
Quality Test Report on Components of Silicate-based Surface Penetrant

Name	: CS-21
Main Component	: Sodium Silicate
Manufacturer of Material	: Aston Incorporated
Shipping Date	: See "Statement of Delivery" or "Certificate of Shipping"
Expiry	: A year from the shipping date
Manufacturing Lot No.	: 10230101

1. Quality items on components

Item	Test standard	Target value by material manufacturer	Test value
Reactivity to calcium hydroxide	JSCE-K572 6.1	Available	Available
Dry solid content	JSCE-K572 6.2	31.5 to 33.5 %	31.9 %
Type	JSCE-K572 6.3	Reactive	Reactive
Density	JIS K2249	1.240 to 1.280 g/cm ³	1.246 g/cm ³
pH value	JIS K0102-12.1	11.3 to 12.3	11.7
Color	Internal standard (visual checking)	Colorless and transparent No contamination	Colorless and transparent No contamination

We certify the result of the quality test on components.

Date:

Aston Incorporated

14-16, Yasakahonmachi, Kita-ku,
Okayama-shi, Okayama
700-0075, Japan
Phone: +81-86-255-1511

Quality Test Report on Components of Silicate-based Surface Penetrant

Name	: CS-21
Main Component	: Sodium Silicate
Manufacturer of Material	: Aston Incorporated
Shipping Date	: See "Statement of Delivery" or "Certificate of Shipping"
Expiry	: A year from the shipping date
Manufacturing Lot No.	: 10230102

1. Quality items on components

Item	Test standard	Target value by material manufacturer	Test value
Reactivity to calcium hydroxide	JSCE-K572 6.1	Available	Available
Dry solid content	JSCE-K572 6.2	31.5 to 33.5 %	31.9 %
Type	JSCE-K572 6.3	Reactive	Reactive
Density	JIS K2249	1.240 to 1.280 g/cm ³	1.244 g/cm ³
pH value	JIS K0102-12.1	11.3 to 12.3	11.7
Color	Internal standard (visual checking)	Colorless and transparent No contamination	Colorless and transparent No contamination

We certify the result of the quality test on components.

Date:

Aston Incorporated

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Quality Test Report on Renovation Effects of Silicate-based Surface Penetrant

Name	: CS-21
Main Component	: Sodium Silicate
Manufacturer of Material	: Aston Incorporated
Tested between	: June and December 2012
Tested by	: Kagoshima University (2-1, 3-1 to 3-4)
	: Okayama University (3-6)
	: Japan Testing Center for Construction Materials (3-5, 3-7)
Lot No. Used for Testing	: "10230101", "11230102"

1. Construction specifications in quality evaluation test on renovation effects

Moisture content of mortar board before application	Approx. 6% (sprinkle water and check with a finger the board is dried before applying coating)
Application method	Brush
Number of application times	Twice
Interval before second application	2 hours (including wetting after drying the coating material)
Application quantity	300 g/m ² (150 g/m ² * twice)
Amount of dry solid in application quantity	95.7 g/m ²
Curing method and period after application	As per JSCE K572

2. Quality items on impregnability

Item	Test standard	Test value
Impregnation depth of surface penetrant	JSCE-K572 6.5	1.8 mm

3. Quality items on renovation effects

Item	Test standard	Target value by material manufacturer	Test value
Ratio of water permeability	JSCE-K572 6.6	- % or less	61 %
Ratio of water absorption	JSCE-K572 6.7	- % or less	78 %
Ratio of neutralization depth	JSCE-K572 6.8	- % or less	67 %
Ratio of permeation depth of chloride ion	JSCE-K572 6.9	- % or less	89 %
Total mass loss	JSCE-K572 6.10	- % or less	49.55 %
Ratio of water permeability from cracks	JSCE-K572 6.11	- % or less	0.92 %
Ratio of water permeability by pressurizing	JSCE-K572 6.12	- % or less	74.53 %

We certify the result of the quality test on renovation effects.

Date:

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