MASTER® BUILDERS SOLUTIONS

Product Submittal

MasterKure® 260

Non-coloured, water soluble inorganic and silicate based curing, hardening, sealing and dustproofing compound

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Index

MASTER® BUILDERS SOLUTIONS

1. Company profile

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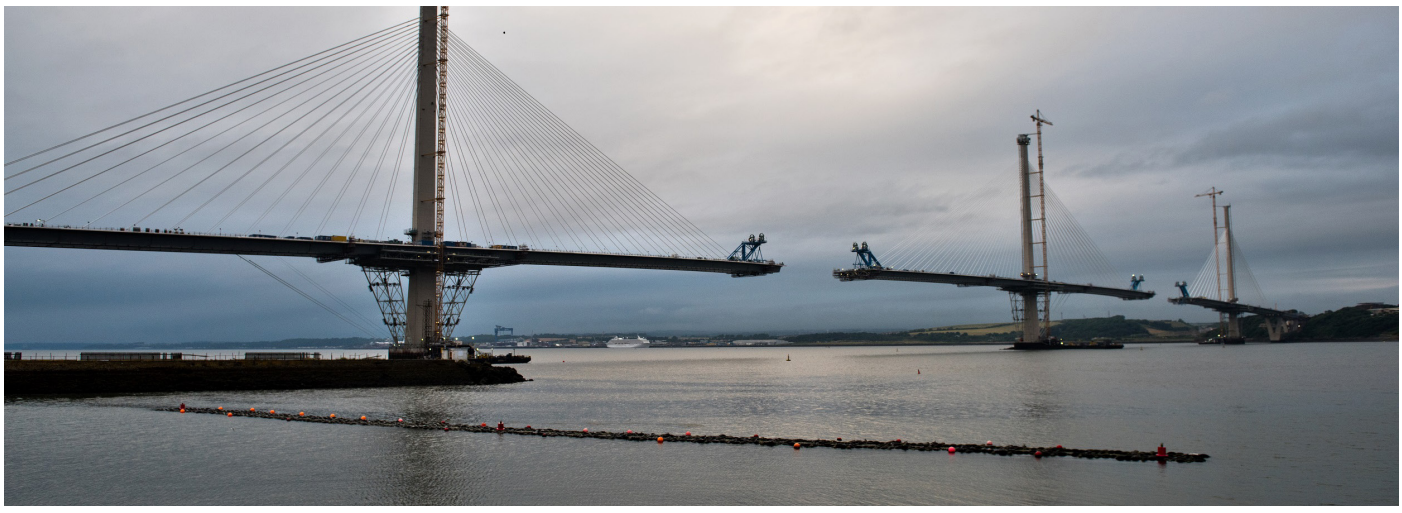
About MBCC Group

The MBCC Group is one of the leading suppliers of construction chemicals and solutions worldwide and has emerged from the carve-out of the former BASF Construction Chemicals business from BASF Group. We offer innovative and sustainable products and solutions for the construction industry across different sectors, such as buildings, structures, underground construction, new construction, as well as for renovation. Our strong brands Master Builders Solutions®, PCI®, Thermotek®, Wolman®, Colorbiotics® and Watson Bowman Acme® are well established in the marketplace. With our innovations, we address sustainability challenges in the industry. MBCC Group consists of approximately 70 legal entities worldwide and is home to around 7,500 construction experts in over 60 countries.

Master Builders Solutions

Master Builders Solutions is MBCC Group brand of advanced chemical solutions for construction. The Master Builders Solutions brand is built on the experience gained from more than 100 years in the construction industry. The comprehensive portfolio under the Master Builders Solutions brand encompasses lasting solutions for new construction, maintenance, repair and renovation of structures: concrete admixtures, cement additives, chemical solutions for underground construction, waterproofing solutions, sealants, repair & protection solutions, performance grouts, tiling solutions and performance flooring solutions. The Master Builders Solutions brand is backed by a global community of construction experts. To solve our customers' specific construction challenges from conception through to completion a project, we combine our know-how across areas of expertise and regions and draw on the experience gained in countless construction projects worldwide. We leverage global technologies, as well as our in-depth knowledge of local building needs, to develop innovations that help make our customers more successful and drive sustainable construction. For more information please visit www.master-builders-solutions.com/en-ae



