

vernites[®]

CHEMICAL GROUP



ACQUAPUR STONE 2K
two-component paint for interior

ECOPUR STONE 2K
two-component paint for exterior



our technology

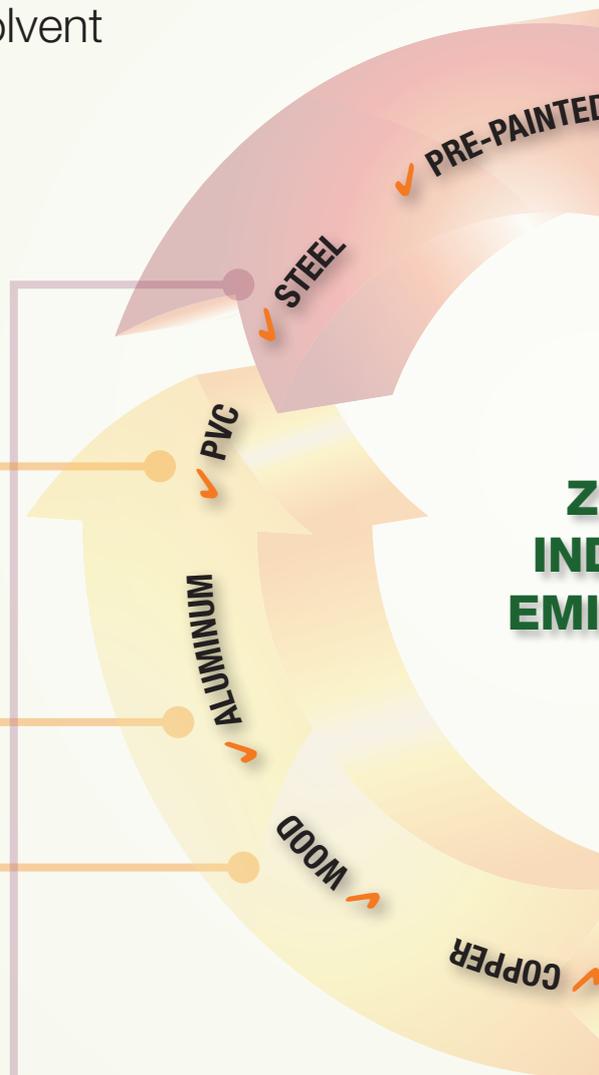


ACQUAPUR STONE 2K

It's a Water-based Topcoat for indoor with an excellent chemical and mechanical performances. Easy to apply and ecological with zero indoor solvent emissions.

Certified by international regulation EN 71/3 for indoor children toys. The product is characterized by an excellent adhesion on wood, PVC, aluminum, copper, steel, polycarbonate, plexiglass, methacrylate and industrial and domestic cement floors. These are just some examples of surfaces where you can apply ACQUAPUR STONE 2K without using any primers.

For a perfect and tenacious adhesion, we recommend slight surface sanding; cleaning in the end of the operation with detergent that contain Alcohol to remove dust, grease or waxes traces that could be present in the surface. ACQUAPUR STONE 2K is the definitive solution.



CERTIFIED QUALITY



AESTHETICS “tailor made”

0 SHEETS

4 sheen levels available - 15-30-50-100 GLOSS.

ERO
DOOR
SSION

✓ POLYCARBONATE

Wide chromatic range NO LIMITS - with our tintometric system using the ACQUAPUR STONE 2K as converter you can obtain all desired colours

Available versions:

- WIT 982.XXS.CLR
ACQUAPUR STONE 2K CLEAR
- WIT 982.XXS.WHT
ACQUAPUR STONE LACK 2K WHITE

✓ PLEXIGLASS

✓ METHACRYLATE

✓ FLOORING



ECOPUR STONE 2K

Waterborne topcoat for outdoor manufactures of 10 years warranty. Perfect adhesion on woods, PVC, aluminium, copper, and various metals substrates.

EXCELLENT HAND CREAM AND SOLAR OIL RESISTANCE.

Main Characteristics: Long lasting durability and long resistance to aging thanks to the innovative formulation and developed with the last technology of resins.

