

CHARTEK[®] 7

FIREPROOFING

Asset protection in the
harshest environments

 **International**
Protective Coatings



KEY BENEFITS

- Latest generation of lightweight, high quality epoxy intumescent
- Certified by Lloyd's and DNV
- Listed Underwriter's Laboratories
- NORSOK M-501 tested
- Jet fire rated and certified
- Fully fire rated for offshore platform applications
- Easy to apply by a variety of techniques
- Excellent physical properties - hard, durable and flexible
- Virtually maintenance free - even in the harshest climatic conditions
- Reduced hazard from emissions in a fire environment
- Unrivalled global network of technical and field service support

CHARTEK® 7

FIREPROOFING

Featuring low density, low water absorption characteristics, and an easier application process, Chartek® 7 is the highest quality, cost efficient fire protection on the market today. Like previous generations of Chartek®, Chartek® 7 is tough, durable and virtually maintenance free. It is ideal for long term fire protection on offshore oil and gas production platforms, at refineries and chemical processing plants. And, what's more, it's halogen free - so in a fire, it does not generate hazardous chlorine-containing gas.

LOWER INSTALLED COST

- Lowest weight per unit area for offshore applications
- Low cost 6mm x 6mm galvanised mesh
- Flexible non-metal mesh available to increase productivity for specific applications
- Weld pins not required to affix metal mesh to large broad surfaces
- Higher build capacity
- Can be applied via single pot or dual spray systems and by trowel

HIGHLY DURABLE

- Meets the environmental exposure (weatherability) requirements of UL 1709 (USA)
- Tested to NORSOK M-501, weatherability and corrosion with excellent results
- Very low moisture absorption after long term submergence in salt water solution - topcoat reduces moisture absorption even further (lowest moisture absorption of any epoxy fireproofing in International Protective Coatings-sponsored tests)
- Lap shear strength in excess of 1400 psi
- Compressive strength in excess of 2500 psi
- Flexible, not affected by deflection of substrate for pre-erection applications.

REDUCED HAZARD IN FIRE ENVIRONMENT

- Toxicity index of 1.3 in Naval Engineering Standard 713 test
- HCN, CO and CO₂ generated in a fire lower than other available materials
- Contains no halogenated flame retardant
- Flame spread index of 25.0 and smoke generation index of 130.9 in ASTM E84 tests

FULLY FIRE RATED FOR OFFSHORE PLATFORM APPLICATIONS

- Structural steel (both I and hollow section certificates from Lloyd's and DNV)
- Jet fire rated

LEADING THE WORLD IN SERVICE

The combination of technical expertise available to customers and clients for Chartek® fireproofing prior to and after installation, supported by the International Protective Coatings organisation, means that we are able to provide an unrivalled service to our customers. Manufacturing in two of our wholly owned factories and providing sales and logistical support from 44 of our wholly owned sales office worldwide, International offer the comfort that dealing only with the worlds largest protective coatings company can.

Property	Test Method	Value	Units
Spray applied density	Plural Pump	1000 (62.4)	kg/m ³ (lb/ft ³)
Tensile strength	ASTM D638	12.8 (1850)	MPa (psi)
Tensile modulus	ASTM D638	1786 (259,000)	MPa (psi)
Compressive strength	ASTM D695	18.6 (2700)	MPa (psi)
Compressive modulus	ASTM D695	1172 (170,000)	MPa (psi)
Flexural strength	ASTM D790	22.8 (3300)	MPa (psi)
Flexural modulus	ASTM D790	1586 (230,000)	MPa (psi)
Lap shear strength	ASTM D1002	10.0 (1450)	MPa (psi)
Thermal Conductivity at room temperature	Transient method	0.213 (1.45)	W/m ² °C (Btu-in/hr ft ² °F)
Coefficient of thermal expansion	ASTM E228	68 x 10 ⁻⁶ 38 x 10 ⁻⁶	cm/cm ² °C (in/in ² °F)
Specific Heat at room temperature	ASTM 1269	1.17 (0.28)	J/g ² °C (Btu/lb ² °F)
Moisture Absorption	Total immersion in 5% salt solution @ room temperature for 76 days	3.3% non topcoated 1.4% topcoated	
Flame Spread	ASTM E84	25.0	
Smoke Generation	ASTM E84	130.9	
Toxicity Index	Naval Engineering Standard 713	1.3	
Hardness	Shore D	Typically 70	
Impact Strength / Inch of notch	ASTM D256	0.69 (0.10)	J/cm (ft-lb/inch)

Unless otherwise agreed by us in writing, any contract to purchase products referred to in this brochure and any advice which we give in connection with the supply of products shall be subject to our standard conditions of contract.

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