

TECHNICAL DATA

PHYSICAL PROPERTIES OF ZEBRON® COATINGS

MEDIUM	EFFECTS	APPLYING OR TESTING AGENCY
Thermal Conductivity	0.000723 cal./sec. / cm ² °C per cm at 20° C (0.175 BTU/HR.ft. °F per ft at 77°F)	ASTM C-177
Water Vapor Permeability	.262 gms/24 hr/M ² Type 386 .0358 U.S. Perms	ASTM E-96
Methane Gas Permeability	17.82 MGTR (mL / (day)*m ² *atm	ASTM D 1434

SERVICE PROPERTIES OF ZEBRON® COATINGS

PROPERTY	MEASUREMENTS	STANDARDS																								
Welding steel substrate Off Gases	<p>Under controlled conditions the following gas concentrations obtained from welding ZEBRON® coated steel plate</p> <p>Gas Concentration Threshold</p> <table border="1"> <thead> <tr> <th>Tested</th> <th>(PPM)</th> <th>Limit (PPM)</th> </tr> </thead> <tbody> <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>NO₂</td> <td>0</td> <td>0.1</td> </tr> <tr> <td>Phosgene</td> <td>1</td> <td>10</td> </tr> <tr> <td>HCN</td> <td></td> <td></td> </tr> </tbody> </table>	Tested	(PPM)	Limit (PPM)	CO	10	50	CO ₂	0.5	5000	Mixed NO	5	25	NO ₂	0.5	5	NO ₂	0	0.1	Phosgene	1	10	HCN			North England Industrial Health Service Report July 1979
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Cathodic Disbondment	<p>1. No effect after 6 weeks in seawater at 1200 mV. No effect after 11 weeks in seawater at 900 mV.</p> <p>2. No effect after 24 days with 2700 micron (106 mil) thick ZEBRON® under 1022 mV in seawater at 25° C.</p> <p>3. No disbondment after 5 days with 150 mil ZEBRON® 5VDC in 5 percent NaCl in glycerol at 300° F. Minor disbondment at side of holiday after 22 days.</p>	<p>Netherlands Paint Research Council TNO</p> <p>Netherlands Paint Research Council TNO</p> <p>Tennessee Gas</p>																								
Ignition and Flame Spread	Index of performance 3.3P. The 3.3 index means a "coating having low flame spread characteristics" and the letter P means "not easily ignitable". Overall rating was Class 2 by Lloyd meaning ZEBRON® coating is acceptable for ships and offshore drilling rigs.	Firto, Lloyds Register of Shipping Certificate No. ICD/F79/223 TE3484 abd TE3485																								