LIFELAST®
Innovation Through Formulation

DURAGARD® W-250

TECHNICAL DATA SHEET

EFFECTIVE: 10/15/2019

PRODUCT DESCRIPTION

CHEMICAL DESCRIPTION
Solventless Aromatic Polyurethane, Chemical Cure, ASTM Type V

USAGE
DuraGard W-250 (DGW-250) is a 100% solids, two-component polyurethane coating that contains no volatile organic compounds (VOC) or solvents. DGW-250 is a high-performance urethane that incorporates the physical properties and toughness normally only found in cast urethanes. DGW-250 was formulated for applications requiring high sliding abrasion resistance and incremental impact resistance. With a hardness of Shore D50, DGW-250 has a good combination of hardness for slip and flexibility for abrasion and impact. The unique chemistry of DGW-250 has excellent hydrolytic stability and hydrocarbon resistance. DGW-250 is designed specifically to provide very fast cure times, while at the same time demonstrating excellent adhesion. DuraGard W-250 is applied by an approved LifeLast spray system.

COLORS
Standard color is yellow. Custom colors available on request.

TYPICAL APPLICATIONS
- **Trucking Industry**
- **Material Handling Equipment**
- **Slurry Pipelines and Tanks**

PRODUCT ADVANTAGES

EXCELLENT SLIDING ABRASION RESISTANCE
Provides excellent wear protection in abrasive environments

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

GOOD CORROSION RESISTANCE
No primer necessary for non-immersion applications

HIGH BUILD CHARACTERISTICS
Application thicknesses from 20 mils to 500 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

DuraGard W-250
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Technical Data

Solids Volume
100 percent

Mix Ratio by Volume
2 : 1 [DGW-250 (POLYOL) : Activator 2300 (ISO)]

Recommended Dry Film Thickness
20 mils up to 500 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 (Red)
- POLYOL: 9.3 ± 0.2 lbs/gallon
- ISO: 10.1 ± 0.2 lbs/gallon
- Mixed: 9.6 ± 0.2 lbs/gallon

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

Tack Free	Recoat Time	To Immersion	To Normal Use
15 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 >90°F (32°C)

Shipping Instructions
Unheated trailer, no special requirements. Keep dry.

Physical Properties

Test	Standard	Result
Adhesion to Steel	ASTM D4541; A.2	3500 psi
Adhesion to Steel	ASTM D6677	Rating - 10
Tensile Strength	ASTM D412	3,700 psi
Elongation	ASTM D412	675%
Flexibility	ASTM D522	No cracking or delamination – 1" Mandrel
Hardness, Shore D	ASTM D2240	50±5
Abrasion Resistance	ASTM G65	0.019 cm³/1000 rev.
Salt Spray	ASTM B117	>2000 hours

Application

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

Mixing
Preheat POLYOL to at least 90°F or it will be a waxy solid. 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. 0°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 W-250 Application Specification Sheet* for recommended spray equipment and setup. **Spray equipment must be approved by LifeLast.**

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