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Master Builders Solutions for the Construction Industry

MasterAir®
Complete Solutions for air entrained concrete

MasterBrace®
Solutions for strengthening and structural adhesives

MasterCast®
Solutions for the manufactured concrete product industry

MasterCell®
Density reducing admixtures

MasterCem®
Solutions for cement manufacture

MasterEase®
Solutions for low viscosity concrete

MasterEmaco®
Solutions for concrete repair

MasterFiber®
Comprehensive solutions for fiber reinforced concrete

MasterFinish®
Solutions for formwork treatment

MasterFlame®
Passive fire protection system

MasterFlow®
Solutions for precision grouting

MasterGlenium®
Hyperplasticizer formulated from state-of-the-art polymers for the ultimate performance

MasterInject®
Solutions for concrete injection

MasterKure®
Solutions for concrete curing

MasterLife®
Solutions for enhanced durability

MasterMatrix®
Advanced rheology control solutions

MasterPolyheed®
High-performance superplasticizer

MasterPozzolith®
Solutions for water-reduced concrete

MasterProtect®
Solutions for concrete protection

MasterRheobuild®
Superplasticizer for concrete

MasterRoc®
Solutions for underground construction

MasterSeal®
Solutions for waterproofing and sealing

MasterSet®
Solutions for set control

MasterTile®
Solutions for tiling systems

MasterTop®
Solutions for industrial and commercial floors

MasterWeld™
Adhesive Solutions for construction

MasterX-Seed®
Advanced accelerator solutions for concrete

Ucrete®
Flooring solutions for harsh environments

International Accreditation

Master Builders Solutions Construction Chemicals is a registered manufacturer certified to the ISO 9001 Quality Management System, Environmental Standard ISO 14001 and the Occupational Health & Safety Standard OHSAS 18001.

CERTIFIED ISO 9001 · ISO 14001 ISO 45001 — UKAS MANAGEMENT SYSTEMS 001

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4. Technical datasheet

MasterKure® 260

Hardening, sealing and dustproofing compound

DESCRIPTION

MasterKure 260 is a non-coloured, water soluble inorganic and silicate based curing, hardening, sealing and dustproofing compound. It is used for freshly placed and finished concrete and in renovation of aged concrete. It contains no VOCs.

FIELDS OF APPLICATION

MasterKure 260 is recommended for the following application :

- Concrete floors and pavements
- Curing of fresh concrete
- Renovation of aged concrete
- Industrial, processing and brewing plants
- Educational, medical and nursing facilities
- Utility, public and residential buildings

PROPERTIES

- **Projects floors during construction** – Cost efficient
- **Easy application, quick drying -** Saves on labour; minimises downtime.
- **Water based -** Has no VOCs, environmentally friendly, easy to clean up.
- **Aid for curing new concrete -** Minimises shrinkage cracking; improves strength development.
- **Concrete hardener –** Withstands light to moderately heavy duty traffic.
- **Improved abrasion resistance** – Extends wearability.

TYPICAL PERFORMANCE DATA

Comparative abrasion resistance, ASTM D4060: 2010

1,000g load; 1,000 revolutions

Taber Abraser CS-17 Wheel

45% increase in abrasion resistance over untreated samples.

Moisture retention, ASTM C156 : 2011

5% improvement in moisture retention.

**Application to fresh mortar. Abrasion resistance measured at 7 days, 23 and 50% relative humidity.*

Test results are averages obtained under laboratory conditions. Reasonable variations can be expected.

APPLICATION

Surface preparation

New Concrete

Freshly finished concrete surfaces do not require surface preparation if **MasterKure 260** is to be applied immediately after the final finishing operation in place of a resin or acrylic curing compound. On areas where forms have been recently removed, all form oil or breaking compound residue must be removed.

Existing Concrete (Cured for 28 days or more)

Install joint sealants before application of **MasterKure 260**. If not possible, test first for adhesion.

To remove all dust and dirt, sweep all areas to be treated with a fine-bristled broom or hose off with water and let stand until completely dry. The surface must be free from all contaminates that will inhibit the penetration of **MasterKure 260** into the pores of the concrete.

