

# SeaShield Marine Systems



*Denso Rigspray can be used on offshore rigs and structures to protect areas subjected to high corrosion.*



## Rigspray

**A polyester two-part high solids reinforced glass flake coating that offers outstanding resistance to corrosion and abrasion.**

**R**igspray has been designed specifically for the long term protection of steel structures exposed to corrosive marine environments. It is ideally suited for the use in the oil industry on offshore structures in areas such as splash zones, underdeck areas, riser pipes. With the simple introduction of a non-slip element, it is also suited for helidecks, main deck surfaces and all areas subject to extreme mechanical damage and erosion.

Multi-layer coating can still be achieved if desired, as a patch repairing if necessary, due to the excellent inter-coat adhesion properties.

### Features

- Excellent corrosion resistance
- Fast dry and set times
- High build up to 40 mils in one coat
- High abrasion resistance
- Excellent undercutting resistance
- Very low water permeability
- Excellent water/sea water resistance
- High temperature tolerance
- Excellent cathodic disbondment results

**Denso**<sup>®</sup>  
DENSO NORTH AMERICA



*Tern Harbor Marina in Weymouth, MA where the old corroded timber was replaced with new Rigspray coated steel sheet piles.*



*New sheet pile just after Denso Rigspray was applied (55" wide x 45' long weighing over 6,000 lbs.)*



*Side view showing initial phase of the Boston Marina using Denso Rigspray steel sheet piles.*



*The one-coat glass flake reinforced polyester coating which can be applied by airless spray to achieve a dry film thickness of 30 - 40 mils in a single coat.*



*One-coat protection for steelwork in marine environments.*



## Find Out More

For further details please refer to the product data sheet rigspray or call

**1-888-821-2300**



**DENSO NORTH AMERICA**

**HOUSTON:**  
9747 Whithorn Drive,  
Houston, Texas,  
U.S.A. 77095  
Tel: 281-821-3355  
Fax: 281-821-0304

**TORONTO:**  
90 Ironside Crescent,  
Unit 12, Toronto,  
Ontario, Canada M1X1M3  
Tel: 416-291-3435  
Fax: 416-291-0898

e-mail: [info@densona.com](mailto:info@densona.com)

[www.densona.com](http://www.densona.com)

*A Member of Winn & Coales International*



*Denso Rigspray being applied to steel sheet piles with an airless spray unit.*

# PRODUCT DATA SHEET

## RIGSPRAY

### Polyester Glass Flake Coating

#### Description

Rigspray is a polyester, two-part, high solids, reinforced, glass flake coating that offers outstanding resistance to corrosion and abrasion. It is resistant to corrosive acids, alkalis, salts and a range of oxidizing chemicals.

#### Uses

Corrosion protection of steel structures that are subject to the most aggressive marine environments (i.e. pilings, sheet piling, bulkheads, helidecks, splash zones, underdeck areas, main deck areas and many other corrosive applications).

#### Features

- Excellent corrosion resistance
- Fast dry and set times
- High build up to 40 mils in one coat
- High abrasion resistance
- Excellent undercutting resistance
- Very low water permeability
- Excellent water/sea water resistance
- High temperature tolerance
- Excellent cathodic disbondment results
- Excellent chemical resistance

#### Application

Prepare surfaces by grit blasting to a clean near white finish, SSPC-SP10/NACE No. 2. The coating can be applied by brush or airless spray in one coat (up to 40 mils thick in one coat). A wet film thickness gauge shall be used to measure uniform application. Plate edges, corners and weld areas shall be stripe coated by brush prior to application. This will help ensure adequate coverage of these areas.

The materials shall be 50°F (10°C) minimum before spraying. Initially stir Part A (base) prior to adding Part B (catalyst). The Part B (catalyst) material shall then be added according to quantity and ambient conditions (see Catalyst Ratio Chart within Specification Section). Ensure the two components are mixed thoroughly using a mechanical whip prior to application. The mixed material shall be sprayed immediately after mixing. **Note: Use of less than 1% catalyst will not produce a full cure of the coating material. Inadequate mixing will lead to areas of unsatisfactory cure.**

When applying by airless spray, refer to the equipment manufacturer's operating procedures. In addition, remove pump filter, surge pot and in-line filters.

Clean tools and equipment with Acetone prior to material curing. Great care must be taken to avoid contaminating the coating material with Acetone as this can have adverse effects on the cure of the material.



# Rigspray

## TECHNICAL DATA

PROPERTIES	VALUE
Color	Gray
Solids Content	98% ±2%
Specific Gravity	1.2
Dry Film Thickness Per Coat	20 - 40 mils
Recommended Mil. Thickness (min./max.)	20 to 60 DFT (Depending on application environment)
Theoretical Coverage	39 SF/Gal @ 40 mils DFT
Actual Coverage (w/ 30% waste)	27 SF/Gal @ 40 mils DFT
Maximum Humidity During Application	90%
Minimum Dewpoint/Substrate Differential	Dewpoint +5°F (+3°C)
<b>Cure Time @ 72°F (22°C) - Product and Air Temp</b>	
Pot Life	25 - 30 minutes
Re-Coat Window	2.5 hrs. to 2 days
Shore D (80 to 85)	3 to 3.5 hrs
<b>Cure Time @ 50°F (10°C) - Product and Air Temp</b>	
Pot Life	50 - 60 minutes
Re-Coat Window	5 hrs to 4 days
Shore D (80 to 85)	6 to 7 hrs
<b>Min. Substrate Temperature</b>	40°F (4°C)
<b>Max. Substrate Temperature</b>	110°F (43°C)
<b>Equipment Required</b>	56:1 Airless (min.)
<b>Airless Spray Tip Size</b>	0.023 - 0.031 in.
<b>Pressure at Tip</b>	1,500 - 2,500 psi
<b>Flash Point</b>	88°F (31°C)
<b>Abrasion Resistance ASTM D4060</b>	0.035 gm
<b>Adhesion Properties ASTM D952</b>	1160 psi (8 MPa)
<b>Salt Water Resistance ASTM B117-57T</b>	20,000 hrs – No effect
<b>Cathodic Disbondment Test</b>	
28 days @ 68°F (20°C)	6 - 7 mm
<b>Tensile Strength ASTM D638</b>	4,715 psi
<b>Flexural Strength ASTM D790</b>	10,040 psi

**STORAGE:** Minimum 6 months when stored in original containers @ 41°F (5°C) to 90°F (32°C).

**CLEANING:** Clean equipment with solvent cleaner (Acetone).

**HEALTH AND SAFETY:** Wear protective clothing and ensure adequate ventilation. Avoid contact with skin and eyes. See material safety data sheet for further information.

**PACKAGING:** 1 gallon kit and 5 gallon kits with gray color standard. Other colors available upon request.



### DENSO NORTH AMERICA

**HOUSTON:**  
9747 Whithorn Drive,  
Houston, Texas,  
U.S.A. 77095  
Tel: 281-821-3355  
Fax: 281-821-0304

**TORONTO:**  
90 Ironside Crescent,  
Unit 12, Toronto,  
Ontario, Canada M1X1M3  
Tel: 416-291-3435  
Fax: 416-291-0898

[www.densona.com](http://www.densona.com)

*A Member of Winn & Coales International*

The information given on this sheet is intended as a general guide only and should not be used for specification purposes. We believe the information to be accurate and reliable but do not guarantee it. We assume no responsibility for the use of this information. Users must, by their own tests, determine the suitability of the products and information supplied by us for their own particular purposes. No patent liability can be assumed.