

SELECTION & SPECIFICATION DATA

Generic Type	Modified gypsum-based mortar specially designed to improve sound absorption.
Description	Modified gypsum-based sound-absorption mortar, contains natural fibres and light fillers. Free from asbestos and crystalline silica, intended for improved sound absorption.
Features	<ul style="list-style-type: none"> • Formulation with light high performance fillers. • Non-combustible. • High sound absorption. • Indoor Air Comfort GOLD certified. • Reaction to Fire A1 classified. • Asbestos-free – Complies with regulations 2003/18/EC and RD 396/2006. • Free from crystalline silica. • Good adhesion on different substrates. • Light and low abrasion with the use of spraying equipment. Saving on consumables. • Low thermal conductivity. • Option for aesthetic finish in different colours. It can be coloured en masse.
Color	Antique white - Other colours on request
Finish	Textured
Primer	FARBOCUSTIC can be applied on different types of substrates, such as concrete, large thin-walled hollow brick, laminated plasterboard, etc. Depending on the type of substrate and its condition, it may be necessary to apply the FARBOFIX adhesion promoter. For further information, contact Carboline Technical Service.
Application Thickness	Maximum thickness per coat of 10 mm.
Theoretical Coverage Rates	<p>For guidance purposes and laboratory tests, the consumption per cm of thickness on a flat substrate is of the order of 3kg/m². Spraying losses of around 30% are not taken into account. This can vary depending on the substrate, applicator, and machinery used.</p> <p>Value is average obtained under laboratory conditions using DISCONTINUOUS machine.</p>
Limitations	Not designed for exteriors. It must not be exposed to the rain or water leakage.
Topcoats	A finish in a colour from a sample is possible. This finish is wet sprayed and must be applied once the coat is dry. Consult Carboline Technical Service to choose the most suitable finish.

SUBSTRATES & SURFACE PREPARATION

General	Before application, all substrates must be chemically stable, clean and free of loose particles, dirt, oil, grease, condensation or any other substance that may affect the adhesion. The substrates must be properly fixed in order to support the load of the weight of the wet FARBOCUSTIC (around 5kg/m ² for every 10mm of protection thickness). The use of FARBOFIX (300g/m ²) adhesion promoter is recommended before spraying FARBOCUSTIC for enhanced adhesion of the mortar to the substrate. Contact Carboline technical service for further information.
Restoration of Substrates	Mortar substrates, chipped or spalling concrete, damaged brickwork, exposed compression rod joints, etc. must be restored before the application of FARBOCUSTIC. The aim is to re-establish the continuity of the substrate and to obtain adequate flatness, improved adhesion and finish of the system.

SUBSTRATES & SURFACE PREPARATION

Types of Substrates

FARBOCUSTIC can be applied on concrete, cement mortar, laminated plasterboard, ceramic brick, hollow ceramic brick, galvanised steel and nervometal mesh. Plasterboard substrates must be the waterproof type, anchored to the metal structure, spaced every 40cm and screwed every 20cm with a washer. Fresh traditional mortar and plaster substrates, cured for a minimum of 30 days. New concrete substrates, cured for at least 45 days. For applications on very porous, disaggregated and moisture barrier substrates, FARBOFIX primer should be applied in a variable dosage of 0.2 to 0.5kg/m². For any type of substrate other than those mentioned, contact Carboline Technical Service to obtain the instructions for appropriate surface preparation prior to application of the FARBOCUSTIC mortar.

PERFORMANCE DATA

All test data was generated under laboratory conditions. Field testing results may vary.

Test Method	Results
Adhesion	>0.081N/mm ²
Apparent Density	210 ± 10% kg/m ³
Asbestos	Does not contain
Crystalline Silica	4.1 ± 15% Kg/m ² /cm (CONTINUOUS machine) ¹
Hardened Density	260 ± 10% kg/m ³
Reaction to Fire	A1 (in accordance with EN13501-1)
Sound Absorption	a _w <0.85 (in accordance with UNE-EN-ISO 354) NRC <0.8 (in accordance with ASTM C423)
Thermal Conductivity	0.051 W/m.K (UNE-EN 12667:2002)