Any curing, scaling or coating agents must be chemically or mechanically removed before **MasterKure 260** is applied. If acid is used to remove surface coatings, the surface must be flushed sufficiently and neutralized before application **of MasterKure 260**. A floor buffing machine with an aggressive pad can be used along with Citrus Degreaser (see Form ANO. 1017985) or other cleaners to remove existing compounds.

Protect metal, glass, wood, paint and brick from contact with **MasterKure 260**. If accidentally misapplied to these surfaces, wash with clean water within 30 minutes.

Application

MasterKure 260is not a film forming product but should fully saturate the concrete for maximum effect. Perform enough applications for **MasterKure 260** to saturate the concrete.

New Concrete

Spray apply undiluted **MasterKure 260** on the concrete surface with a low pressure sprayer following final finishing operation and after all surface water has evaporated and the concrete surface is hard. To ensure proper performance apply **MasterKure 260** to entire surface area as soon as the surface can bear foot traffic. Keep entire surface wet for 30 minutes by spraying **MasterKure 260** or by broom sweeping away the excess material from low spots to saturate dry spots. Failure to remove all excess material from floor surfaces may result in unsightly white stains. Keep **MasterKure 260** from drying out on surface for a full 30 minutes to ensure full penetration. As **MasterKure 260** begins to penetrate into the surface, lightly sprinkle the surface with water to aid penetration.

MasterKure® 260

When **MasterKure 260** begins to dry a second time, flush the surfaces with water and squeegee the surface to remove any excess material and other impurities that were brought to the surface.

On exterior applications, environmental factors, such as wind and heat may greatly reduce the effectiveness of **MasterKure 260** as a curing aid. To improve sheen, dry buff with a non aggressive pad the following day.

If applications with pozzolanic additives in the concrete, additional **MasterKure 260** is required.

Existing Concrete (28 days or more)

Saturate the surface with undiluted **MasterKure 260** by sprayer, squeegee, or broom.

If dry spots appear, move excess material onto them or respray them immediately so that the entire surface is wet with **MasterKure 260** for a minimum of 30 minutes.

Complete job using one of the following finishing options:

- If after 30 to 40 minutes, the majority of **MasterKure 260** has been absorbed into the surface, use broom or squeegee to remove any excess material from the low spots
- Use a floor buffing machine with a non aggressive pad to help work **MasterKure 260** into fully cured concrete during application.
- Application method and concrete porosity will affect final appearance of **MasterKure 260**. White residue signifies too strong a mix or the surfaces reaching maximum hardness. Applications should stop and the surface be flushed with clean hot water, swept with stiff-bristled broom and allowed to dry. If any applications remain, a dilution may be required to avoid further problems.

Note: Allow at least 7 days interval before applying tile or floor covering adhesives over **MasterKure 260**.

CLEANING

Clean the tools and equipment first with clean water immediately after use.

ESTIMATING DATA

MasterKure 260 is applied generally at coverage of 3.5 – 5 m2/L.

Coverage may vary with application method, surface conditions and porosity.

PACKAGING

MasterKure 260 is available in 18.93L pails

SHELF LIFE

The shelf life of **MasterKure 260**.is 12 months in unopened original containers if stored in a cool place at temperature between 3 – 25ºC in original tightly sealed containers. If found to be frozen, thaw it and reconstitute by stirring. However, if separation persists, discard **MasterKure 260**. Do not apply.

PRECAUTIONS

For the full health and safety hazard information and how to safely handle and use this product, please make sure that you obtain a copy of the Master Builders Solutions Material Safety Data Sheet (MSDS) from our office or our website.