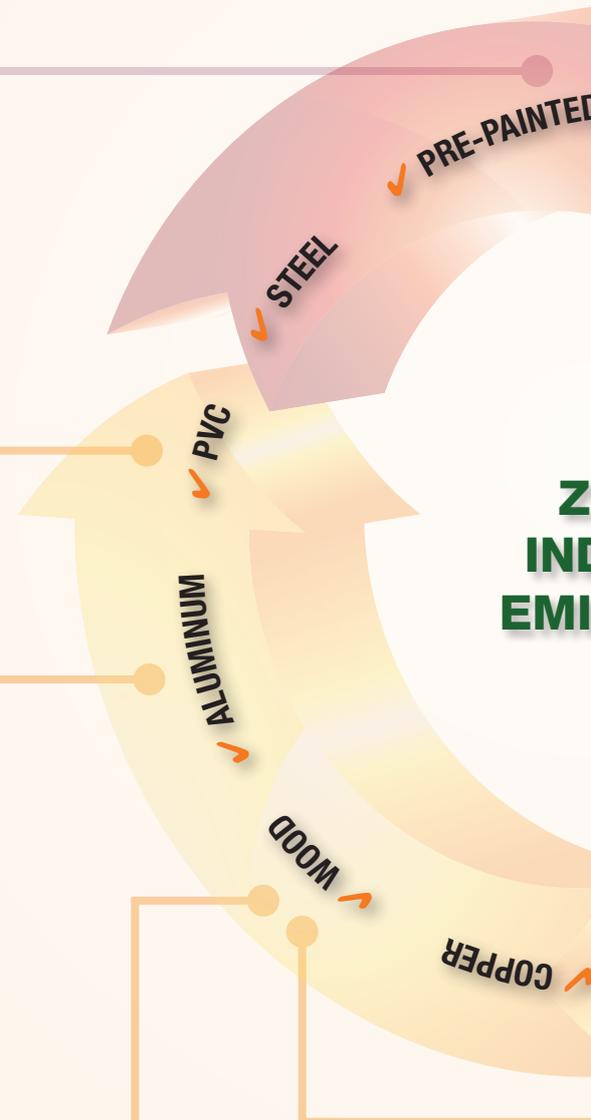
Once applied it shows perfect distension, high coverage and high mechanical resistance and Stone is his name.

CYCLES FOR OUTDOOR MANUFACTURES AS WINDOWS, SHUTTERS, DOORS GRANTED 10 YEARS

- SRP3T "PRISMA 10 years transparent".
- SRP2P "PRISMA 10 years pigmented".



CERTIFIED QUALITY



ECOPUR STONE, TOPCOAT FOREVER

Product application. spray gun, airless, air mix, manual roller (floors),
by brush

PRECIOUS FINISH VARNISH. Zero solvent emissions, no bad
smell, uniform aspect available in 3 sheen levels and quick dry
time.

4 sheen levels available - 15-30-50-100 GLOSS.

Wide chromatic range NO LIMITS - with our tintometric
system using the ECOPUR STONE 2K as converter you
can obtain all desired colours

Available versions:

- WET 892.XXS.CLR
ECOPUR STONE 2K CLEAR
- WET 892.XXS.WHT
ECOPUR STONE LACK 2K WHITE





Cycle guaranteed SRP3T “Prisma 10 years transparent”

Product applied	Method of application	Drying (hours)	Thickness (micron)
Preservative Eco Latygrund coloured	Brush, dipping, flow coating	4 - 6	50
Ecopur Stone 2K cat. 10% CW 7800 framirè 244 / castagno 204 mogano 207 / merbau 250	Airless or airmix spray	6 - 12	150
Sanding	Sanding with 280-320 grit or brushing		
Ecopur Stone 2K cat. 10% CW 7800 framirè 244 / castagno 204 mogano 207 / merbau 250	Airless or airmix spray	12 - 24	150

- Timber species suitable for the above coating cycle: WHITE FIR, RED FIR, SWEDEN PINE, YELLOW PINE, HEMLOCK, DOUGLAS, LARCH, CANADIAN CEDER, OKUMÈ, LIGHT MERANTI, DARK MERANTI, SAPELLI, SIPO MAHAGONI, NIANGON, OAK, WHITE OAK, RED OAK, CHESTNUT, ASH, FRAMIRÈ.

