

# **HIGH HEAT COATING**

### **DESCRIPTION AND USES**

Rust-Oleum High Heat Coatings offer three levels of protection based on temperature range. These coatings will withstand continuous exposure to the temperatures in their posted range. General Purpose High Heat Coatings are designed for surfaces exposed to temperatures up to 400°F. Heavy Duty High Heat Coatings are designed for surfaces exposed to temperatures up to 800°F. High Performance High Heat Coatings offer the highest level of performance for surfaces exposed to temperatures up to 1200°F. Each level of protection is offered in black or aluminum.

MPI #22 Certified\*

PRODUCTS					
Description					
High Heat 1-Gal GP Aluminum (400°F)					
High Heat 1-Gal GP Black (400°F)					
High Heat 1-Gal HD Aluminum (800°F)					
High Heat 1-Gal HD Black (800°F)					
High Heat 1-Gal HP Aluminum (1200°F)					
High Heat 1-Gal HP Black (1200°F)					

### PRODUCT APPLICATION

#### **SURFACE PREPARATION**

ALL SURFACES: Remove all dirt, grease, oil, salt and chemical contaminants by washing the surface with Krud Kutter<sup>®</sup> Original Cleaner Degreaser or other suitable cleaner and water. Rinse thoroughly with fresh water and allow to fully dry. All surfaces must be dry at time of application.

STEEL: Remove loose rust, mill scale and deteriorated coatings.

UNCOATED STEEL: Abrasive blast clean to a minimum SSPC-SP-6 Commercial Grade (NACE 3) to achieve a 1-2 mil surface profile. Abrasive blast cleaned surfaces require two coats. If abrasive blast cleaning is not possible, remove all rust, scale, and deteriorated previous coatings in accordance to either SSPC-SP-2 Hand Tool Cleaning or SSPC-SP-3 Power Tool Cleaning. Steel surfaces must be clean and dry prior to coating application.

PREVIOUSLY COATED: Previously coated surfaces must be removed to bare metal. Two coats are required.

## **PRODUCT APPLICATION (cont.)**

#### **APPLICATION**

Apply only when air and surface temperatures are between 32-125°F (0-52°C) and surface temperature is at least 5°F above dew point. This coating can be applied by brush, roller or spray.

#### **EQUIPMENT RECOMMENDATIONS**

BRUSH: Use good quality natural or synthetic bristle. ROLLER: Use good quality natural or synthetic cover. AIR-ATOMIZED SPRAY:

Method	Fluid Tip	Fluid Delivery	Atomizing Pressure			
Pressure	0.055-0.070	16 oz./min.	40-60 psi			
Siphon	0.055-0.070	_	40-60 psi			
HVLP	0.043-0.070	8-14 oz./min.	10 psi at the tip			
AIRLESS SPRAY:						
Fluid Pressure		Fluid Tip	Filter Mesh			
2,100-2,800 psi		0.019-0.023	60			

#### **THINNING**

BRUSH/ROLLER: Normally not required. Use 5-10% VOC compliant thinner if needed (approximately ½ pint per gallon).

AIR-ATOMIZED SPRAY: Use 10-20% VOC compliant thinner or as needed (approximately 1½ pints per gallon). AIRLESS SPRAY: Normally not required. Use 5-10% VOC compliant thinner if needed (approximately ½ pint per gallon).

#### **CLEAN-UP**

Clean up with VOC compliant thinner.

Form: GDH-996 Rev.: 020618

<sup>\*</sup> Refer to the MPI website for the most current listing of MPI certified products.



### **TECHNICAL DATA**

# **HIGH HEAT COATING**

### PHYSICAL PROPERTIES

		GENERAL PURPOSE	HEAVY DUTY	HIGH PERFORMANCE
Resin Type		Silicone Alkyd	Silicone Alkyd	Polysiloxane Polymer
Pigment Type		Ceramic Black, Aluminum Flake	Ceramic Black, Aluminum Flake	Ceramic Black, Aluminum Flake
Solvents		Parachlorobenzotrifluoride, Mineral Spirits	Parachlorobenzotrifluoride, Mineral Spirits	Parachlorobenzotrifluoride, Xylene
Weight	Per Gallon	9.34-9.50 lbs.	10.8-11.1 lbs.	10.5-11.8 lbs.
	Per Liter	1.12-1.14 kg	1.29-1.33 kg	1.26-1.41 kg
Solids	By Weight	43.8-51.2%	40.5-53.5%	46.8-55.7%
	By Volume	36.8-39.5%	28.0-37.8%	37.6-41.1%
Volatile Organic Compounds		<420 g/l (3.50 lbs./gal.)	<420 g/l (3.50 lbs./gal.)	<420 g/l (3.50 lbs./gal.)
Recommended Dry Film Thickness (DFT) Per Coat		1.0-2.0 mils (25-50µ)	1.0-2.0 mils (25-50μ)	1.0-2.0 mils (25-50µ)
Wet Film to Achieve DFT (unthinned material)		2.5-5.5 mils (62.5-112.5µ)	2.5-7.0 mils (37.5-175µ)	2.5-5.5 mils (62.5-137.5µ)
Theoretical Coverage at 1 mil DFT (25μ)		590-634 sq.ft./gal. (14.5-15.6 m²/l)	450-606 sq.ft./gal. (11.1-14.9 m²/l)	603-659 sq.ft./gal. (14.8-16.2 m²/l)
Practical Coverage at Recommended DFT (assumes 15% material loss)		250-540 sq.ft./gal. (6.2-13.3 m <sup>2</sup> /l)	190-515 sq.ft./gal. (4.7-12.7 m²/l)	250-560 sq.ft./gal. (6.2-13.8 m²/l)
Dry Times at 70-80°F (21-27°C) and 50% Relative Humidity	Handle	1-2 hours	1-2 hours	1-2 hours
	Recoat	8-24 hours	8-24 hours	8-24 hours
Force Cure		None	After 24 hours drying, raise the surface temperature to a minimum of 300°F for one hour.	Each coat requires one hour cure at 450°F
Dry Heat Resistance		400°F (204°C)	800°F (426°C)	1200°F (648°C)
Shelf Life		5 years	5 years	5 years
COMBUSTIBLE. CONTAINS PETROLEUM DISTILLATES. HARMFUL IF INHALEI MAY CAUSE RESPIRATORY TRACT, EYE AND SKIN IRRITATION. MAY AFFECT BRAIN OR NERVOUS SYSTEM CAUSING DIZZINESS, HEADACHE OR NAUSEA. I INDUSTRIAL USE ONLY. KEEP OUT OF REACH OF CHILDREN. SEE THE PRODU SAFETY DATA SHEET (SDS) AND LABEL WARNINGS FOR ADDITIONAL SAFET INFORMATION.				

Calculated values are shown and may vary slightly from the actual manufactured material

The technical data and suggestions for use contained herein are correct to the best of our knowledge, and offered in good faith. The statements of this literature do not constitute a warranty, express, or implied, as to the performance of these products. As conditions and use of our materials are beyond our control, we can guarantee these products only to conform to our standards of quality, and our liability, if any, will be limited to replacement of defective materials. All technical information is subject to change without notice.



Form: GDH-996 Rev.: 020618