

## PRODUCT SPECIFICATIONS

# MODIFIED BITUMEN MEMBRANE TORCH APPLY

Founded by

*Osman Ahmed Osman*

1974

# Mineral INSUELAST

### Methods of Application:

INSUELAST Mineral membranes are designed for easy torch application using a propane torch; it can also apply using mechanical means. Substrates must be thoroughly cleaned and treated with Insuprimer cold applied by brush, roller, or spray at a rate of 0.2 to 0.3 litres/m<sup>2</sup>. It will depend on substrate porosity. Membranes must be laid to allow side laps of 8 to 10 cm and end laps of 12 to 15 cm.

For more details, please contact Insumat Technical Services, we will be happy to provide assistance and advice in designing special waterproofing systems.

**Storage:** Sheet rolls shall be stored vertically in a dry place protected from sun and weather. Rolls shall be placed on clean floors or platforms in such a way as to prevent damage to ends and soiling with foreign matters.

NB: 1. The above products data is subject to technical updating without prior notice due to technological research development pursued by **INSUMAT**.

2. Increasing of mechanical properties for polyester as tensile strength, elongation and tear resistance are available according to customer requirements.

### Manufacturing of Insulating Materials and by-products Company, Insumat

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**SBS Modified Bitumen Membrane Torch Apply  
Reinforced With Nonwoven Polyester**

**-15°C**

| Specifications               |                                              |              | Units   | Results*      | Method of Test |
|------------------------------|----------------------------------------------|--------------|---------|---------------|----------------|
| INSUELAST series N/3000&4000 |                                              |              |         |               |                |
| Dimensions                   | Thickness                                    |              | mm      | 3 & 4 (±0.2)  | ASTM D-5147    |
|                              | Length                                       |              | m       | 10 (±1%)      | UNI 8202       |
|                              | Width                                        |              | m       | 1 (±1%)       | UNI 8202       |
|                              | Carrier                                      |              |         | Polyester     | UNI 8202       |
| Compound                     | R & B Softening Point                        |              | °C      | >120          | ASTM D-36      |
|                              | Penetration at                               | 25°C         | dm m    | 25            | ASTM D-5       |
|                              |                                              | 60°C         | dm m    | 100           | ASTM D-5       |
| Membrane                     | Tensile strength                             | Longitudinal | N/5cm   | 900           | ASTM D-5147    |
|                              |                                              | Transverse   | N/5cm   | 700           | ASTM D-5147    |
|                              | Elongation                                   | Longitudinal | %       | 55            | ASTM D-5147    |
|                              |                                              | Transverse   | %       | 60            | ASTM D-5147    |
|                              | Tear resistance                              | Longitudinal | N       | 500           | ASTM D-4073    |
|                              |                                              | Transverse   | N       | 400           | ASTM D-4073    |
|                              | Low temperature flexibility                  |              | °C      | -15           | ASTM D-5147    |
|                              | High temperature stability                   |              | °C      | ≥100          | ASTM D-5147    |
|                              | Hot running test at 90 slope + 90C           |              | mm      | <1.0          | UNI 8202       |
|                              | Water absorption                             |              | %       | 0.15(max)     | ASTM D-570     |
|                              | Moisture content                             |              | %       | ≤1.0          | ASTM D-5147    |
|                              | Water tightness                              |              | Kpa     | ≥60           | EN 1928        |
|                              | Static puncture resistance                   |              |         | PS4           | UNI 8202       |
|                              | Dynamic puncture resistance                  |              |         | PD4           | UNI 8202       |
|                              | Dimensional stability (after thermal action) |              | %       | ≤1.0          | ASTM D-1204    |
|                              | Aging Due to UV-Radiation                    |              | 2000 hr | Pass the test | ASTM G-5377    |

**Quality Statement:**

- The declared average values represent the best performance achieved at the present state of our knowledge, Insumat reserves the right to change, without warning, the technical characteristics in order to make the product more responding to the application requirements. The choice of the type of membrane for the kind of use is at the client's discretion.
- All information/ values listed in this technical data sheet may supersede relevant information / values listed in equivalent product(s) technical data sheet or submittal.
- \*Tolerances for the above as per the latest product testing, results may vary +/- 20%
- 1. Exact Value depends on thickness of the product/reinforcement, please ask Insumat's representative for the latest tests results.
- 2. Actual measured data may vary due to circumstances beyond Insumat's control.
- 3. All products manufactured by Insumat Egypt, are manufactured to procedures certified to conform to the quality, environment, health & safety management systems described in the ISO 9001:2015, standard.
- 4. Deviating from the standard method, the assessment is made in 1 Hour test 4 mm or 4.5 Kg/m<sup>2</sup> products.