The warranty will be 10 years for windows and 8 for shutters.

- The following timber species are excluded from this coating cycle: IROKO, TEAK, EUCALIPTUS, BRASILIAN CEDER, RUSSIAN LARCH, MDF.

Cycle SRP3T - Table of coating system test results

Description	Reference	Requirement	Evaluation	Result
Water permeability	EN 927-5	> 30 ; < 175 g/m ²	80.08 gr/m ²	+
Stackability	CEN / TS 16499	a 23 °C: a2, d1 a 50 °C: a2, d1	A0, d0 A1, d0	+ +
Resistance to cold liquid (water)	UNI EN 12720	≥ 4	5	+
Wet adhesion	PTP 137 Method A Method B	≥ 0.5 Mpa; sing. Val. ≥ 0.3 MPa ≤ 2	3.0 MPa; 2,3 MPa 0	+ +
Free film transmittance	PTP 138	From 280 and 340 nm ≤ 1% From 280 and 440 nm ≤ 5%	0.14% 3.82%	+ +
Inhibition of the growth on agar	PTP 136	Hinibited growths	Hinibited growths	+
Microfoam/air inclusion in film	CEN TS 16358	Mean value < 30 bubbles / cm	22 bubbles / cm	+

The table shows part of the minimum requirements and the results obtained on the check carried out in 2017

TEST REPORT

240691 / 1

Date received: 16/10/17
Date of test: 12/03/18
Date of issue: 13/03/18

VERNITES S.R.L.
VIA DEL LAVORO 12/14
21015 LONATE POZZOLO (VA)
ITALIA

Sample name: Ciclo di verniciatura Traslucent High Quality 2K: impregnante Eco Latygrund pino 318 + finitura Ecopur stone 2k G30 castagno catalizzata al 10% con CW7800 (2 mani 150 g/mq) - prove preliminari CQA csew

Water liquid permeability EN 927-5:2006

Wood specie of the substrate: spruce
Mean density of the wood specie used: 0,4 Kg/mc
Sampling: made by the customer
Application: made by CATAS in accordance with the enclosed technical sheet
Spreading rate: 300 μ m wet film thickness
Mean dry film thickness (μ m): 166 \pm 16

Test results:

Mean water absorption of the sealed control panels (g/m ²)	Mean water absorption of the coated samples (g/m ²)
28,19	80,08

Measurement uncertainty expanded to a level of confidence of about 95%=4,44%.

With reference to the classification by end use in function of the dimensional movement of wood (see UNI EN927-1), the EN927-2/2014 (Performance Specifications) gives the following requirements:

EN927-5	Requirement
Stable	30 g/m ² to 175 g/m ²
Semi-stable	30 g/m ² to 250 g/m ²
Non-stable	> 30 g/m ²

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Managing Director
Dr. Andrea Giavon

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TEST REPORT

240691 / 2

Date received: 16/10/17
Date of test: 07/03/18
Date of issue: 09/03/18

VERNITES S.R.L.
VIA DEL LAVORO 12/14
21015 LONATE POZZOLO (VA)
ITALIA

Sample name: Ciclo di verniciatura Traslucent High Quality 2K: impregnante Eco Latygrund pino 318 + finitura Ecopur stone 2k G30 castagno catalizzata al 10% con CW7800 (2 mani 150 g/mq) - prove preliminari CQA csew

Assessment of wet adhesion PTP 137:2016

Substrate: Pinus sylvestris
Application: made by Catas on 15/11/2017
Dry film thickness (measured according to ISO 2808 meth. 6A vers. 2): $189 \pm 20 \mu\text{m}$.
Conditioning after application: 112 days at $20 \pm 2 \text{ }^\circ\text{C}$ and $65 \pm 5 \%$ r.h.
Testing conditions: $23 \pm 2 \text{ }^\circ\text{C}$ and $50 \pm 5 \%$ r.h.

