

Coating for High Temperature Acid Immersion



BELZONA[®]
1392



Belzona 1392 (Ceramic HT2) is a two component high temperature coating system designed to resist hydrocarbons and aqueous solutions. This product was specifically designed to exhibit excellent chemical resistance, particularly in systems contaminated by acid. It also provides excellent erosion resistance.

Belzona 1392 (Ceramic HT2) can operate continuously in immersed conditions at temperatures up to 120°C (248°F). It also has excellent resistance to process chemicals and conditions such as steam out and rapid depressurisation.

| TECHNICAL DATA | Mixing ratio (base:solidifier) | 20 : 1 by weight |
|----------------|--------------------------------|----------------------------------------------------------------------------|
| | Working life | 35 minutes at 20°C (68°F) |
| | Shelf life | 2 years |
| | Dry heat resistance | 230°C (446°F) |
| | Adhesion (tensile shear) | Mild steel: 18.13 MPa (2,630 psi) at 20°C (68°F) cure |
| | Compressive strength | 102.04 MPa (14,800 psi) at 20°C (68°F) cure |
| | Volume capacity | 439 cm ³ (26.8 in ³) / 1 kg |
| | Heat distortion temperature | 49°C (118°F) at 20°C (68°F) cure |
| | Coverage rate | 0.73 m ² (7.9 ft ²) / 1 kg at 600 microns (24 mils) |
| | Abrasion resistance | H10 - 145 mm ³ 100°C (212°F) cure, wet |

| CURE TIMES | Temperature | 20°C (68°F) | 30°C (86°F) | 40°C (104°F) |
|------------|----------------------------------------|-------------|-------------|--------------|
| | Time until inspection | 12 hours | 5 hours | 3 hours |
| | Time until full service | 96 hours | 18 hours | 10 hours |
| | Time until dry post cure (if required) | 12 hours | 5 hours | 3 hours |
| | Time until wet post cure (if required) | 28 hours | 8 hours | 5 hours |

*Please consult the Product Specification Sheet (PSS) and Instructions for Use (IFU) for the latest technical data.



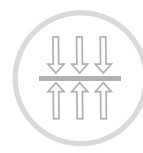
**HIGH
TEMPERATURE
RESISTANT**



CHEMICAL RESISTANT



SOLVENT-FREE



**HIGH COMPRESSIVE
STRENGTH**



**SIMPLE
APPLICATION**

Key Benefits:

- Excellent resistance to corrosion**
 This coating is specially designed to provide erosion-corrosion protection in acid contaminated water/hydrocarbon systems.
- High chemical resistance**
 This material resists water, aqueous solutions, hydrocarbons in acid contaminated water and hydrocarbons up to temperatures of 120°C (248°F) in continuous immersion.
- Simple application**
 This easy to use epoxy coating can be applied by brush or applicator eliminating the need for specialist tools and will cure at room temperature.

Application Examples:



Screw conveyors protected



Engine block coated

Application Areas:

- Condensate extraction pumps
- Condensate return tanks
- Evaporators
- Heat exchanger barrels
- Separators
- Autoclaves
- Scrubber units
- Rotary reactor
- Calorifiers
- Distillation units
- Slug catchers
- Absorber towers

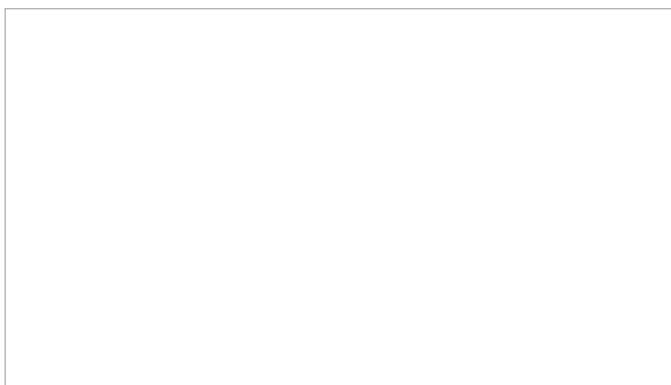
Key

| | | |
|-----------|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Excellent | Ex | No significant deterioration/barrier properties retained for greater than 52 weeks. Suitable for all applications including long term immersion |
| Good | G | No significant deterioration/barrier properties retained for 12-52 weeks. Suitable for short short-term immersion and general chemical contact |
| Moderate | M | No significant deterioration/barrier properties retained for 1-12 weeks. Suitable for applications involving short term chemical contact e.g. spillage, splash or secondary containment |
| * | Ex | Product must be post cured to deliver quoted chemical resistance |

Inorganic Acids

| Chemical name (synonym) | Chemical Formula (synonym) | Concentration | Chemical Resistance | |
|-------------------------|--------------------------------|---------------|---------------------|---------------|
| | | | 20°C 68°C | 60°C 140°C |
| Hydrochloric acid | HCl | 36% | G | G |
| | | 20% | Ex* | G |
| | | 10% | Ex* | G |
| | | 5% | Ex | Ex |
| | | 3% | Ex | Ex |
| Nitric acid | HNO ₃ | 20% | Ex* | M |
| | | 10% | Ex* | G |
| | | 5% | Ex* | G |
| Nitrous acid | HNO ₂ | 20% | Ex* | M |
| | | 40% | Ex* | G |
| Phosphoric acid | H ₃ PO ₄ | 20% | Ex* | G |
| | | 10% | Ex* | G |
| | | 5% | Ex* | G |
| | | 98% | G* | M |
| Sulphuric acid | H ₂ SO ₄ | 70% | Ex* | Ex |
| | | 50% | Ex* | Ex |
| | | 30% | Ex* | Ex |
| | | 20% | Ex | Ex |
| | | 10% | Ex* | Ex |
| | | 5% | Ex* | Ex |

For more information, please contact your local Belzona representative:



QUALITY PRODUCTS - TECHNICAL SUPPORT

Belzona products are manufactured under an ISO 9001 Registered Quality Management System.

Belzona has a global distribution network of over 140 Distributors operating in 120 countries. Local support is provided by a trained Technical Consultant who will diagnose the problem, recommend the solution and provide 24-hour, on-site application supervision and advice.