

# DURAGARD® H-250

# TECHNICAL DATA SHEET

EFFECTIVE: 7/21/20

# **PRODUCT DESCRIPTION**

#### **CHEMICAL DESCRIPTION**

Solventless Aromatic Polyurethane, Chemical Cure, ASTM Type V

# USAGE

DuraGard H-250 (DGH-250) is a 100% solids, twocomponent polyurethane coating that contains no volatile organic compounds (VOC) or solvents. DGH-250 is a highperformance polyurethane that combines the toughness and durability of cast polyurethanes (like the DuraGard W-250) with the outstanding corrosion protection of LifeLast's DuraShield product line. DGH-250 was specifically designed for applications requiring high wear and impact resistance, while at the same time maintaining good flexibility across a wide temperature range. Since DGH-250 has excellent resistance to salt and brine solutions, it is ideally suited for use on equipment operating in snowy and icy climates, and its excellent durability allows it to handle impact from sand, gravel and other road debris. DGH-250 is designed specifically to provide very fast cure times, while at the same time demonstrating excellent adhesion. DuraGard H-250 is applied using the LifeLast Cartridge System or an approved plural component spray system.

#### COLORS

Standard color is black. Custom colors available on request.

# TYPICAL APPLICATIONS

- Undercarriages
- Utility and Cargo Boxes
- Pickup Beds

# PRODUCT ADVANTAGES

#### **EXCELLENT IMPACT RESISTANCE**

Provides excellent protection against sand, gravel, rocks, tools and other equipment

#### **GREAT FLEXIBILITY**

Expands, contracts and flexes with the substrate

# EXCELLENT HYDROLYTIC STABILITY

Retains properties in moist environments

# FAST CURE TIME

Quick return-to-service times

# VERY CORROSION RESISTANCE

No primer necessary for non-immersion applications; withstands salt and brine environments

# **HIGH BUILD CHARACTERISTICS**

Application thicknesses from 20 mils to 250 mils in one application; completely encapsulates welds, rivets and edges

# **COATING SYSTEMS**

# **PRIMERS**

 Steel, Non-Ferrous Metals & Galvanized Steel, Concrete, & Wood: Self-priming, Primall-AP, Primall-125 or Primall-160

#### **TOPCOATS**

 May be topcoated with aliphatic polyurethane for color stability; check with topcoat manufacturer for compatibility

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#### TECHNICAL DATA

#### SOLIDS VOLUME

100 percent

# MIX RATIO BY VOLUME

2:1 [DGH-250 (POLYOL): Activator 2300 (ISO)]

# RECOMMENDED DRY FILM THICKNESS

20 mils up to 250 mils; thickness varies with application. Consult a LifeLast technical representative for information.

#### COVERAGE

Theoretical: 80.2 ft²/gallon @ 20 mils
Spray: ≈ 70-75 ft²/gallon @ 20 mils

# NET WEIGHT PER GALLON (BLACK)

POLYOL: 9.7 ± 0.2 lbs/gallon
ISO: 10.1 ± 0.2 lbs/gallon
Mixed: 9.6 ± 0.2 lbs/gallon

PHYSICAL PROPERTIES					
Test	Standard	Result			
Adhesion to Steel	ASTM D4541; A.2	> 2,000 psi			
Tensile Strength	ASTM D412	3,370 psi			
Elongation	ASTM D412	390%			
Flexibility	ASTM D522	No cracking or delamination – ½" Mandrel			
Salt Spray	ASTM B117	>2,000 hours			
Hardness, Shore D	ASTM D2240	64±5			

# **Cure Time** @ 70°F (21°C) - 75°F (24°C)\*

Tack Free	Recoat Time	To Immersion	To Normal Use
30 min.	< 6 hours	24 hours	12 hours

Varies by application technique, thickness & temperature

#### SHELF LIFE

12 months at recommended storage temperatures in sealed, unopened containers.

#### **STORAGE**

- Temperature
  - ♦ POLYOL: Min 50°F (10°C), Max 120°F (49°C)
  - ♦ ISO: Min 55°F (13°C), Max 120°F (49°C)
- Containers must be kept sealed in a dry environment.
- Contact LifeLast for continuous storage above 90°F (32°C)

# **SHIPPING INSTRUCTIONS**

Unheated trailer, no special requirements. Keep dry.

# APPLICATION

# **SURFACE PREPARATION**

Preparation requirements vary with application. Refer to the *DuraGard H-250 Application Specification Sheet* or contact a LifeLast technical representative for assistance.

#### MIXING

Power mix contents of POLYOL containers for a minimum of 30 minutes, making sure to remove all pigment from the bottom and sides of the container.

# GEL TIME

≈ 2 minutes @ 75°F (24°C)

# SPRAY TEMPERATURE\*

POLYOL: 120°F (49°C) - 150°F (66°C) ; ISO: 80°F (27°C) - 150°F (66°C)

\*Exact temperatures depend on spray equipment setup

# SURFACE TEMPERATURE

Min. 40°F (4°C), Max 140°F (60°C); surface should be clean, dry and more than 5°F (3°C) above dew point.

# AMBIENT CONDITIONS

- Min. o°F (-18°C), Max 120°F (49°C)
- Relative humidity should be less than 85%. Ambient air temperature must be no less than 5°F (3°C) above the dew point.

#### **SPRAY EQUIPMENT**

Refer to DuraGard H-250 Application Specification Sheet for recommended spray equipment and setup. Spray equipment must be approved by LifeLast.

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