B32

SHER-KEM®

High Gloss Metal Finishing Enamel

Raven Black.....	F75BC14	Low Gloss Ultra Deep Base Clear.....	F75TC1	Deep Base White.....	F75WC8
Semi-Gloss Black.....	F75BC17	Enviro Green.....	F75GC19	Equipment Yellow.....	F75YC19
Equipment Blue.....	F75LC14	International Red.....	F75RC7	Implement Yellow.....	F75YC18
Ultra Deep Base Clear.....	F75CC2	Extra White Base.....	F75WC7	Catalyst (Optional).....	V66V1020

DESCRIPTION

SHER-KEM® High Gloss Metal Finishing Enamel is a direct-to-metal coating designed to give a factory applied finish and provide the brilliant color and performance required by the large agricultural, construction equipment and trailer manufacturers. It can also be used in the general metal finishing market when a premium, long lasting finish is needed.

Advantages:

- 8 package colors provide quick hiding and color clarity needed to achieve OEM finishes
- Excellent, long lasting color and gloss retention, adding value to the life of finished products
- Superior distinctness of image reflecting deep color clarity and mirror-like finish
- Full range of more than 60 preformulated custom colors available
- One coat direct-to-metal protection
- Excellent chemical resistance including engine coolant, oil, diesel fuel and unleaded gasoline
- Easy to apply by simply reducing with a variety of readily available industrial solvents
- Ideal for coating large components due to longer open time allowing for rewetting
- For improved hardness & better overnight hardness, use V66V1020 catalyst at an 8:1 ratio. It eliminates the recoat window.
- Covers quickly due to increased volume solids
- Easy to apply with many types of spray equipment

* VOC Compliance limits vary from state to state; please consult local Air Quality rules and regulations.

An Environmental Data Sheet is available from your local Sherwin-Williams facility or at www.PaintDocs.Com.

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CHARACTERISTICS

20° Gloss:	80+
60° Gloss:	90+
F75BC17 (Semi-Gloss Black)	45-55
F75TC1 (Low Gloss UDB Clear)	15-20

Volume Solids: 36-39 ± 2 %
Varies by color

Viscosity: 20-60 secs., #5 Zahn Cup
(at 77° F)

Recommended Film Thickness:
Mils Wet 3.0-4.0
Mils Dry 1.0-1.2

Spreading Rate (no application loss):
480-625 ft.²/gal. at 1.0-1.2 mils DFT

Cure:
Air Dry or
Catalyzed Air Dry (Optional) or
Force Dry 20-30 mins. at 140-180° F

Air Drying: 1.0-1.2 mils at 77° F, 50% RH
To Touch 20-40 minutes
Tack Free 2-3 hours
To Handle 6-8 hours
Through-Dry 19-21 hours
To Recoat w/ Itself Apply second coat before 2 hours or after 21 hours

Critical recoat period may fluctuate depending on drying conditions and film thickness. Test a small area first.

Catalyzed Air Drying:
1.0-1.2 mils at 77° F, 50% RH
To Touch 30-40 minutes
Tack Free 2-4 hours
To Handle 6-8 hours
Through-Dry 6-11 hours

Catalyzed Mixing Ratio (by volume):
F75 Bases 8 Parts
V66V1020 1 Part

Catalyzed Potlife: 2 hours maximum at room temperature

Flash Point (Pensky Martens Closed Cup):
F75 Bases 80° F
V66V1020 80° F

Air Quality Data:

Photochemically Reactive
Volatile Organic Compounds (VOC), Less Exempts
(admixed, maximum) 4.20 lb/gal, 504 g/L

Recommended Storage: Inside, sealed container, 40-120° F, no freeze hazard. Protect from moisture.

Package Life: 24 months, unopened
F75BC17 & F75TC1 18 months, unopened

SPECIFICATIONS

General: All substrates should be free of mold release, oil, grease, dirt, fingerprints, drawing compounds, surface passivation treatments and any other contaminants to ensure optimum adhesion and coating performance. Consult Metal Preparation brochure CC-T1 for additional details.

Aluminum: If untreated, prime with RoHS Compliant Wash Primer, P60G10 or Industrial Wash Primer, P60G2, or Kem Aqua® Wash Primer, E61G522. Over "pre-treated" aluminum, check adhesion before use as the proprietary pretreatment may change from supplier to supplier which may have an effect on the final adhesion.

Steel or Iron: Remove rust, mill scale, and oxidation products. **For best results, treat the surface with a proprietary surface chemical treatment of zinc or iron phosphate to improve corrosion protection. Recommended for all direct to metal applications.**

For improved corrosion protection, priming is recommended. Prime with Kem® 400 Primer, E61A400 series for best hold-out or Kem-Flash® Prime, E61A45 series

Testing: The information, data, and recommendations set forth in this Product Data Sheet are based upon test results believed to be reliable. However, due to the wide variety of substrates, substrate properties, surface preparation methods, equipment and tools, application methods, and environments, the customer should test the complete system for adhesion, compatibility and performance prior to full scale application.