MAP# MasterKure 260 v2-06.2021

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5. Method statement

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THIS METHOD STATEMENT COVERS THE APPLICATION PROCEDURES FOR **MasterKure 260.**

METHOD STATEMENT: MasterKure 101

1. Application should be made by low pressure air-less spray, short nap paint roller, or suitable soft bristled brush. **IF spray application or any type of application in confined spaces is being proposed ensure ALL necessary safety precautions are taken.**
2. **MasterKure 260** is ready for use and should **NOT** be diluted prior to use.
3. Horizontal surfaces shall be treated as soon as the initial surface sheen has left the concrete but not before all finishing operations have been completed (broom finish / steel trowel etc.)
4. Formed concrete should receive treatment as soon as formwork is removed.
5. The recommended application rate is **3.5 – 5.0m^2/litre** (flat horizontal surfaces being able to accept the slightly higher application rate **(4.5m^2/litre)**).
6. Excessive application to vertical surfaces may result in streaking and colour change.
7. NOTE: If **MasterKure 260** is to be over coated at a later date, do not over apply and do not apply a second coat. When applied at the correct rate the concrete surface will have a slight sheen. If the surface is glossy, the membrane has been applied too thickly.
8. **MasterKure 260** when correctly applied can be over coated with typical water based Acrylic coatings. We would always recommend that a bond test be conducted prior to any finishes being applied to confirm compatibility.
9. Should it be required to apply a cementitious plaster to a surface that is to receive **MasterKure 260 we would strongly recommend** that bond strength tests be conducted prior to any major application taking place to ensure that the required bond strengths for the plaster

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6. Job references

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8. Test reports

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ADMATERIALS TECHNOLOGIES PTE LTD

58 Sungei Kadut Loop Singapore 729501 Co. Reg. No.: 200805959C
Tel: (65) 6362 9066 Fax: (65) 6362 2080 Website: www.admaterials.com.sg

ADMATERIALS

TEST REPORT

CLIENT NAME	:	BASF SOUTH ASIA PTE LTD
ADDRESS	:	33 TUAS AVENUE 11 SINGAPORE 639090
ATTENTION TO	:	MR DYLAN NG
TEL NO	:	9691 8802
ACCOUNT CHARGEABLE TO	:	BASF SOUTH ASIA PTE LTD
PROJECT CODE	:	D0239
PROJECT TITLE	:	GENERAL TESTING
SUBJECT	:	WATER RETENTION
TEST STANDARD	:	ASTM C156: 2009
JOB REFERENCE	:	ADM/13/3595B
CLIENT SAMPLE REFERENCE	:	MASTERKURE 260
DATE RECEIVED	:	12-Aug-2013
DATE OF REPORT	:	13-Sep-2013
TOTAL PAGES	:	3 (INCLUDING COVER PAGE)

ACCREDITED LABORATORY
SAC-SINGLAS
Cert No: LA 2008 0422 B
Cert No: LA-2010-0461-A
Cert No: LA-2013-0540-B
Cert No: LA-2013-0546-F

The results reported herein have been performed in accordance with the laboratory's terms of accreditation under the Singapore Accreditation Council - Singapore Laboratory Accreditation Scheme

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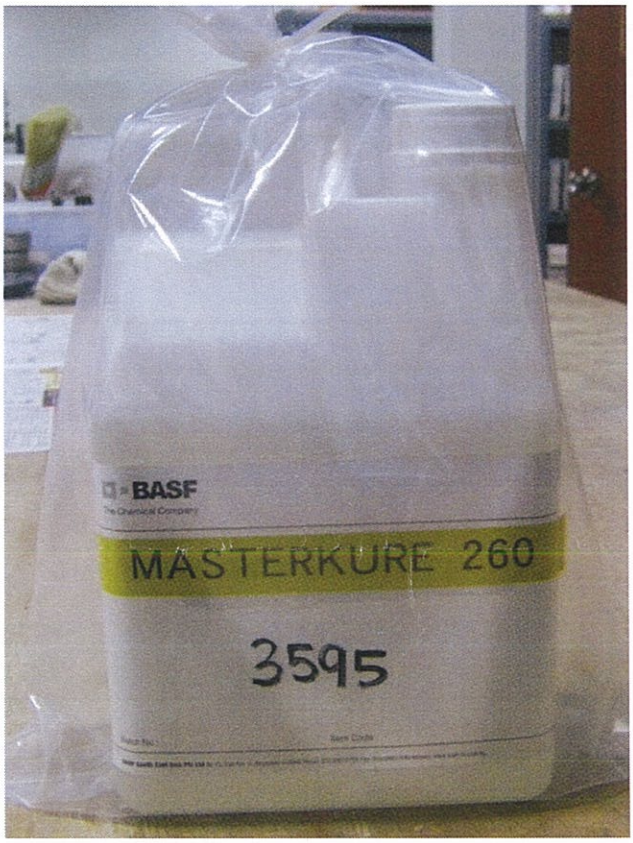
TESTING OF CURING COMPOUND



