

TECHNICAL DATA SHEET

ISOLATE FR: Projected natural cork DESCRIPTION

Waterproof membrane, thermal-acoustic insulator with excellent fire performance, based on styrene-acrylic resins in aqueous emulsion, natural cork and other additives. Specially formulated to reduce the passage of heat into the treated area. Thermal bridge breakage; generating savings in energy consumption. For the waterproofing of facades, terraces and roofs. Its mechanical and water resistance properties reduce the formation of cracks, highlighting its elasticity, high resistance to atmospheric agents and good adhesion to supports such as stucco, concrete, gypsum, cement, brick, etc.

Thanks to the thermal insulation it avoids extreme expansions and contractions, with the passive thermal protection of the structures of the building elements.

The **ISOLATE FR** is expressly formulated to be colored with our **INKERCORK**, and can also be colored with an external tinting system. *Since Cork is a natural product, small color variations can normally occur, this being inherent to the product.*

TECHNICAL DATA

Concept	Result
* Dry to touch	4 - 5 hours.
* Re-paint	12 hours minimum.
* Total polymerization	7 days
* Outdoor resistance (aging 2000hrs)	No loss of adhesión or "blistering"
* Adherence	Excellent, controlling the porosity and moisture of the support
* Minimum recommended thickness	3 mm
* Particle Thermal conductivity (natural cork)	0.034 (W/m.k)
* Water vapor permeable	Class I
* Waterproof to liquid water	Class III (W=0.08Kg/sqm/h ^{0.5})
* Density	0.99 gr/cc aprox.
* Performance as required	2 Kg/sqm
* FIRE RESISTANCE EUROCLASS CLASIFICATION	Bs2,d0
* Combustibility: THR ₆₀₀ total heat release	1.04MJ
* Combustibility: TSP ₆₀₀ total smoke production	72,31sqm

PROPERTIES

- Breathable elastic waterproofing, sound insulation, shock damping, masking of defects in the support and prevents condensations.
- Indoor applied prevents the migration of the comfort temperature to the structure, with consequent energy savings.
- Being a water based product, it is not toxic, hazardous or flammable.
- Easy to apply, using spray gun machine. Following instructions provided by the application protocol.
- Free of volatile organic compounds according to regulations.
- CLASSIFIED product based on fire behavior (see annex Certificate)
SBI "Single burning object" combustibility test.
- Product provided in two different granulometries:
 - Medium granulometry: **ISOLATE TECH FR**
 - Fine granulometry: **ISOLATE FINE FR**

DETAILED VIEW OF THE TWO GRANULOMETRIES (ISOLATE TECH FR / ISOLATE FINE FR)



APPLICATIONS

Before applying **ISOLATE FR**, it must be mixed with the desired color (**INKERCORK**). To do this, shake the **INKERCORK** until its perfect homogenization and pour over the 12Kg / 10Kg bucket of **ISOLATE TECH FR / ISOLATE FINE FR**, respectively. To ensure the complete emptying of the color a small quantity of water can be put in the **INKERCORK** bottle, shake and pour the water into the **ISOLATE FR** bucket. Then, beat it with a stirrer until the color is perfectly homogenized with **ISOLATE FR**. Once it is colored, the product can be applied.

The surfaces to be painted must be perfectly cleaned and free of dust, grease and lime. Once the **INKERCORK** has been mixed into the product, add water between 300-600 grams of water per bucket, according to the desired fluidity (once decided the amount of water to add per bucket, work always with the same quantity in all the buckets). Apply with spray gun machine.

- New cement and concrete surfaces:
 - Apply the first layer of primer (**UNIVERSAL PRIMER**) diluted: 4 parts of water/ 1 part of **UNIVERSAL PRIMER**.
 - Let dry for 4-5 hours.
 - Apply the first thinner layer of **ISOLATE FR** to serve as a grip and then apply a second layer until you get a 2-3 mm thickness.
- Old surfaces:
 - Clean the surface thoroughly before applying the product, removing all unhealthy paint residue.
 - Repair faulty and flaking areas.
 - Always apply primer, **UNIVERSAL PRIMER**.
 - Apply the product in the same way as on new surfaces.
- Terraces with concrete or brick bottom:
 - Brick and expansion joints need to be cleaned with water and anti-mold fungicide, mildew can be removed with a metallic brush.
 - It should be rinsed with water and let dry for 3 or 4 days.
 - Proceed to the application of the product as indicated in the case of new surfaces.
- Special care must be taken in disperse surfaces:
 - These surfaces need a good consolidation.
 - Generally, applying **UNIVERSAL PRIMER** should be enough. Dilution of this product may vary depending on the surface. Please, contact our technical department for further information.

RECOMMENDATIONS:

Protect the product from frost. Do not apply with temperatures below 5 °C, or on hot days (35°C) or with hot winds.

Measures to be taken in case of:

- Efflorescences, saltpeter:
 - Clean with a specific cleaner. Rinse with water and let dry.
- Dirty or disintegrated old surfaces:
 - Apply our primer (**UNIVERSAL PRIMER**) diluted: 4 parts of water/ 1 part of **UNIVERSAL PRIMER**.
- Moisture stains, smoke:
 - Wash with water and detergent. Print with stain repellent or smudged or anti-dampness sealer.

