# Carbocoat® 8225

PRODUCT DATA SHEET

## SELECTION & SPECIFICATION DATA

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| **Generic Type** | Alkyd Enamel |
| **Description** | A quick-dry, low-VOC, general purpose air dry enamel that is an easy-to-use coating. This product has excellent application characteristics and fast dry properties. It can be used as a single coat, self-priming finish or with an appropriate primer to provide very good protection of steel substrates in mild to moderate exposures. It can be used for both new construction or maintenance. |
| **Features** | • Smooth, attractive, high-gloss finish<br>• Good weatherability, gloss and color retention<br>• Excellent application characteristics; spray, brush, or roll<br>• Quick dry to handle times<br>• May be applied direct-to-metal (self-priming)<br>• <250 g/l VOC |
| **Color** | Available in Rapid Tint Service; See Carboline Color Chart |
| **Finish** | High Gloss |
| **Primer** | Typically applied over Alkyd Primers |
| **Dry Film Thickness** | 2 - 3 mils (51 - 76 microns) per coat<br><br>Do not exceed 4.0 mils (100 microns) in a single coat. |
| **Solids Content** | By Volume 62% +/- 2% |
| **Theoretical Coverage Rate** | 994 ft²/gal at 1.0 mils (24.4 m²/l at 25 microns)<br>497 ft²/gal at 2.0 mils (12.2 m²/l at 50 microns)<br>331 ft²/gal at 3.0 mils (8.1 m²/l at 75 microns)<br>Allow for loss in mixing and application. |
| **VOC Value(s)** | Per EPA Method 24: 2.09 lbs/gal (250 g/l)<br><br>These are nominal values and may vary slightly with color. Product contains VOC-exempt dimethyl carbonate. Check local regulations regarding product usage. |
| **Dry Temp. Resistance** | Continuous: 200°F (93°C)<br>Non-Continuous: 250°F (121°C)<br><br>Slight discoloration and loss of gloss is observed above 200 °F (66 °C). |
| **Limitations** | Not for immersion applications or splash and spillage of acids, alkalies or solvents. |

## SUBSTRATES & SURFACE PREPARATION

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| **General** | Surfaces must be clean and dry. Employ adequate methods to remove dirt, dust, oil and all other contaminants that could interfere with adhesion of the coating. |
| **Steel** | Apply over properly primed steel.<br>May be applied direct to properly prepared steel surfaces. SSPC-SP6 is the preferred degree of cleanliness. Where abrasive blasting is not possible, hand or power tool cleaning (SSPC-SP2/3) is recommended. |

## MIXING & THINNING

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| **Mixing** | Power mix until uniform in consistency. |
| **Thinning** | Normally not required. May be thinned up to 4 oz per gallon (3%) with Thinner 225E. Use of thinners other than those supplied or recommended by Carboline may adversely affect product performance and void product warranty, whether expressed or implied. |

## APPLICATION EQUIPMENT GUIDELINES

Listed below are general equipment guidelines for the application of this product. Job site conditions may require modifications to these guidelines to achieve the desired results.

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| **Spray Application (General)** | The following spray equipment has been found suitable and is available from equipment manufacturers. |
| **Conventional Spray** | Pressure pot equipped with dual regulators, 3/8" I.D. minimum material hose, 0.052" I.D. fluid tip and appropriate air cap. |
| **Airless Spray** | Pump Ratio: 30:1 (min.)*<br>GPM Output: 3.0 (min.)<br>Material Hose: 3/8" I.D. (min.)<br>Tip Size: 0.015-0.019"<br>Output PSI: 1800-2700<br>Filter Size: 60 mesh<br>*PTFE packings are recommended and available from the pump manufacturer. |
| **Brush & Roller (General)** | Avoid excessive re-brushing or re-rolling. |
| **Brush** | Use a medium bristle brush. |
| **Roller** | Use a short-nap roller. |

## APPLICATION CONDITIONS

| Condition | Material | Surface | Ambient | Humidity |
|---|---|---|---|---|
| Minimum | 35°F (2°C) | 35°F (2°C) | 35°F (2°C) | 0% |
| Maximum | 120°F (49°C) | 120°F (49°C) | 120°F (49°C) | 95% |

This product simply requires the substrate temperature to be above the dew point. Condensation due to substrate temperatures below the dew point can cause flash rusting on prepared steel and interfere with proper adhesion to the substrate. Special application techniques may be required above or below normal application conditions.

## CURING SCHEDULE

| Surface Temp. | Dry to Touch | Dry to Recoat | Dry to Handle |
|---|---|---|---|
| 50°F (10°C) | 30 Minutes | 5 Hours | 9 Hours |
| 75°F (24°C) | 30 Minutes | 2 Hours | 8 Hours |
| 90°F (32°C) | 30 Minutes | 1 Hour | 8 Hours |

These times are based on a 3.0 mil (75 micron) dry film thickness. Higher film thickness, insufficient ventilation, high humidity or cooler temperatures will require longer cure times and could result in solvent entrapment or premature failure. Adhesion develops over a period of time. Wait 30 days before doing adhesion testing. (Note: Like many alkyd coatings this product is thermoplastic until fully cured. The film may soften as the ambient or substrate temperature is increased)

## CLEANUP & SAFETY

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| **Cleanup** | Use Thinner 2 or Acetone. In case of spillage, absorb and dispose of in accordance with local applicable regulations. |
| **Safety** | Read and follow all caution statements on this product data sheet and on the SDS for this product. Employ normal workmanlike safety precautions. |
| **Ventilation** | When used in enclosed areas, thorough air circulation must be used during and after application until the coating is cured. The ventilation system should be capable of preventing the solvent vapor concentration from reaching the lower explosion limit for the solvents used. User should test and monitor exposure levels to insure all personnel are below guidelines. If not sure or if not able to monitor levels, use MSHA/NIOSH approved respirator. |
| **Caution** | This product contains flammable solvents. Keep away from sparks and open flames. In confined areas workers must wear fresh airline respirators. All electrical equipment and installations should be made and grounded in accordance with the National Electric Code. In areas where explosion hazards exist, workers should be required to use non-ferrous tools and wear conductive and non-sparking shoes. |

## PACKAGING, HANDLING & STORAGE

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| **Shelf Life** | Min. 24 months at 75 °F (24 °C)<br><br>*Shelf Life: (actual stated shelf life) when kept at recommended storage conditions and in original unopened containers. |
| **Storage Temperature & Humidity** | 40-110 °F (4-43 °C)<br>0-100% Relative Humidity |
| **Storage** | Store indoors |
| **Shipping Weight (Approximate)** | 1 Gallon - 13.5 lbs. (6.0 kg)<br>5 Gallons - 66 lbs. (28.9 kg) |
| **Flash Point (Setaflash)** | 73 °F (23 °C) |

## WARRANTY

To the best of our knowledge the technical data contained herein is true and accurate on the date of publication and is subject to change without prior notice. User must contact Carboline Company to verify correctness before specifying or ordering. No guarantee of accuracy is given or implied. We guarantee our products to conform to Carboline quality control. We assume no responsibility for coverage, performance, injuries or damages resulting from use. Carbolines sole obligation, if any, is to replace or refund the purchase price of the Carboline product(s) proven to be defective, at Carbolines option. Carboline shall not be liable for any loss or damage. NO OTHER WARRANTY OR GUARANTEE OF ANY KIND IS MADE BY CARBOLINE, EXPRESS OR IMPLIED, STATUTORY, BY OPERATION OF LAW, OR OTHERWISE, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. All of the trademarks referenced above are the property of Carboline International Corporation unless otherwise indicated.