

TORODIN HYDROS

Asphaltic waterproofing membrane

DESCRIPTION

Asphaltic membrane produced by the physical modification of asphalts with a high concentration of polymers, which confer greater resistance to ultraviolet rays. The membrane is structured with a non-textile of continuous filaments of pre-stabilized polyester of high mechanical resistance.

TECHNICAL CHARACTERISTICS OF THE PRODUCT

Characteristics	Unit	Type III
Thickness	mm	3 & 4
Resistance to longitudinal & transversal traction (minimum)	N	400
Longitudinal and transversal elongation (minimum)	%	30
Water absorption (maximum)	%	1,5
Flexibility at low temperatures	°C	Class B = -5
Resistance to impact	J-Joule	4.90
Drooping from heat (minimum)	°C	95
Dimensional stability (minimum)	%	1
Flexibility after aging	°C	Class B = 5
Watertightness (minimum)	w.c.m	15
Tear resistance (minimum)	N	120

REFERENCE NORMS

- NBR 9952 – Asphaltic Membranes for Waterproofing (Applies to Type III – Class B)
- NBR 9575:2010 – Waterproofing – Systems and Projects;
- NBR 9574:2008 – Execution of Waterproofing.

UTILIZATION

Torodin Hydros 3 mm – Direct facing on concrete in irrigation canals, fish farm tanks and coffer dams.
Torodin Hydros 4 mm – Direct facing on soil in irrigation canals, clay pits, reservoirs, fish farm tanks and lagoons, coffer dams, lagoons executed in concrete, dams and adduction canals.

For other uses consult the Technical Department (sac@viapol.com.br).

USAGE INSTRUCTIONS

Preparation of the Surface

On concrete

The surface must first be washed, free of dust, sand, residues of oil, grease, release agent, stains of any type of material that may hinder adhesion of the product.

On the moist horizontal surface, execute regularization with cement and medium sand mortar, ratio 1:3, using kneading water composed of 1 volume of **Viafix** adhesive emulsion and 2 volumes de water for better adhesion to the substrate. This mortar must be given an even finish, with a minimum thickness of 2cm.

All corners and edges must be rounded off with an approximate radius of 5cm to 8cm.

On the soil

The soil must be compacted in accordance with geotechnical criteria.

All irregularities caused by outcrops of roots, clods of turf/soil and stones/rocks must be removed, leaving the substrate uniform.

The membrane is to be set in place over the entire extension of the embankment of the irrigation canal or the lagoon by means of trenches 30cm wide and 30cm deep.

In lagoons and tanks create core trenches close to the embankment slopes for better stability of the asphaltic membrane and to facilitate maintenance of the tanks.

Application of the Product

On concrete

On the dry regularized surface apply one coat of **Viabit, Adeflex or Ecoprimer** primer with a roller or broad brush and allow to dry for a minimum of 6 hours.

Align the **Torodin Hydros** asphaltic membrane in a transverse direction in relation to the course of the irrigation canal. The membrane should be laid with overlaps in the downstream to upstream direction.

In the case of lagoons, initiate application on the inclined slopes of the embankment

With the aid of a LPG gas blowtorch flame, proceed with the total adhesion of the **Torodin Hydros** membrane. The seams between lengths of membrane should have an overlap of 10cm, which is to be beveled to provide a perfect seal.

On the soil

Align the **Torodin Hydros** asphaltic membrane in a transverse direction in relation to the course of the irrigation canal. The membrane should be laid with overlaps in the downstream to upstream direction.

In the case of lagoons, initiate application on the inclined slopes of the embankment.

With the aid of a LPG gas blowtorch flame, proceed with the total adhesion of the **Torodin Hydros** membrane. The seams between lengths of membrane should have an overlap of 15cm, which should be beveled to provide a perfect seal.

MECHANICAL PROTECTION MORTAR

If traffic of pedestrians or animals is foreseen, the borders are to receive leveled mechanical protection mortar of cement and medium sand, ratio 1:3, with a minimum thickness of 3cm and seams every 2.0m.

CONSUMPTION

Asphaltic membrane: 1.15 m² of area, considering overlaps and losses from cutouts of edges.

Primer: 0,40 l/m²

FINISH OF MEMBRANE

AA – Sand on both faces.

Other types of finish: by consultation.

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PACKAGING / STACKING

Spools 1m in width containing 10m of membrane:

Pallets 30 spools of 3mm membrane - 300 m²;

Pallets with 25 spools of 4mm membrane - 250 m²;

Pallets should be stacked as recommended to avoid collapse of the stack and damage to the products.

The product must be stacked vertically on pallets, avoiding contact of product with the floor.

Do not stack the product against walls or partitions.

Stack up to 2 pallets, with the second pallet resting on Madeirit for better distribution of the weight.

VALIDITY / STORAGE

5 years from date of manufacture.

Store the product in the vertical position, in the original intact packaging, in a covered, dry ventilated location, far from sources of heat.

SAFETY RECOMMENDATIONS

Prior to starting work consult the SISCP (Safety Information Sheet for Chemical Products) of the products.

Due to high temperature application, use adequate clothing and PPE - (respirator, split leather gloves, boots, over-sleeves, leggings, apron and safety eyewear), keeping the area ventilated until the product has dried completely.

In closed/indoor areas it is imperative to use forced ventilation and semi-facial mask equipped with a filter adequate for organic vapors.

When a blowtorch is used for applying the waterproofing system in a closed/indoor area, we recommend that the gas cylinder be kept away from the work area for greater safety.

ENVIRONMENTAL PRECAUTIONS

Dispose of materials in an appropriate location in accordance with regulations based on local environmental legislation in force.

FIRST AID

Consult the SISCP of the products.

In case of contact of hot product with the skin, cool the area immediately with cold water, until the product cools and hardens, then cover the burnt region and consult a doctor.

In case of intoxication by inhalation, move the victim to a well ventilated location and immediately seek medical assistance.

In case of contact with the eyes, wash copiously with potable water and seek medical assistance. In the eventuality of irritation of the eyes or skin, or ingestion of the product, consult a doctor, stating the type of product involved.

For further details consult the catalogues of the following products: **Viafix**, **Adeflex**, **Viabit**, **Ecoprimer**.

Note: The information contained in this datasheet is based on our best knowledge, and is provided for your help and guidance. We need to point out that the performance of our products depends on the preparation conditions of the surface and the storage and application of the product, factors not subject to our control. The consumption of the product depends on the application technique, the condition of the equipment used, and the surface to

be coated. We do not, therefore, accept any responsibility of any nature regarding the consumption and performance of our products arising from inadequate storage or use of the product. For further clarification please consult our Technical Department.

Viapol reserves the right to alter the specifications and/or the information contained in this datasheet without prior notice..