METHOD A: pull-off

Adhesive: epoxy (Bostik epoxy gel mix)
Mill depth: from 1 to 2 mm
Water volume poured in the mill: 1 ml
Waiting time after water application: 120 min

Test results:

Specimen nr	Strength (MPa)	Description
1	2,4	W (cohesive failure of the wood substrate)
2	2,3	W (cohesive failure of the wood substrate)
3	3,0	W (cohesive failure of the wood substrate)
4	2,5	A/D (adhesive failure between adhesive and dolly)
5	3,2	A/D (adhesive failure between adhesive and dolly)
6	3,3	W (cohesive failure of the wood substrate)
7	3,1	W (cohesive failure of the wood substrate)
8	3,3	W (cohesive failure of the wood substrate)
9	3,1	W (cohesive failure of the wood substrate)
10	3,5	W (cohesive failure of the wood substrate)
11	3,4	W (cohesive failure of the wood substrate)
Mean val.	3,0	
Std dev	0,4	
Coeff. var.	12,4 %	

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TEST REPORT

240691 / 2

Date of issue:

09/03/18

Sample name:

Ciclo di verniciatura Traslucent High Quality 2K: impregnante Eco Latygrund pino 318 + finitura Ecopur stone 2k G30 castagno catalizzata al 10% con CW7800 (2 mani 150 g/mq) - prove preliminari CQA csew

METHOD B: cross-cut test

Procedure: a perpendicular cross-cut of at least six cuts is made on the surface of the specimen.

A wet cloth is put over the cross-cut for 60 minutes. Then, the cloth is removed and the surface is blotted and dried.

Within five minutes, a pressure sensitive adhesive tape is put over the cross-cut and, then, peeled off quickly.

Apparatus: Hand-held single-blade cutting tool

Adhesive tape: in accordance with IEC 60454-2.

Test results:

Spacing of cuts	Classification zone 1	Classification zone 2	Classification zone 3
3 mm	0	0	0

Classification:

- 0 no coating detached
- 1 less than 5% of coating detached
- 2 5-15% of coating detached
- 3 15-35% of coating detached
- 4 35-65% of coating detached
- 5 over 65% of coating detached





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33048 San Giovanni al Natisone (UD)
+39 0432 747211 - lab@catas.com
www.catas.com

Testing site:
via Antica, 24/3
33048 San Giovanni al Natisone (UD)
tel. +39 0432 747211
lab@catas.com

TEST REPORT**240691 / 4 del 02/03/18**

Date received:	16/10/17	VERNITES S.R.L.
Date of test:	02/03/18	VIA DEL LAVORO 12/14
Date of issue:	02/03/18	21015 LONATE POZZOLO (VA)
Sample name:	ITALIA	
Sample name:	Ciclo di verniciatura Traslucent High Quality 2K: impregnante Eco Latygrund pino 318 + finitura Ecopur stone 2k G30 castagno catalizzata al 10% con CW7800 (2 mani 150 g/mq) - prove preliminari CQA csew	

Film trasmittance between 280 and 440 nm - PTP 138: 2008**Object**

Determination of the free film trasmittance in the range 280 nm to 440 nm.

Sampling

Done by the Customer.

Appication

Done by Catas using the film applicator Erichsen Multicator mod. 411.

Wet film thickness: 300 µm

Procedure

The finishing coating was applied on a glass surface. The dry film was unstaked by slight vapor humidification and conditioned in a climatic chamber at 20°C and 65% r.h. for 72 hours. The trasmittance spectrum in the range 280 to 440 nm was recorded using a UV-VIS integration sphere spectrophotometer. The film trasmittance is obtained by integration of the area under the curve. The final result is the mean value of three measurements. The film thickness was measured by the use of a micrometer.

Test results

Thickness: 0,09 mm

	<u>From 280 to 340 nm</u>	<u>from 280 to 440 nm</u>
Permeability:	0,14%	3,82 %

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Cycle guaranteed SRP2P “Prisma 10 years pigmented”

Product applied	Method of application	Drying (hours)	Thickness (micron)
Preservative Eco Latygrund clear or coloured	Brush, dipping, flow coating and spray	2 - 4	50
Ecopur Fond 2K white cat.10% CW 7500	Airless or airmix spray	2 - 4	200
Ecopur Fond 2K white cat.10% CW 7500	Airless or airmix spray	8 - 12	200
Sanding	Sanding with 280-320 grit or brushing		
Ecopur Stone 2K pigmented cat. 10% CW 7800	Airless or airmix spray	12 - 24	150

- Timber species suitable for the above coating cycle: WHITE FIR, RED FIR, SWEDEN PINE, YELLOW PINE, HEMLOCK, DOUGLAS, LARCH, CANADIAN CEDER, OKUMÈ, LIGHT MERANTI, DARK MERANTI, SAPELLI, SIPO MAHAGONI, NIANGON, OAK, WHITE OAK, RED OAK, CHESTNUT, ASH.