MIXING & THINNING

Mixer	1. CONTINUOUS. Use a gypsum mortar mixer or similar with a capacity of at least 100 litres and capable of rotating at 60 rpm with rubber-tipped blades that wipe the sides of the hopper.
Mixing	Always mix with clean potable water. The mixer must be kept clean and free of any previously mixed material that may cause premature setting of the product. It is recommended to adjust the feedwater supply for flow rates ranging from 310 to 400l/hour, depending on the machine model used. This water flow rate should be adjusted until a density of the mortar in paste form of between 500 and 550kg/m ³ is obtained.
Density	To obtain information and recommendations on how to obtain adequate density and performance, contact Carboline Technical Service.
Working Time	1 hour at 20°C, the higher the temperature the shorter the usage time. These times are for guidance and can vary depending on the ambient humidity and air currents. The useful life of the material ends when it hardens and becomes unusable.

APPLICATION EQUIPMENT GUIDELINES

Listed below are general equipment guidelines for the application of this product. Job site conditions may require modifications to these guidelines to achieve the desired results.

Pump	This material may be pumped with a wide range of piston, rotor, stator and compressor pumps designed for pumping cement and plaster materials, including: M-TEC- model DUO MIX
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Ball Valves	Ball valves must be fitted on at least one end of the spray hose to facilitate cleaning.
Hose Length	Use a flexible spray hose of between 5 and 10 m in length and at least 25 mm inner diameter. Working pressure at least 30 bar.
Nozzle/Gun	8mm nozzle for optimum finish.
Orifice Size and Shields	Minimum length of 600 mm and minimum inner diameter of 25 mm. With material shut-off ball valve and air shut-off valve.
Compressor	The pump compressor must be capable of maintaining a minimum of 7-8 bar and from 500 to 600l/min at the nozzle.
Air Line	Use a line with an inner diameter of 16 mm. Hose with a minimum burst pressure of 7 bar (100 psi).
Spray Lance	Maximum length of 600mm and minimum inner diameter of 25mm, with material shut-off valve and air shut-off valve.

APPLICATION PROCEDURES

General	Spray a 8-12mm thick first coat of FARBOCUSTIC perpendicular to the substrate at a distance of about 80cm. To obtain a fine degree of finish, after the hardening of this first coat, spray a second coat further away from the substrate, around 1m, with an increased air flow rate in order to atomise the FARBOCUSTIC. The optimum air pressure of the compressor must be set to atomise and maintain an even distribution of the FARBOCUSTIC. If the previous coat has set and is dry, wet the surface with water before applying additional coats. Contact Carboline Technical Service if further information is required.
Finishing	Normally the finish is a sprayed texture. Optional overcoating with FARBO RENOV topcoat if required.

APPLICATION CONDITIONS

Condition	Material	Surface	Ambient	Humidity
Minimum	5°C (41°F)	5°C (41°F)	5°C (41°F)	0%
Maximum	38°C (100°F)	52°C (126°F)	43°C (109°F)	90%

The air and ambient temperatures must be maintained 24 hours before, during and after the application. Gypsum-based mortars are sensitive to water and therefore must be adequately protected. For additional recommendations, contact Carboline Technical Service.

CURING SCHEDULE

Surface Temp.	Dry to Recoat
25°C (77°F)	8 Hours

The overcoat application times are for guidance only and could vary depending on the ambient conditions and air currents. In enclosed areas with little ventilation (basements, confined spaces, etc.), for the mortar to dry properly, it is recommended that the RH does not exceed 60% and there is adequate ventilation, which means at least 4 complete changes of air per hour until the material is dry (or for at least 2 weeks after the end of the application).

CLEANUP & SAFETY

Cleanup	The case, mixer and the hoses should be cleaned with drinking water. Pass sponges or plenty of water through the hoses to remove any material residue that remains in them. Excess wet sprayed mortar should be cleaned with clean drinking water. Dry sprayed mortar may require scraping off to remove it.
Safety	Follow all the safety precautions described in the safety data sheet for the mortar. The use of personal protective equipment is recommended, including overalls, gloves and eye protection.
Overspray	Adjacent surfaces should be protected against damage and splashing. Sprayed fireproof materials can be difficult to remove from surfaces and can damage architectural finishes.
Ventilation	In enclosed areas, ventilation must be no less than 4 complete air exchanges per hour until the material is dry.