APPLICATION

Typical Setups

Reduction: Reduce with R2K4 (xylene) at 10-20% by volume. For more flow and open time, use R2K5 (Aromatic Naphtha 100 Flash). For faster dry time use R6K9 (acetone).

May be applied by: Conventional Spray
Airless Spray
Air Assisted Airless Spray
HVLP Spray

Conventional Spray:

Air Pressure 55 psi
Reduction 10-20% by volume

Airless Spray:

Tip 413"
Fluid Pressure 2,100-2,700 psi
Reduction 5-10% by volume

Air Assisted Airless Spray:

Air Cap AA-4
Air Assist Pressure 15 psi
Fluid Tip 1308
Fluid Pressure 1,500-1,800 psi
Reduction 5-10% by volume

HVLP Spray:

Gun DeVilbiss EXL
Air Cap 2000
Cap Pressure 10 psi max
Fluid Tip FF (0.055)
Fluid Pressure 10-25 psi
Reduction 10-20% by volume

Equipment/application guidelines are only guidelines and individual application & process parameters will dictate exact requirements.

Cleanup: Clean tools/equipment immediately after use with R2K4 (xylene), R2K5 (100 Flash), or R6K9 (acetone).

Follow manufacturer's safety recommendations when using any solvent.

Performance Tests

Substrate: Bonderite® 1000 P99X
Salt Spray Resistance Pass 200-250 hrs
(ASTM B117)
Humidity Resistance Pass 200 hrs
ASTM D2247
Conical Mandrel Pass 1/8"
ASTM D633
Impact Resistance, Direct 40 in lb
Impact Resistance, Reverse 4 in lb
ASTM D2794
*Pencil Hardness – ASTM D3363
Not Catalyzed 2B
Catalyzed HB
Chip Resistance 5A
45° So. Florida Exposure, 1 Year Passes
No Gloss Loss

*Pencil Hardness may vary depending on dry film thickness, substrate and tester.

ADDITIONAL INFORMATION

1. Apply at least 1.0 mil DFT on direct to metal applications for good film integrity and good corrosion resistance.
2. For improved corrosion resistance and to maintain high distinctness of image use Kem 400 Primer.
3. For better corrosion resistance use Kem-Flash Prime. There will be a loss of distinctness of image when using Kem-Flash Prime.
4. Initial dry times are slightly slower when BAC colorants are used. No loss of dry time observed when 844 or Maxitoner® colorants are used.
5. Blocking or sticking may occur when flat surfaces are stacked before adequate drying occurs
6. Apply at temperatures above 60° F.
7. Drying time is dependent on film thickness and atmospheric conditions. Heavier film thickness causes slow drying.
8. Not recommended for dip application.
9. For increased chemical and abrasion resistance, improved hardness and better gloss and color retention SHER-KEM High Gloss Metal Finishing Enamel may be catalyzed at an 8 to 1 ratio with V66V1020 catalyst prior to reduction. Dry times are slightly slower. **DO NOT VARY CATALYST RATIO.** Read label cautions before use.
10. Addition of V66V1020, eliminates the critical recoat window. V66V1020 contains isocyanates.
11. Working pot life of catalyzed product is 2 hours maximum at room temperature.
12. Caution should be exercised when recoating with products containing aromatic, ester or ketone solvents as they may result in lifting or dulling of gloss.
13. Do not add more than 8 ounces of colorant per gallon of base. Compatible colorants are: 844, BAC and Maxitoner®.
14. **F75CC2 (Ultra Deep Base Clear) and F75TC1 (Low Gloss UDB Clear) must be tinted for use as final products. They are not designed for use as clear coats.**
15. **F75WC7 (Extra White Base) and F75WC8 (Deep Base White) must be tinted for use as final products. They are not designed for use as package whites.**
16. To quickly obtain a hard, mar-proof finish, force dry 20 minutes at 140-180° F.
17. F75RC7 (International Red) contains organic pigments and should not be force dried above 160° F because it tends to bronze above this temperature.

18. Due to the wide variety of substrates, surface preparation methods, application methods, and environments, the customer should test the complete system for adhesion and compatibility prior to full scale application.

CAUTIONS

FOR INDUSTRIAL SHOP APPLICATION ONLY

Thoroughly review the product label and Safety Data Sheet (SDS) for safety information and cautions prior to using this product.

To obtain the most current version of the Environmental Data Sheet (EDS), Product Data Sheet (PDS), or Safety Data Sheet (SDS) please visit your local Sherwin-Williams facility or www.PaintDocs.Com.

Please direct any questions or comments to your local Sherwin-Williams facility.

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