Photograph 1.Masterkure 260 Sample as per received

TESTS		TEST RESULTS	UNIT
Water Retention	Untreated	1.47	kg/m²
	Treated	1.31	kg/m²

Table 1. Summary Table for Test Results

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TEST RESULTS

Water Retention (ASTM C156 : 2011)

Sample Reference	MASTERKURE 260			
Date of Test	20 August 2013 - 23 August 2013			
Test Specimen	1	2	3	Average
Condition	Untreated			
Loss of Mass (g)	18.47	17.11	17.61	17.73
Depth of Mortar (mm)	150	150	150	150
Surface Area (mm^2)	12100	12100	12100	12100
Mass Loss Per Unit Area (kg/m^2)	1.53	1.41	1.46	1.47
Test Specimen	1	2	3	Average
Condition	Treated			
Loss of Mass (g)	19.13	14.35	13.94	15.81
Depth of Mortar (mm)	150	150	150	150
Surface Area (mm^2)	12100	12100	12100	12100
Mass Loss Per Unit Area (kg/m^2)	1.58	1.19	1.15	1.31

Remarks : 1) Proportion of mortar by weight : Cement - 540g
Water - 216ml
Sand - 1350g

2) Method of Application : By Spray
3) Test Chamber 's Conditions : 23^{0}C temperature / 50% Relative Humidity.
4) Non-Volatile(NV) content of MASTERKURE 260 was declared by BASF SOUTH EAST ASIA PTE LTD to be 42%.
5) Rate of Application : 4m²/L

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ADMATERIALS TECHNOLOGIES PTE LTD
An Exova Group company

TEST REPORT

CLIENT NAME	:	BASF SOUTH EAST ASIA PTE LTD
ADDRESS	:	7, TEMASEK BOULEVARD, #35-01 SUNTEC TOWER ONE, SINGAPORE 038987
ATTENTION TO	:	STEPHANIE LOW
TEL NO	:	6337 0330
FAX NO	:	6334 0330
ACCOUNT CHARGEABLE TO	:	BASF SOUTH EAST ASIA PTE LTD
PROJECT CODE	:	D0371
PROJECT TITLE	:	GENERAL TESTING
TEST SUBJECTS	:	TABER ABRASION
TEST STANDARDS	:	ASTM D4060: 2010
JOB REF.	:	ADM/16/10031A
CLIENT SAMPLE REF.	:	MASTERKURE 260
DATE RECEIVED	:	30-Sep-2016
DATE OF REPORT	:	21-Oct-2016
TOTAL PAGES	:	2 (INCLUDING COVER PAGE)

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Cert No: LA-2013-0548-F

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TESTING OF MASTERKURE 260

Taber Abrasion (ASTM D4060: 2010)

Sample Reference	MASTERKURE 260			CONTROL		
Date of Test	21-Oct-16			21-Oct-16		
Test Specimen	**Test 1**	**Test 2**	**Average**	**Test 1**	**Test 2**	**Test 3**
Weigh Loss, mg	120.0	135.0	**127**	214.0	297.0	**255**
Wear Index	120.0	135.0	**127**	214.0	297.0	**255**

Remarks:
1) Test Condition: 23° C, 50% RH
2) Number of cycle: 1000
3) Type of wheel: CS-17
4) Load (per wheel): 1000 g