TESTING / CERTIFICATION / LISTING

Reaction to Fire	<i>Reaction to Fire in accordance with EN standards carried out in accredited laboratories:</i> Reaction to Fire (Classified in accordance with EN13501-1) Classification A1
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Sound Absorption

Thickness (mm)	a_w	NRC	CLASS
15	0.5	0.55	D
25	0.65	0.55	C
45	0.85	0.8	B

Sound absorption test carried out in accredited laboratories :

a_w : Sound absorption coefficient in accordance with UNE-EN-ISO 354:2004

NRC Noise reduction coefficient in accordance with ASTM C423-17

TESTING / CERTIFICATION / LISTING

Sustainability

Regulation or Protocol	Conclusion	Version of regulation or Protocol
French VOC Regulation	A+	Decree of March 2011 (DEVL1101903D) and Arrete of April 2011 (DEVL 1104875A) modified in February 2012 (DEVL 1133129A)
French CMR Components	Pass	Regulation of April and May (DEVP0908633A and DEVP0910046A)
Italian CAM Edilizia	Pass	Decree 11 October 2017 (GU n.259 del 6-11-2017)
AgBB/ABG	Pass	Ausschuss zur gesundheitlichen Bewertung von Bauprodukten (June 2021)
Belgian Regulation	Pass	Royal decree of May 2014 (C-2014/24239)
EMICODE	EXC1 PLUS	March 2022
Indoor Air Comfort	Pass	Indoor Air Comfort 8,0 of June 2022
Indoor Air Comfort GOLD	Pass	Indoor Air Comfort GOLD 8,0 of June 2022
BREEAM International	Exemplary Level	BREEAM International New Construction v6,0 (2021)
BREEAM NOR	Exemplary Level	BREEAM-NOR v6.0 New Construction (2022)

Products certified as "**Indoor Air Quality GOLD** - the top level" are in the best (i.e. the lowest) emissions class, and are among the best in regards to air quality. Additional product emission compliance with the ecological labels and similar specifications of the EU, as well as the sustainable building certifications. For more information: www.eurofins.com

PACKAGING, HANDLING & STORAGE

Shelf Life	12 months
Shipping Weight (Approximate)	9kg/bag (42 bags/pallet)
Storage	Store indoors and in dry environments between 0°C and 50°C. Material must be kept dry or clumping of material may occur.
Packaging	9kg/bag (42 bags/pallet)

WARRANTY

To the best of our knowledge the technical data contained herein is true and accurate on the date of publication and is subject to change without prior notice. User must contact Carboline to verify correctness before specifying or ordering. No guarantee of accuracy is given or implied. Carboline warrants our products to be free of manufacturing defects in accord with applicable Carboline quality control procedures. THIS WARRANTY IS NOT VALID WHEN THE PRODUCT IS NOT: (1) APPLIED IN ACCORDANCE WITH CARBOLINE'S SPECIFICATIONS, AND/OR (2) PROPERLY STORED, CURED, AND USED UNDER NORMAL OPERATING CONDITIONS. Carboline assumes no responsibility for coverage, performance, injuries, or damages resulting from use of the product. If this product is found not to perform as specified upon inspection by a Carboline representative during the warranty period, Carboline's sole obligation, if any, is to replace the Carboline product(s) proven to be defective or refund the purchase price thereof, at Carboline's sole option. Carboline shall not be liable for any other losses or damages. This warranty excludes (1) labor and costs of labor for the application or removal of any product, and (2) any incidental or consequential damages, whether based on breach of express or implied warranty, negligence, strict liability or any other legal theory. NO OTHER WARRANTY OR GUARANTEE OF ANY KIND IS MADE BY CARBOLINE, EXPRESS OR IMPLIED, STATUTORY, BY OPERATION OF LAW, OR OTHERWISE, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. All of the trademarks referenced above are the property of Carboline International Corporation unless otherwise indicated. The whole text of this Product Data Sheet, as well as the documents derived from it, have been written in English, and for legal purposes the English version shall prevail.