# 3M<sup>™</sup> Scotchkote<sup>™</sup> Fusion Bonded Epoxy Coating 206N XTRA LG

# **Data Sheet and Application Guide**

# **Product Description**

3M<sup>™</sup> Scotchkote<sup>™</sup> Fusion Bonded Epoxy coating 206N XTRA LG is a one-part, heat curable, thermosetting, powdered epoxy coating with extended gel for coating the interior of line pipe and fittings, valves, and couplers. Scotchkote coating 206N XTRA LG is NSF/ANSI 61 certified for potable water applications and is also resistant to corrosive soils, hydrocarbons, harsh chemicals and sea water. Scotchkote coating 206N XTRA LG meets the requirements of AWWA Standard C213 and C550.

### **Properties**

Property	Value
Color	blue green
Specific Gravity (Air Pycnometer)	1.47
Coverage	134 ft²/lb/mil 0.694 m²/kg/mm
Shelf Life 80°F/27°C	12 months
Gel time @ 380°F/193°C Gel time @ 450°F/232°C Modified CSA-Z245.20	90-115 seconds 40-60 seconds
Pill flow - 300°F/149°C	50-80 mm
Cure time	18 minutes @ 380°F (193°C)

#### **General Application Information**

- Remove oil, grease and loosely adhering deposits.
- Abrasive blast-clean the surface to near-white in accordance with SSPC-SP10 or NACE No. 2
- ISO 8501-Sa2.5
- Heat pipe to 350°F/177°C-450°F/232°C
- Deposit Scotchkote coating 206N XTRA LG onto the interior of the pipe at 16-40 mils (406-1016 µm).
- Within 24 hours move coated pipe to a post cure station. Refer to cure guide below for cure time and temperature.
- Electrically inspect for holidays after coating has cooled to 200°F/93°C or lower.
- When Scotchkote coating 206N XTRA LG is used with 3M<sup>™</sup> Primers, contact the 3M representative for application and cure conditions. Primers may not be used for potable water applications.
- Repair all defects using 3M<sup>™</sup> Scotchkote<sup>™</sup> 323 Liquid Epoxy Coating 323. 3M<sup>™</sup> Scotchkote<sup>™</sup> Hot Melt Patch Compound 226P may be used for non-potable water applications.

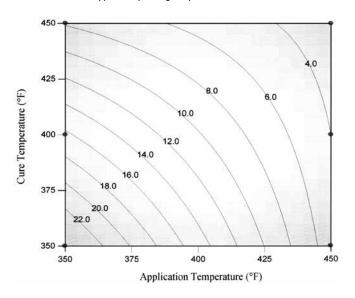
#### **Coating Test Data**

Property	Test Description	Result
Impact	ASTM G14 1/8" x 3" x 3" in steel panel (0.32 cm x 7.6 cm x 7.6 cm) 5/8" (1.6 cm) diameter tup	160 in-lbs. 1,8 kg-m
Bendability	Saudi Aramco 09-SAMSS-091 500-625 µm thickness CSA-Z245.20-M92 3°/PD at -30°C	10.5 PD (5.5°/PD) Passes
Dielectric Strength	ASTM D149-95a	1345 V/mil 53,0 Kv/mm
Water Vapor Transmission	ASTM D 1653	4.05 g/M2/day (0,21 grains/ ft2/hr)
Water Absorption	ASTM D 570-95 23° C (73° F)	1.46 % Wt. gain
Water Resistance	ASTM D 4585-92 Cleveland Test 52°C with 15°C Gradient 3 weeks continuous	*Pass
Abrasion Resistance	Saudi Aramco 09-SAMSS-091 ASTM D 4060	0,11 g loss
V.O.C. (As supplied)		0 g/L, as calculated

<sup>\*</sup>Pass means excellent adhesion, no blisters and no swelling



Scotchkote coating 206N XTRA LG has been tested and certified to NSF/ANSI Standard 61, Drinking Water System Components. For NSF certified applications, max approved thickness is 60 mil (1.5 mm) and the max approved operating temperature is 140°F/60°C.





#### 3M™ Scotchkote™ Fusion Bonded Epoxy Coating 206N XTRA LG Properties (continued)

Property	Test Description	Results
Penetration	ASTM G 17 -40° to 200°F (-40° to 93°C)	0%
Tensile Strength	ASTM D 2370	9,330 psi (654 kg/cm²)
Elongation	ASTM D 237	6.9%
Compressive Strength	ASTM D 695	11,600 psi (815 kg/cm²)
Thermal Shock	-100°F to 310°F ( -73°C to 154°C) 4 in x 4 in (10,2 cm x 10,2 cm) coated panel	no visible effect 10 cycles
Volume Resistivity	ASTM D 257	1.3 x 10 <sup>15</sup> ohm-cm
Salt Fog	ASTM B 117	no blistering, no discoloration, no loss of adhesion
Cathodic Disbondment	90 day, 5 volt, 5% NaCl, 73°F (23°C) 7 day, 5 volt, 5% NaCl, 73°F (23°C) after bending at 3° per diameter length	13 mmr 2, 75 mmr
Hot Water Resistance	212°F (100°C) immersion for 1,000 hrs	no blistering, good adhesion, slight discoloration, surface roughening and softening

<sup>1</sup>Test conducted on coupons cut from production coated 26 in O.D., 0.406 in wall x 52 pipe 12 mil (0.305 mm) average coating thickness.

#### **Handling and Safety Precautions**

Read all Health Hazard, Precautionary and First Aid, Material Safety Data Sheet, and/or product label prior to handling or use.

#### **Ordering Information/Customer Service**

For ordering, technical or product information; or a copy of the Material Safety Data Sheet, call:

Phone: 800/722-6721 or 512/984-9393 Fax: 877/601-1305 or 512/984-6296

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