# 3M<sup>™</sup> Scotchkote<sup>™</sup> Fusion-Bonded Epoxy Coating 226N

# **Product Description**

The 3M<sup>™</sup> Scotchkote<sup>™</sup> Fusion-Bonded Epoxy Coating 226N, is a one-part, heat curable, thermosetting epoxy coating. It is designed to provide superior performance and adhesion to the metal substrate, and to provide excellent cathodic disbonding properties without the use of a chromate pretreatment.

#### Scotchkote 226N Test Data

OCOICHROIC 220N ICSI Data		
Property	Value	
Color Federal Standard 595B	14272/Green	
Specific Gravity Powder	1.44	
Shelf Life at 27°C	12 months	
Particle size larger than 250 µm larger than 150 µm	<0.2% <3.0%	
Moisture Content	<0.3% at manufacture	
Gel Time at 205°C 226N 4G 226N 8G 226N 11G	7-12 seconds 17-23 seconds 24-36 seconds	
Cure Time at 232°C 226N 4G 226N 8G 226N 11G	30 seconds 90 seconds 110 seconds	

# **Temperature Operating Range**

Scotchkote 226N, when properly applied, should perform in a satisfactory manner on pipelines operating between -100°F/-73°C and 230°F/110°C. For temperatures between 170°F/77°C and 230°F/110°C, laboratory tests indicate that the thicker coatings may improve the service capability. It is difficult to accurately predict field performance from laboratory data, due to the wide variation in actual field conditions. Operating temperature performance depends on the whole system, not only the FBE coating. Soil types, moisture content, temperature and other factors peculiar to the area all influence the coating performance and the upper temperature operating limit.

### **Test Data**

Coating performance is affected by the degree of surface preparation, application temperature, film formation and curing conditions.

Scotchkote 226N Test Data - Coating		
Property	Test Method	Value
Impact	CSA Z245.20	1.5 J
Cathodic Disbondment	24 hours, 65°C, 3.5V, 3% NaCl CSA Z245.20-02, Clause 12.8 14 day, 65°C, 1.5V, 3% NaCl 28 day, 23°C, 1.5V, 3% NaCl 28 day, 65°C, 3.5V, 3% NaCl	2.5 mm r 3.0 mm r 2.3 mm r 6.0 mm r
Hot Water Resistance	24 hours, CAN/CSA-Z245.20-12.14, 203°F/95°C 48 hours, CAN/CSA-Z245.20-12.14, 167°F/75°C	1 rating 1 rating
Flexibility (Bendability) (Mandrel Bend)	-30°C CSA Z245.20-02, Clause 12.11 <u>Temperature</u> -22°F/-30°C	<u>°/PD</u> 3.0
Penetration	ASTM G 17 -40° to 200°F/-40° to 93°C	0
Volume Resistivity	ASTM D 257	1.2*10 <sup>15</sup> ohm*cm
Electrical Strength	ASTM D 1000	1160V/mil / 45.2kV/mm

Note: The typical values in this data sheet are based on lab prepared samples. Values shown are not to be interpreted as product specifications.



3M and Scotchkote are trademarks of 3M Company.

#### **Handling & Safety Precautions**

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

#### **Important Notice**

All statements, technical information and recommendations related to 3M Products are based on information believed to be reliable, but the accuracy or completeness is not guaranteed. Before using the 3M Product, you must evaluate it and determine if it is suitable for your intended application. Because conditions of Product use are outside of our control and vary widely you assume all risks and liability associated with such use. Any Product-related statements not contained in current 3M publications, or any contrary statements contained in your purchase order, shall have no force or effect unless expressly agreed to in writing by an authorized officer of 3M.

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

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

Phone: 800/722-6721 Fax: 877/601-1305

## Warranty; Limited Remedy; Limited Liability.

3M warrants that Product will conform to 3M published specifications upon shipment. If Product is proven not to have met the specifications your exclusive remedy and 3M's sole obligation will be, at 3M's option, to replace the Product or to refund the purchase price of the Product. **EXCEPT WHERE PROHIBITED BY LAW. THIS** WARRANTY IS MADE IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR THOSE ARISING FROM A COURSE OF DEALING, CUSTOM OR USAGE OF TRADE. Buyer is an expert in its field and is responsible for determining if Products are suitable for a particular purpose or application. 3M has no obligation under this warranty with respect to any Product that has failed due to inadequate or improper storage, handling, surface preparation, application, or maintenance; failure to follow Product instructions; or alteration or damage to the Product caused by accident, neglect, or misuse. EXCEPT WHERE PROHIBITED BY LAW, IN NO EVENT SHALL 3M BE LIABLE FOR ANY DIRECT, INDIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL LOSS OR DAMAGES (INCLUDING LOST PROFITS) ARISING FROM THIS PRODUCT, REGARDLESS OF THE LEGAL THEORY ASSERTED.

