

DATA SHEET

603
“ABR” ELASTOMER

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V1-25/11/2013

CHEMICAL RESISTANCE OF ABR COATING

<p>MEDIUM: Water @ ambient Water @ 120°C Sea water, immersion</p>	<p>EFFECTS: No effect 0.06 mg extractives/cm² in 2hrs 1. No effects in 4 years 2. 6 years exposure on piles no effect 3. 1 year immersion of scribed panel. No edge lifting, no deterioration- coating intact.</p>
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SERVICE PROPERTIES OF ABR COATINGS

<p>SERVICE Welding steel substrate off:</p>	<p>EFFECT Under controlled conditions the following gas concentrations obtained from welding ABR coated steel plates. Gas Concentration Threshold Tested (PPM) Limited (PPM)</p> <table border="0"> <tr> <td>CO</td> <td>10</td> <td>50</td> </tr> <tr> <td>CO²</td> <td>0.5</td> <td>5000</td> </tr> <tr> <td>Mixed NO</td> <td>5</td> <td>25</td> </tr> <tr> <td>NO²</td> <td>0.5</td> <td>5</td> </tr> <tr> <td>Phosgene</td> <td>0</td> <td>0.1</td> </tr> <tr> <td>HCN</td> <td>1</td> <td>10</td> </tr> </table>	CO	10	50	CO ²	0.5	5000	Mixed NO	5	25	NO ²	0.5	5	Phosgene	0	0.1	HCN	1	10
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- Cathodic disbondment:
 1. No effect after 6 weeks in seawater at 1200 mV.
 2. No effect after 24 days with 2700µ thick ABR under 1022mV in seawater at 25°C.
 3. No disbondment after 5 days with 3.75mm ABR 5 VDC in 5% NaCl in glycerol at 15°C. Minor disbondment at side of holiday after 22 days.

- Ignition and Flame Spread:
 Index of Performance 3.3p. The 3.3 index means a “coating having a low flame spread characteristics” and the latter P means “not easily ignitable”. Overall rating was Class 2 by Lloyds meaning ABR coating is acceptable for ships and offshore drilling rigs.

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TECHNICAL DATA

<u>PROPERTY</u>	<u>MEASUREMENT</u>	<u>ASTM</u>
COLOUR	Cream	
SPECIFIC GRAVITY	1,2-1,3	D-792
TENSILE STRENGTH	17N/mm ² @25°C	D-638
BOND STRENGTH	10N/mm ² on steel elcometer	
FLEXIBILITY	No effect bending 0.5mm plate Coated with 0.5mm of ABR over mandral of 8mm diameter.	
RECOVERABLE ELONGATION	67% @ 25°C	D-638
IMPACT	1) 1, 9 X 10 ⁶ gm-cm (on steel) 2) No failures	DG-14
COMPRESSIBILITY	30N/mm ³	G-695
SURFACE HARDNESS	60 to 70 Shore “D”	
ABRASION RESISTANCE	1) 250 000 units 2) Weight loss 0.0102 gms Taber Abraser H-10 wheel, 1000gms weight 1000 cycles. 3) 1.40µ/hr from coated discs circulated At 2280 RMP in sea water with 1.9% Quartz metal. 4) 40µ loss in 2800 hrs in circulating 35% SIC and 5% Fe Slurry. 5) 2µ wear following 1320 hrs in rotating drum containing ice and abrasive particles.	D- 658 FTMS-141
LEACH RATE	0.0045 mg/cm ² (per EPS Protocol December 1970).	
THERMAL	0.000723 cal/sec/cm ² /°C/cm @ 20°C	C-177
PERMEABILITY	0.262 gms/24hr/m	E-96

The technical data furnished is obtained from controlled laboratory tests under ideal application conditions. No guarantee of any performance characteristic is therefore given or implied and we do not hold ourselves responsible for any consequential damage of whatsoever nature that may arise from use of our products. In the event of a proven fault our liability will be limited to the replacement of the product only. It is the users' responsibility to confirm the currency of product data sheets.