

# SIGMALINE 415

3 pages

May 2006

## DESCRIPTION

two component high solids epoxy in situ lining

## PRINCIPAL CHARACTERISTICS

- to be applied to the internals of steel pipes by using in-situ application techniques
- suitable for pipelines transporting sweet crude oil, diesel fuel, salt and fresh water, and many chemical solutions
- meets NSF Standard 61 for potable water
- NSF certification valid for pipes of 10" diameter or greater
- temperature resistance (dry) 121°C (250F)

## COLOURS AND GLOSS

redbrown - semigloss

## BASIC DATA AT 20°C

(1 g/cm<sup>3</sup> = 8.25 lb/US gal; 1 m<sup>2</sup>/l = 40.7 ft<sup>2</sup>/US gal)

Mass density

1.7 g/cm<sup>3</sup>

Volume solids

82 ±2%

VOC (supplied)

max. 95 g/kg (Directive 1999/13/EC, SED)

max. 156 g/l (approx. 1.3 lb/gal)

Recommended dry film thickness

50 - 100 µm depending on system

Theoretical spreading rate

16 m<sup>2</sup>/l for 50 µm \*

Touch dry after

5 hours

Overcoating interval

min. 16 hours

max. 3 days

Full cure after

7 days

Shelf life (cool and dry place)

at least 12 months

## RECOMMENDED SUBSTRATE CONDITIONS AND TEMPERATURES

- internal steel pipe has to be cleaned by either of two methods (sheet 1493):
  - inhibited acid cleaning
  - abrasive blasting
- existing pipelines may have to be cleaned first by scraper pigs and solvents
- substrate temperature should be above 10°C (50F) and at least 3°C (37F) above dew point



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## INSTRUCTIONS FOR USE

mixing ratio by volume: base to hardener 3 : 1

- base component has to be agitated in the drum before adding hardener
- two 6-gallon pails of hardener are to be added to each drum of base under continuous agitation till homogeneous
- no solvents or thinners should be added to the mixture
- no induction time necessary
- in order to assure maximum potlife, the drums should be stored as cool as possible
- the amount of material mixed at any one time should be less than what can be applied within 3 hours of mixing
- when storage and application temperatures are 24°C (75F) or less, coating should be applied within 4 hours of mixing

## IN SITU APPLICATION

- application of this coating to internal pipe surfaces is accomplished by the use of pigs, pupjoints, compressors and other specialized equipment
- this application should be referred to contractors specializing and experienced in this type of work
- coating performance is dependent upon proper surface preparation, application and curing; these factors are not under the control of Sigma Coatings and therefore no warranty can be offered
- after the application of each coat, dry air has to be blown through the coated pipe until the next coat is applied (minimum overcoating interval) this will remove the solvents and accelerate the curing
- after the last coat is applied, fresh air blowing has to continue for a minimum of 24 hours
- depending on line length, it may be necessary to switch the direction of the fresh air

## CLEANING SOLVENT

Sigma thinner 90-53

## SAFETY PRECAUTIONS

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

this is a solvent based paint and care should be taken to avoid inhalation of spray mist or vapour as well as contact between the wet paint and exposed skin or eyes

## Worldwide availability

Whilst it is always the aim of Sigma 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.



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## 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
Internal chemical cleaning of steel pipes - in-situ application	see information sheet 1493

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## 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 products made by Sigma 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.

Sigma 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. Sigma 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.

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