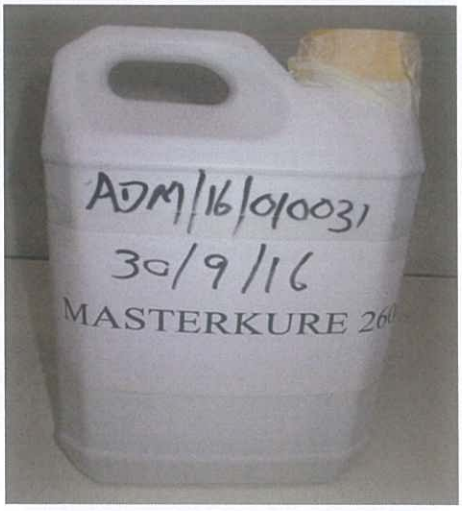

Figure 1. Sample as per received

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TEST REPORT

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ADDRESS	:	7, TEMASEK BOULEVARD, #35-01 SUNTEC TOWER ONE, SINGAPORE 038987
ATTENTION TO	:	STEPHANIE LOW
TEL NO	:	6337 0330
FAX NO	:	6334 0330
ACCOUNT CHARGEABLE TO	:	BASF SOUTH EAST ASIA PTE LTD
PROJECT CODE	:	D0371
PROJECT TITLE	:	GENERAL TESTING
TEST SUBJECTS	:	WATER RETENTION
TEST STANDARDS	:	ASTM C156: 2011
JOB REF.	:	ADM/16/10031B
CLIENT SAMPLE REF.	:	MASTERKURE 260
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Cert No: LA-2013-0540-G
Cert No: LA-2013-0546-F

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ADMATERIALS TECHNOLOGIES PTE LTD
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TESTING OF CURING COMPOUND

Water Retention (ASTM C156: 2011)

Sample Reference	MASTERKURE 260					
Date of Test	14 Oct - 17 Oct 2016					
Condition	TREATED			UNTREATED		
Test Specimen	1	2	3	1	2	3
Loss of Mass (g)	17.39	17.83	17.25	18.94	19.44	19.26
Specimen Area (mm^2)	12100	12100	12100	12100	12100	12100
Mass Loss Per Unit Area (kg/m^2)	1.44	1.47	1.43	1.57	1.61	1.59
Average Mass Loss Per Unit Area (kg/m^2)	**1.45**			**1.59**		

Remarks: *1) Proportion of mortar by weight : Cement - 500g*
Water - 200ml
Sand - 1200g

2) Method of Application : By brush
3) Test Chamber 's Conditions : 37.8° C temperature / 32% Relative Humidity
4) Brand of cement used: Asia Cement
5) Duration of test: 72 hrs
6) Non-Volatile (NV) content of MASTERKURE 260 was obtained from safety data sheet provided by BASF SOUTH EAST ASIA PTE LTD to be 22.0 %.
7) Rate of application: 0.25 L/m^2

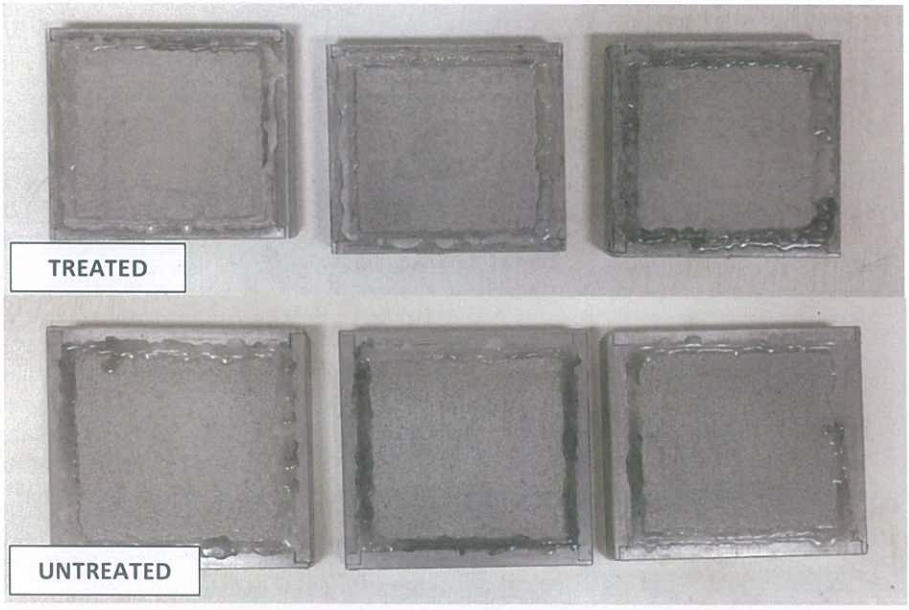

Figure 1. Test Specimen (Top: Treated; Bottom: Untreated)

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