## PYROCRETE 241

### Main characteristics (technical specifications)

The protected structure shows a thermal step at about 100°C during the 30-80 min test. Non-uniform grey coloured

- **Can be washed**: □ Low/medium/high pressure
- **Can be painted**: ✔

### Information on the composition

Product based on inorganic cement
Powder mono-component to be mixed with water before application

### Fire Test reports (cross the relevant boxes)

<table>
<thead>
<tr>
<th>Test Code</th>
<th>Temperature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISO</td>
<td>(1050°C 2h, 1160°C 4h)</td>
<td>□</td>
</tr>
<tr>
<td>HC</td>
<td>(1100°C, ref. EC1.1.2)</td>
<td>□</td>
</tr>
<tr>
<td>HCM</td>
<td>(1300°C, HC*1300/1100)</td>
<td>□</td>
</tr>
<tr>
<td>RABT/ZTV</td>
<td>(1200°C)</td>
<td>□</td>
</tr>
<tr>
<td>RWS</td>
<td>(1350°C)</td>
<td>□</td>
</tr>
<tr>
<td>Others:</td>
<td>ASTM E 119</td>
<td>1010°C at 2h, 1093°C at 4h</td>
</tr>
</tbody>
</table>

### Characteristics of the tested samples, report number and possible comments:

- Tests by “Underwriters Laboratories US” under :
  - ASTM E119 fire, in 22 mm, for CF 4h floor resistance
  - UL 1709 fire in 33 mm, for steel wall resistance CF 2h

- FIRTO GB tests in 33 mm under comparable hydrocarbide fire (1983) i.e. 1150 °C 2 hours, on metal support

- Tests by “Det Norske Veritas, Norvège”,

- CSTB

### Application procedures

Preparation by concrete mixer (proportions: 19 l water for a 22 kg bag)
Applied by spraying or with trowel; minimal thickness 7 mm wet
Surface preparation required
Primary layer on steel, galva., wood or concrete
Projected on unfolded steel reinforcement (1-2 kg/m2) welded for steel bars protection
Plan an expansion joint every 3 m (trowel indent)
Possible smoothing
Drying time 10 days at 21°C for 25 mm

### Present application field

Recommended to protect steel structures, walls, LPG tanks, concrete for:
Oil refineries/petrochemistry, chemistry, offshore platforms, nuclear industry…

Not recommended for use on non-ferrous metals (aluminium)
### Physical and thermal data

**Reaction to fire (French/European classification):**

**Main thermal data: (at 20°C and possibly variation with temperature)**

- Thermal conductivity $\lambda$ (W.m$^{-1}$.K$^{-1}$) = 
- 2 out of the 4 following values
  - Specific heat $c$ (J. kg$^{-1}$.K$^{-1}$) =
  - Density $\rho$ (kg/m$^3$) = 800/880
  - Volumic specific heat $C$ (J.m$^{-3}$.K$^{-1}$) = $\rho c$
  - Diffusivity $a$ (en m$^2$.s$^{-1}$) = $\lambda/\rho c$
- Resulting emissivity (adimensionnal): $\varepsilon_{res}$ =

**Other thermal data:**

- Reflection coefficient (adimensionnal): or
- Absorption coefficient (adimensionnal):

**Main mechanical data:**
- E modulus (Mpa) =
- Compressive strength (Mpa) = 3.8
- Bending strength (Mpa) = 3

**Complementary data:**
- Porosity:
- Shore hardness: **Shore D /44 à 65**

### Durability

Shrinkage: 55%

### Product and company identification/Commercial name/ Applicators

Véronique BUSTILLO  
CARBOLINE chez CORROLINE France  
78130 Les Murreaux  
FRANCE  
Tél. +33 134 92 70 70

### Documentation/References

Pyrocètè leaflet dated 1996 + English memo dated 1998