The warranty will be 10 years for windows and 8 for shutters.

- The following timber species are excluded from this coating cycle: IROKO, FRAMIRÈ, TEAK, EUCALIPTUS, BRASILIAN CEDER, RUSSIAN LARCH, MDF.

Cycle SRP2P - Table of coating system test results

Description	Reference	Requirement	Evaluation	Result
Water permeability	EN 927-5	> 30 ; < 175 g/m ²	85.62 gr/m ²	+
Stackability	CEN / TS 16499	a 23 °C: a2, d1 a 50 °C: a2, d1	A0, d0 A0, d0	+ +
Resistance to cold liquid (water)	UNI EN 12720	≥ 4	5	+
Wet adhesion	PTP 137 Method A	≥ 0.5 Mpa; sing. Val. ≥ 0.3 MPa	0.5 MPa; 0.3 MPa	+
Inhibition of the growth on agar	PTP 136	Hinibited growths	Hinibited growths	+

The table shows part of the minimum requirements and the results obtained on the check carried out in 2017



TEST REPORT

240693 / 1

Date received: 16/10/17
Date of test: 12/03/18
Date of issue: 13/03/18

VERNITES S.R.L.
VIA DEL LAVORO 12/14
21015 LONATE POZZOLO (VA)
ITALIA

Sample name: Ciclo di verniciatura Pigmented High Quality 2K: impregnante Eco verniprotect bianco NEW + fondo Ecopur fond 2k bianco catalizzato al 10% con CW7800 e diluito al 10% con acqua (2 mani 200 g/mq)+ finitura Ecopur stone lack 2k bianco G30 catalizzata al 10% con CW7800 (1 mano 150 g/mq) - prove preliminari CQA csew

Water liquid permeability EN 927-5:2006

Wood specie of the substrate: spruce
Mean density of the wood specie used: 0,4 Kg/mc
Sampling: made by the customer
Application: made by CATAS in accordance with the enclosed technical sheet
Spreading rate: 200 μ m base coat in two layers + 150 μ m top coat (wet film thickness)
Mean dry film thickness (μ m): 246 \pm 13 μ m

Test results:

Mean water absorption of the sealed control panels (g/m ²)	Mean water absorption of the coated samples (g/m ²)
28,19	85,62

Measurement uncertainty expanded to a level of confidence of about 95%=4,44%.

With reference to the classification by end use in function of the dimensional movement of wood (see UNI EN927-1), the EN927-2/2014 (Performance Specifications) gives the following requirements:

EN927-5	Requirement
Stable	30 g/m ² to 175 g/m ²
Semi-stable	30 g/m ² to 250 g/m ²
Non-stable	> 30 g/m ²

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TEST REPORT

240693 / 5

Date received: 16/10/17
Date of test: 30/11/17
Date of issue: 22/02/18

VERNITES S.R.L.
VIA DEL LAVORO 12/14
21015 LONATE POZZOLO (VA)
ITALIA

Sample name: Ciclo di verniciatura Pigmented High Quality 2K: impregnante Eco verniprotect bianco NEW + fondo Ecopur fond 2k bianco catalizzato al 10% con CW7800 e diluito al 10% con acqua (2 mani 200 g/mq)+ finitura Ecopur stone lack 2k bianco G30 catalizzata al 10% con CW7800 (1 mano 150 g/mq) - prove preliminari CQA csew

Resistance to blocking of paints and varnishes on wood UNI CEN/TS 16499

Sampling: made by the orderer

Application: made by CATAS in accordance with the enclosed technical sheet

Mean wet film thickness of top coat applied: 150 μ m

Procedure:

test is carried out on at least three couples of specimens of mm 50x50 dimension to two different conditions:

Test Condition 1

- Drying: 24 hrs to 23°C and 50% r.h. (c1)
- Load applied: 1 N/cm² (p1)
- Test condition: 23°C and 50% r.h. (t1)

Test condition 2

- Drying: 5 days to 23°C and 50% r.h. (c2)
- Load applied: 1 N/cm² (p1)
- Test condition: 50°C (t2)

The load is applied for 24 hours to both testing conditions.

