

# SIPOXY SHIELD 656

## Solvent Free Amine Cured Epoxy Coating

Product No. 6656

### Features

- Self priming, high build with excellent sag resistance, polyamine cured coating and mainly used as one coat system.
- Good resistance to heat as well as excellent impact and abrasion resistance.
- Excellent resistance against wide range of chemicals and solvents.
- Excellent cathodic disbondment resistance.
- Solvent Free.
- Approved under APCS-113A

### Recommended Use

- Protection of steel pipelines in severely corrosive environment.
- Field applied renovation and repair coating with a capability for repairing to live lines having service temperature up to 90°C.
- Outstanding Protective coating on permanently submerged surfaces such as offshore structures, sheet piling, steel, concrete
- As a one coat tank lining in crude oil, refined products, water ballast tanks, cofferdams, void spaces etc

### Physical Data

**Finish** : Glossy  
**Colour** : Red Brown  
**Volume Solids** : 100% by volume  
**Recommended Film Thickness:**  
 500 – 1000 microns  
 Min DFT for closed film : 250 microns  
 Min DFT for brush application : 200 microns  
**Theoretical Coverage:**  
 2 m<sup>2</sup>/ltr. at 500 microns

**Density (mixed)** : 1.35 kg/ltr.  
**Drying Time** : 30°C/86°F  
**Dry to Handle** : 10 Hours  
**Recoat Interval**  
 Min : 10 hours, Max : 9 days  
**To Immersion**  
 Water : 36 Hours, Buried : 24 Hours  
**Heat Resistant** : 125°C Dry  
**Flash Point** : > 100°C

### Specification Data

#### Preparation

##### Steel

All surfaces must be free of oil, grease, salt and moisture before abrasive blasting to Near White Metal equivalent to Steel Structures Painting Council SP10 or ISO 8501-1 Sa 2.5. The minimum steel profile after blasting should be at least 2 mils (50 microns) in depth and be of a jagged nature as opposed to a peen pattern. Surfaces must be free of grit dust.

The first coat should be applied to cleaned surfaces as soon as possible to prevent re rusting or contamination.

Steel with suitable primer (SIPOXYSHIELD 274), should be dry and free from any contamination.

##### Concrete

All loose particles, dust and other contaminants must be removed from the surface. This is achieved by light sweep blasting. Concrete surface should be sealed with Sipseal 220, any voids/bugholes should be filled with Sipoxy Mortar 680/681.

## Application Data

|                               |  |
|-------------------------------|--|
| <b>Mixing Ratio by Volume</b> | Base : 2.5 parts<br>Hardener : 1 part  |
| <b>Mixing Advice</b>          | SIPOXY SHIELD 656 is a two component product supplied in pre measured kit which contain the proper ratio of ingredients. The entire contents of each container must be mixed together.<br>Mix the base portion slowly for several minutes. After mixing the base portion, add the hardener slowly with continued agitation. After the hardener add is complete, continue to mix slowly until the system is homogeneous.  |
| <b>Thinning</b>               | Thinning not required. Clean up with Thinner 741/780.  |
| <b>Application Condition</b>  | Base and Hardener should be preferably stored at above 20 –25 deg C before use. At lower temperatures, efforts should be made to bring the coating to 25 °C. At lower temperatures the viscosity will be too high for spray application. Max. relative humidity 85%.   |
| <b>Induction Time</b>         | None   |
| <b>Pot Life</b>               | 40 minutes at 40°C.  |
| <b>Application Details</b>    | Airless spray is recommended. A 64:1 WIWA/MAGNUM/ GRACO/ EXTREME Pump and .021" to .029" tip size with nozzle pressure of 220-280 bar will provide a good spray pattern. To avoid cooling down of paint in hoses at lower temperatures, hoses should be insulated. Length of hoses should be as short as possible.<br>Do not allow coating to remain in the application equipment longer than 1 hour. Flush out all application equipment whenever there is a delay in application.<br>For plural component hot airless spray, use WIWA DUO mix model S300/120 or GRACO EXTREME/ HYDRACAT with inline heater. Adjust heaters to give a material temp. of about 55- 60 deg C at the spray nozzle. If application is interrupted the spray gun should be flushed within 5 minutes with Thinner 741/780, from the flushing pump.<br>Brush and roller application are only recommended for spot repair and stripe coating.<br>A minimum of four days cure with ventilation at temperatures above 25°C should be allowed before tank linings are put into cargo service. Longer curing times with ventilation are required if temperatures are lower than 25°C. |
| <b>Cleaning of Equipment</b>  | Use Thinner 741/ 780   |

## Storage Information

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|-------------------|---|
| <b>Pack Size</b>  | 10 ltr. and 0.5 ltr. two component kits. (For plural component hot airless spray, drum pkg available on request, consult SIPCO- TSD.) |
| <b>Storage</b>    | Store generally in original sealed container, indoors, at a temperature between 20 and 40°C and relative humidity below 70%.          |
| <b>Shelf Life</b> | 1 Year  |

## Safety Information

See the material safety data sheet and product label for complete safety and precaution requirements.

## Disclaimer

The information in this data sheet represent test results or experience under well defined conditions. Its accuracy or suitability under the actual conditions of any intended use is not guaranteed and must be determined by the user. All advice given about this product is given in good faith. Since as we have no control over conditions of substrate and application, manufacturer and seller can not accept any liability in connection with the use of the product relative to coverage, performance, injury or damage, unless we specifically agree in writing to do so. The information in this data sheet is subject to change without notice and it is the user's responsibility to ensure it is current. For further information and advice contact SIPCO Technical Services Department on Tel. (03) 847 2299, Fax (03) 847 3780.