

COAL TAR ENAMEL (Coal Tar Based Pipeline Coating)

CHARACTERISTICS STANDARD SPECIFICATIONS

SL No.	Characteristics Specification Grades	Standard Range				
		AWWA-C-203-02		BS-4164-02		
		Type - 1	Type - 2	105/15	105/8	120/5
1.	Softening Point Deg. C	104-116	104-116	105-116	105-116	120-130
2.	Filler content % by mass	25-35	25-35	25-35	25-35	25-35
3.	Density at 25 C.g/cm ²	1.4-1.6	1.4-1.6	1.4-1.6	1.4-1.6	1.4-1.6
4.	Flow time, Seconds At 230°C At 234°C	-	-	9-16	9-16	- 9-26
5.	Penetration, 10' mm At 250°C/100 gm/5s 45/46.1/480 _c /50 gm/5 _s	5-10 12-30	10-20 15-55	10-20 15-55	5-12 8-30	1-9 3-16
6.	Sag, Maximum, mm 70/71°C C/24/hrs. 80°C C/24 hrs.	1.6	1.6	1.5	1.5	- 1.5
7.	Low Temp. Cracking & Disbonding -30°C	-	-	None	-	-
	-28.9°C	N/A	None	-	-	-
	-25°C	-	-	-	None	-
	-23.3°C	None	N/A	-	-	-
	-20°C	-	-	-	-	None
8.	Bend at 0°C/4°C First Crack, Min, mm Initial	N/A	N/A	20	15	-
	After heating	-	-	15	10	-
	Disbanded Area, Max, mm ²					
	Initial	-	-	2,000	3,000	-
	After heating	-	-	3,000	5,000	-
9.	Impact Test Disbonding Area, Max, mm ² 0°C (i) Direct	-	-	15,000	-	-
	(ii) Indirect	-	-	-	-	-
	25°C (i) Direct	10,323	6,452	-	10,000	-
	(ii) Indirect	3,871	1,290	-	-	-
10.	Peel Test (Max) mm 27/30°C	No Peeling	No Peeling	3.0	-	-
	38/40°C	No Peeling	No Peeling	3.0	3.0	-
	49/50°C	No Peeling	No Peeling	3.0	3.0	-
	60/60°C	No Peeling	No Peeling	-	3.0	3.0
	71/70°C	No	No	-	-	3.0

		Peeling	Peeling			
11.	Fineness Filler through 200 mesh% by weight, min.	90	90	-	-	-
12.	Cathodic Disbonding in 28 days, mm. max	-	-	5	5	5
13	Service Temp. °C					
	Interior Lining	32.2	32.2	-	-	-
	Exterior Lining	71.1	71.1	-30to+65	-20to+5	-5to+65
14.	Recommended application temp., °C	230-240	230-240	250max	250max	260max