

NOVAGUARD 830

3 pages

 April 2009
 Revision of November 2005

DESCRIPTION	two component solvent free amine cured phenolic epoxy compound
PRINCIPAL CHARACTERISTICS	<ul style="list-style-type: none"> - sprayable caulking to overlap the welding seams - suitable caulking compound for use under SigmaGuard CSF 650 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 colour - reduced explosion risk and fire hazard
COLOURS AND GLOSS	cream - gloss
BASIC DATA AT 20°C	(1 g/cm ³ = 8.25 lb/US gal; 1 m ² /l = 40.7 ft ² /US gal) (data for mixed product)
Mass density	1.4 g/cm ³
Volume solids	100%
VOC (supplied)	max. 105 g/kg (Directive 1999/13/EC, SED) max. 144 g/l (approx. 1.2 lb/gal)
Recommended dry film thickness	3500 - 5000 µm depending on system
Touch dry after	6 hours
Overcoating interval	min. 16 hours * max. 3 months *
Full cure after	5 days * (data for components)
Shelf life (cool and dry place)	at least 12 months
RECOMMENDED SUBSTRATE CONDITIONS AND TEMPERATURES	<ul style="list-style-type: none"> - steel; blast cleaned to a minimum of ISO-Sa2½, blasting profile 50 - 100 µm - steel with suitable holding primer (SigmaGuard 260 or SigmaCover 280) which must be dry, clean and free from any contamination
INSTRUCTIONS FOR USE	mixing ratio by volume: base to hardener 75 : 25 <ul style="list-style-type: none"> - when mixing the temperature of the base and hardener should be at least 20°C - at lower temperature the viscosity will be too high for spray application - no thinner should be added
Induction time	none
Pot life	1 hour at 20°C * * see additional data

NOVAGUARD 830

April 2009

AIRLESS SPRAY

- heavy duty single feed airless spray equipment with a minimum of 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

Recommended thinner

no thinner should be added

Nozzle orifice

approx. 0.67 mm (= 0.026 in) at an angle of 30° à 40°

Nozzle pressure

at 20°C (paint temperature) min. 30 MPa (= approx. 350 bar; 5000 p.s.i.)

at 30°C (paint temperature) min. 25 MPa (= approx. 250 bar; 3500 p.s.i.)

CLEANING SOLVENT

Thinner 90-83

- all application equipment must be cleaned immediately after use
- paint inside the spraying equipment must be removed before the pot life time has been expired

SAFETY PRECAUTIONS

for paint and recommended thinners see safety sheets 1430, 1431 and relevant material safety data sheets

ADDITIONAL DATA

Film thickness and spreading rate

theoretical spreading rate m ² /l	0.3
dft in µm	3000

structure: in different layers wet in wet in order to reach the required film thickness

Overcoating table with solvent free tanklinings

substrate temperature	10°C	20°C	30°C
minimum interval	30 hours	16 hours	12 hours
maximum interval	3 months	2 months	1 month

- surface should be dry and free from any contamination

Curing table

substrate temperature	dry to handle	full cure
10°C	30 hours	7 days
20°C	16 hours	5 days
30°C	10 hours	3 days

- although the paint is solvent free adequate ventilation must be maintained during application and curing (please refer to sheet 1433 and 1434)

NOVAGUARD 830

April 2009

Pot life

20°C	60 min.
30°C	45 min.

- due to exothermic reaction, temperature during and after mixing may increase

Worldwide availability

Whilst it is always the aim of PPG Protective & Marine Coatings to supply the same product on a worldwide basis, 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

Explanation to product data sheets	see information sheet 1411
Safety indications	see information sheet 1430
Safety in confined spaces and health safety	
Explosion hazard - toxic hazard	see information sheet 1431
Safe working in confined spaces	see information sheet 1433
Directives for ventilation practice	see information sheet 1434
Cleaning of steel and removal of rust	see information sheet 1490

LIMITATION OF LIABILITY

The information in this data sheet is based upon laboratory tests we believe to be accurate and is intended for guidance only. All recommendations or suggestions relating to the use of the Sigma Coatings products made by PPG Protective & Marine Coatings, whether in technical documentation, or in response to a specific enquiry, or otherwise, are based on data which to the best of our knowledge are reliable. The products and information are designed for users having the requisite knowledge and industrial skills and it is the end-user's responsibility to determine the suitability of the product for its intended use.

PPG Protective & Marine Coatings has no control over either the quality or condition of the substrate, or the many factors affecting the use and application of the product. PPG Protective & Marine Coatings does therefore not accept any liability arising from loss, injury or damage resulting from such use or the contents of this data sheet (unless there are written agreements stating otherwise).

The data contained herein are liable to modification as a result of practical experience and continuous product development.

This data sheet replaces and annuls all previous issues and it is therefore the user's responsibility to ensure that this sheet is current prior to using the product.

The English text of this document shall prevail over any translation thereof.