Within one hour from the end of testing, specimens are unstucked by hand.

Then visual assessment is done.

Test results

Test result is expressed as visual observation of the surfaces of the specimens tested after their split off.

Test condition	Evaluation	Description
nr 1	a0	The pair of specimens is loosely resting on top of each other without adhesion
	d0	No visual surface changes
nr 2	a0	The pair of specimens is loosely resting on top of each other without adhesion
	d0	No visual surface changes

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TEST REPORT

240693 / 6

Date received: 16/10/17
Date of test: 30/11/17
Date of issue: 22/02/18

VERNITES S.R.L.
VIA DEL LAVORO 12/14
21015 LONATE POZZOLO (VA)
ITALIA

Sample name: Ciclo di verniciatura Pigmented High Quality 2K: impregnante Eco verniprotect bianco NEW + fondo Ecopur fond 2k bianco catalizzato al 10% con CW7800 e diluito al 10% con acqua (2 mani 200 g/mq)+ finitura Ecopur stone lack 2k bianco G30 catalizzata al 10% con CW7800 (1 mano 150 g/mq) - prove preliminari CQA csew

Assessment of surface resistance to cold liquids UNI EN 12720:2013

Sampling: made by the customer

Application: made by Catas in accordance with the enclosed technical sheet

Description of the tested material:

- substrate: poplar plywood
- finishing: water borne coating system as described in the sample description

Staining agents	Contact time (hrs)	Rating
Distilled water	1	5

Evaluations:

- 5=no defects
- 4=slight change in colour or gloss
- 3=moderate change of colour or gloss
- 2=strong mark
- 1=structure changed / detachment

Notes:

- The test has been carried out after 24 hours from the finishing application.

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STONE 2K Technical data sheet

Main product characteristics				
Typical Proprieties :	High blocking resistance	Excellent mechanical resistance	Excellent chemical resistance	
Applications Method:	Conventional spray gun	airless	airmix	
	Hand roller	Hand brush		
Main Purpose :	Topcoat with excellent performance chemical-physical, easy to apply, low VOC, zero indoor emission. Certified EN 71/3.			
Preparation product:	Add CW7800 hardener at 10%. Dilute 10 -20% with water and stir very well with a mechanical stirrer. Avoid using preheaters.			
Gloss levels available for booth versions				
15 gloss	30 gloss	50 gloss	100 gloss	
CLEAR VERSION				
Chemical – Physical characteristics (20 °C)		Application Properties		
Solid content (%)	34 ± 1	Vertical Hold (µm wet)	140	
Specific Gravity (g/cm ³)	1,04 ± 0,02	Recommended N° of coats	1 - 2	
Viscosity ASTM 4 RPM 50	4000 - 5000	Recommended quantity per coat (gr/m ²)	min: 120 max: 140	
Pot Life	3 hours	Metric yield (m ² /kg)	5 - 6	
WHITE VERSION				
Chemical – Physical characteristics (20 °C)		Application Properties		
Solid content (%)	43 ± 1	Vertical Hold (µm wet)	140	
Specific Gravity (g/cm ³)	1,21 ± 0,02	Recommended N° of coats	1 - 2	
Viscosity ASTM 4 RPM 50	4000 - 5000	Recommended quantity per coat (gr/m ²)	min: 120 max: 140	
Pot Life	3 hours	Metric yield (m ² /kg)	5 - 6	
General information				
Drying at 20° - UR% between 45 and 65 : 100 gr/square meter		Tunnel drying		
Dust free	30 minutes	Flash off	30°C	20 minutes
Touch free	60 minutes	Laminar air	45°C	30 minutes
Overcoat	2-4 hours	Cooling	20°C	15 minutes
Stackable	8-12 hours	Stackable	Out of the tunnel curing	



vernites[®]
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