Icopal Sp. z o.o.
98-220 Zduńska Wola
ul. Łaska 169/197
Poland

MONODACH WM

1. Product trade name: Top bitumen sheet MONODACH WM

2. Technical specification:
PN-EN 13707 + A2:2012 IDT. EN 13707:2004 + A2:2009
Flexible sheets for waterproofing – Reinforced bitumen sheets for roof waterproofing – Definitions and characteristics

3. Manufacturer: ICOPAL Sp. z o.o., 98-220 Zduńska Wola ul. Łaska 169/197, Poland

4. Description of the product:
Sheet with polyester – glass fleece reinforcement, coated with SBS modified with mineral filler, top side is finished with slate and with ca. 120 mm foil selvedge, bottom side is finished with foil

5. Type of application: single layer applications in roof waterproofing

6. Method of application: torch applied or mechanically fastened

7. Information for users:
Conditions of application:
the roofing sheet should be applied on a roof when the temperature does not fall below 0 °C. It should not be applied: on a wet roof surface, on a roof covered with ice, during rain or snow falls or during strong wind.
Conditions of usage:
waterproofing made with the use of MONODACH WM should be done according to a technical project complying with binding building regulations and detailed guidelines included in the manual issued by the producer.
Storage:
the rolls should be stored in rooms and should be protected against moisture and exposure to sunlight or source of heat. The rolls should be stored on an even surface in upright position, in one layer.
Transport:
the rolls should be transported in covered trucks, in upright position in one layer, protected against falling over and any other damage. Rolls should be placed in a way preventing their dislocation during transport.

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8. Product performance:

	Characteristic	Test method/ Classification	Units	Value or statement
1.	Visible defects	EN 1850-1	-----	no visible defects
2.	Length (*)	EN 1848-1	m	≥ 5,0
3.	Width (*)	EN 1848-1	m	≥ 0,99 (1,00±0,01)
4.	Straightness	EN 1848-1	-----	deviation: ≤10 mm/5 m or proportional for other lengths
5.	Thickness	EN 1849-1	mm	5,5 ± 0,2
6.	Watertightness	EN 1928 Method A	-----	resistant to 10 kPa
7.	Reaction to fire	EN 1850-1	-----	Class E
8	Watertightness after stretching at low temperature	EN 13897	%	10
9	Peel resistance of joints (maximum, medium) -longitudinal direction, -transverse direction	EN 12316- 1	N/50 mm	 250 ± 100 250 ± 100
10.	Shear resistance of joints -longitudinal direction, -transverse direction	EN 12317-1	N/50 mm	900 ± 100 1000 ± 100
11.	Tensile properties: maximum tensile strength -longitudinal direction, -transverse direction	EN 12311-1	N/50 mm	 1200 ± 300 900 ± 200
12.	Tensile properties: elongation -longitudinal direction, -transverse direction	EN 12311-1	%	 50 ± 10 50 ± 10
13.	Resistance to impact	EN 12691 Method A Method B	mm	 2000 2000
14.	Resistance to static loading	EN 12730 Method A	kg	20
15.	Resistance to tearing (nail shrank) - longitudinal direction, - transverse direction	EN 12310-1	N	 350 ± 50 350 ± 50
16.	Dimensional stability	EN 1107-1 Method A	%	≤ 0,5
17	Flexibility at low temperature	EN 1109	ºC	-25 /∅30 mm
18.	Flow resistance at elevated temperature	EN 1110	ºC	100
19.	Artificial ageing by long term exposure to elevated temperature	EN 1109 EN 1296	ºC	-20 ± 5
20.	Adhesion of granules	EN 12039	%	10 ± 10
21.	Water vapour transmission properties	EN 13707	-----	μ=20 000

(*) there is a possibility to produce the sheet of different length and/or width on condition that the length and/ or width specified in tests is not lower than declared