

NOVAGUARD™ 830

DESCRIPTION

Two-component, solvent-free, amine-cured phenolic epoxy compound

PRINCIPAL CHARACTERISTICS

- Sprayable caulking to overlap the welding seams
- Suitable caulking compound for use under SIGMAGUARD CSF 650, NOVAGUARD 810 and NOVAGUARD 840
- Excellent chemical resistance against crude oil, unleaded gasolines and a wide range of petrochemicals and solvents
- Can be applied by heavy-duty, single-feed, airless spray equipment (60:1)
- Good visibility due to light color
- Reduced explosion risk and fire hazard

COLOR AND GLOSS LEVEL

- Cream
- Gloss

BASIC DATA AT 20°C (68°F)

Data for mixed product	
Number of components	Two
Mass density	1.4 kg/l (11.7 lb/US gal)
Volume solids	100%
VOC (Supplied)	Directive 1999/13/EC, SED: max. 105.0 g/kg max. 144.0 g/l (approx. 1.2 lb/US gal)
Recommended dry film thickness	3500 - 5000 µm (140.0 - 200.0 mils) depending on system
Dry to touch	6 hours
Overcoating Interval	Minimum: 16 hours Maximum: 3 months
Full cure after	5 days
Shelf life	Base: at least 12 months when stored cool and dry Hardener: at least 12 months when stored cool and dry

Notes:

- See ADDITIONAL DATA – Spreading rate and film thickness
- See ADDITIONAL DATA – Overcoating intervals
- See ADDITIONAL DATA – Curing time

NOVAGUARD™ 830

RECOMMENDED SUBSTRATE CONDITIONS AND TEMPERATURES

Substrate conditions

- Steel; blast cleaned to a minimum of ISO-Sa2½, blasting profile 50 – 100 µm (2.0 – 4.0 mils)
 - Steel with suitable holding primer must be dry and free from any contamination
 - If a holding primer is required, SIGMAGUARD 260 or SIGMACOVER 280 can be used
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INSTRUCTIONS FOR USE

Mixing ratio by volume: base to hardener 75:25 (3:1)

- When mixing, the temperature of the base and hardener should be at least 20°C (68°F)
 - At lower temperature, the viscosity will be too high for spray application
 - No thinner should be added
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Induction time

None

Pot life

1 hour at 20°C (68°F)

Note: See ADDITIONAL DATA – Pot life

Airless spray

Recommended thinner

No thinner should be added

Nozzle angle

30° – 40°

Nozzle orifice

Approx. 0.66 mm (0.026 in)

Nozzle pressure

At 20°C (68°F) paint temperature min. 30.0 MPa (approx. 300 bar; 4351 p.s.i.). At 30°C (86°F) min. 25.0 MPa (approx. 250 bar; 3626 p.s.i.)

Notes:

- Use heavy-duty, single-feed, airless spray equipment, preferably 60:1 pump ratio and suitable high-pressure hoses
 - In-line heating or insulated hoses may be necessary to avoid cooling down of paint in hoses at low air temperature
 - Length of hoses should be as short as possible
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NOVAGUARD™ 830

Cleaning solvent

THINNER 90-83

Note: All application equipment must be cleaned immediately after use. Paint inside the spraying equipment must be removed before the pot life has been expired.

ADDITIONAL DATA

Spreading rate and film thickness	
DFT	Theoretical spreading rate
3000 µm (120.0 mils)	0.3 m ² /l (13 ft ² /US gal)
5000 µm (200.0 mils)	0.2 m ² /l (8 ft ² /US gal)

Note: Structure; in different layers apply wet in wet in order to reach the required film thickness

Overcoating interval for DFT up to 5000 µm (200.0 mils)				
Overcoating with...	Interval	10°C (50°F)	20°C (68°F)	30°C (86°F)
Solvent free tanklinings	Minimum	30 hours	16 hours	12 hours
	Maximum	3 months	2 months	1 month

Note: Surface should be dry and free from any contamination

Curing time for DFT up to 5000 µm (200.0 mils)		
Substrate temperature	Dry to handle	Full cure
10°C (50°F)	30 hours	7 days
20°C (68°F)	16 hours	5 days
30°C (86°F)	10 hours	3 days

Note: Adequate ventilation must be maintained during application and curing (please refer to INFORMATION SHEETS 1433 and 1434)

Pot life (at application viscosity)	
Mixed product temperature	Pot life
20°C (68°F)	1 hour
30°C (86°F)	45 minutes

Note: Due to exothermic reaction, temperature during and after mixing may increase



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SAFETY PRECAUTIONS

- For paint and recommended thinners see INFORMATION SHEETS 1430, 1431 and relevant Material Safety Data Sheets

WORLDWIDE AVAILABILITY

It is always the aim of PPG Protective and Marine Coatings to supply the same product on a worldwide basis. However, slight modification of the product is sometimes necessary to comply with local or national rules/circumstances. Under these circumstances an alternative product data sheet is used.

REFERENCES

• CONVERSION TABLES	INFORMATION SHEET	1410
• EXPLANATION TO PRODUCT DATA SHEETS	INFORMATION SHEET	1411
• SAFETY INDICATIONS	INFORMATION SHEET	1430
• SAFETY IN CONFINED SPACES AND HEALTH SAFETY, EXPLOSION HAZARD – TOXIC HAZARD	INFORMATION SHEET	1431
• SAFE WORKING IN CONFINED SPACES	INFORMATION SHEET	1433
• DIRECTIVES FOR VENTILATION PRACTICE	INFORMATION SHEET	1434
• CLEANING OF STEEL AND REMOVAL OF RUST	INFORMATION SHEET	1490
• RELATIVE HUMIDITY – SUBSTRATE TEMPERATURE – AIR TEMPERATURE	INFORMATION SHEET	1650

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