STORAGE

Store properly in its original container at temperatures between 5 and 40 °C. Do not store for more than twelve months.

SAFETY INFORMATION

Check Safety Data sheet.

CONTAINERS

ISOLATE TECH FR: Bucket with 12 Kg.

ISOLATE FINE FR: Bucket with 10 Kg.

NOTAS LEGALES

Estas informaciones corresponden al estado actual de nuestros conocimientos y facilitan información sobre nuestros productos y sus posibilidades de aplicación. En la práctica, las posibles diferencias en los materiales, soportes y condiciones reales en el lugar de aplicación son tales, que no se puede deducir de la información del presente documento, ni de cualquier otra recomendación escrita, ni de consejo alguno ofrecido, ninguna garantía en términos de comercialización o idoneidad para propósitos particulares, ni obligación alguna fuera de cualquier relación legal que pudiera existir. El usuario de los productos debe realizar las pruebas para comprobar su idoneidad de acuerdo al uso que se le quiere dar. Gardenia Química se reserva el derecho de cambiar las propiedades de sus productos. Los usuarios deben de conocer y utilizar la versión última y actualizada de las Hojas de Datos de los Productos.

Rev. 3 (January 2021)

ANNEX



MEMBER OF



REPORT No. 085229-2-a

CUSTOMER GARDENIA QUÍMICA, S.L.

ADDRESS AV. REAL DE EXTREMADURA, 25
12200 ONDA (CASTELLÓN), SPAIN

PURPOSE REACTION TO FIRE CLASSIFICATION REPORT ACCORDING TO
EN 13501-1:2018

TESTED SAMPLE PROJECTED NATURAL CORK
REF.: "ISOLATE"

RECEPTION DATE 08.01.2020

TEST DATE 31.01.2020 – 07.02.2020

ISSUE DATE 11.02.2020

TRANSLATION DATE 19.02.2020

Pablo Garmendia
Technical Project Manager
Safety Laboratory

- The results of the current report concern only and exclusively the sample tested.
- This report shall not be reproduced, except in full, without the express authorisation of FUNDACIÓN TECNALIA R&I
- The validity of this classification report is restricted to the applicable regulation at the time and place of carrying out the final assembly of the product referenced in this report.
- (*) Data provided by the customer. FUNDACIÓN TECNALIA R&I accepts no responsibility or liability for the data provided by the customer.
- In case of a lawsuit, the original spanish version shall be taken as reference.



1. PURPOSE OF THE REPORT

The purpose of this report is to determine the reaction to fire classification obtained by the projected natural cork, referenced as **"ISOLATE"** in accordance with EN 13501-1:2018: *"Fire classification of construction products and building elements. Part 1: Classification using data from reaction to fire tests"*.

NOTE: This report does not imply any approval or certification of the product.

2. DESCRIPTION OF THE SAMPLE SUBJECT TO CLASSIFICATION

The sample, referenced as "ISOLATE" is defined as projected natural cork. The test specimens were manufactured at the customer's facilities.

The technical datasheet of said sample is included in the annex of the report 085229-1.

3. REPORT ON WHICH THE CLASSIFICATION IS BASED

ISSUING LABORATORY:	FUNDACIÓN TECNALIA R&I (headquarters Azpeitia) Bº Lasao, Área Anardi 5 20730 Azpeitia (Gipuzkoa), Spain
TESTED SAMPLE:	PROJECTED NATURAL CORK
COMMERCIAL REFERENCE:	"ISOLATE"
TEST APPLICANT:	GARDENIA QUÍMICA, S.L. AV. REAL DE EXTREMADURA, 25 12200 ONDA (CASTELLÓN), SPAIN
TEST REPORT No.:	085229-1
DATE OF ISSUE:	11 February 2020
TRANSLATION DATE:	19.02.2020
TEST CONDUCTED:	According to EN 13823:2010+A1:2014 and EN ISO 11925-2:2010/AC:2011

TEST RESULTS

TEST METHOD	PARAMETER	RESULT
EN 13823:2010+A1:2014	FIGRA _{0,2 MJ}	67.68 W/s
	FIGRA _{0,4 MJ}	43.50 W/s
	LFS < edge	YES
	THR _{600S}	1.04 MJ
	SMOGRA	11.06 m ² /s ²
EN ISO 11925-2:2010/AC:2011	TSP _{600S}	72.31 m ²
	Flaming droplets/particles	NO
	P _s ≤ 150 mm (in 60 s)	YES
	Filter paper flaming	NO

4. CLASSIFICATION

In accordance with standard EN 13501-1:2018, the projected natural cork referenced as “ISOLATE” received on 8 January 2020 was given the following reaction to fire classification:

Reaction to Fire Classification: B-s2, d0

This classification is valid when the product referenced as “ISOLATE” is used under the following conditions:

- As a construction product in all applications, with the exception of flooring.
- When the cork with reference “ISOLATE” is applied to any support of classification A2-s1,d0 or A1 according to EN 13501-1.