

## Sureshield – Catalyst Comparison

### DESCRIPTION:

Catalysts are an integral component of allnex Industrial Floor Toppings | Resin Flooring Systems. Understanding the correct use of the Catalyst is critical in obtaining a correctly cured system.

### Product tested at Room Temperature @ 19 - 20°C

Component	Sureshield Summer Resin	Sureshield Winter Resin
Dosage of Hardener	1.5%	1.5%
Resin : Aggregate mix ratio	1: 6	1: 6
Catalyst: STZ Hardener (Norox 900)	Gel Time: 58 minutes Cure and Touch Dry Time: 245 minutes	Gel Time: 18 minutes Cure and Touch Dry Time: 83 minutes
Catalyst: Curox M100	Gel Time: 54 minutes Cure and Touch Dry Time: 220 minutes	Gel Time: 15.5 minutes Cure and Touch Dry Time: 78 minutes
Catalyst: Curox M200	Gel Time: 52 minutes Cure and Touch Dry Time: 200 minutes	Gel Time: 16.5 minutes Cure and Touch Dry Time: 80 minutes
Catalyst: LX (Low Exotherm)	Gel Time: 74 minutes Cure and Touch Dry Time: 300 minutes	Gel Time: 28 minutes Cure and Touch Dry Time: 125 minutes

So, as you can see the STZ Hardener gives significant working time even at 20 degrees with the Summer Grade Resin. If you require a longer working / gel time, then LX Catalyst is the correct choice. (This will reduce any shrinkage cracking on coves)

- The Catalyst level does not need to drop below 1.5%. (This will ensure a complete cure)
- The absolute minimum level of catalyst is 1%.....however; if you are not weighing the materials correctly and the catalyst levels drop below 1% ***you will end up with a failure.***
- Exceeding 3% catalyst level will also have an adverse effect on the system and should not be instigated.

### NOTE \*

- When you get higher ratios of aggregate to resin then the catalyst levels need to be increased.
- Normal aggregate to resin ratio is 1-part resin to 6 parts aggregate.
- Aerosil not mixed correctly into the resin to make “coving butter” will inhibit cure.
- Use STZ Coving Resin as the best solution to solve the issues of unmixed Aerosil.

### Mixing of Aerosil

**Caution – Mixing of Aerosil on sites may be prohibited.**

***This should only be done in a correctly contained environment with the use of the appropriate Safety Equipment and an extraction system.***

The correct way to mix the Aerosil into the resin is to use an empty 20 litre metal pail and drill a hole in the lid for the mixing shaft of a stirrer to fit in.

Put 5 litres of resin in the pail, add Aerosil and clamp lid on.

Mix with a **high-speed disperser blade** until it is well blended with no lumps.

Add additional Aerosil to achieve desired consistency.

## Measurements

Resin	Catalyst 1%	Catalyst 1.5%	Catalyst 2%	Catalyst 2.5%	Catalyst 3%
1kg	10 grams	15 grams	20 grams	25 grams	30 grams
1.5kg	15 grams	22.5 grams	30 grams	37.5 gram	45 grams
2.0kg	20 grams	30 grams	40 grams	50 grams	60 grams
2.5kg	25 grams	37.5 grams	50 grams	62.5 gram	75 grams
3.0 kg	30 grams	45 grams	60 grams	75 grams	90 grams
3.5 kg	35 grams	52.5 gram	70 grams	87.5 gram	105 grams
4.0kg	40 grams	60 grams	80 grams	100 grams	120 grams
4.5kg	45 grams	67.5 grams	90 grams	112.5 grams	135 grams
5.0kg	50 grams	75 grams	100 grams	125 grams	150 grams
5.5kg	55 grams	82.5 grams	110 grams	137.5 grams	165 grams
6.0kg	60 grams	90 grams	120 grams	150 grams	180 grams
6.5kg	65 grams	97.5 grams	130 grams	162.5 grams	195 grams
7.0kg	70 grams	105 grams	140 grams	175 grams	210 grams
7.5kg	75 grams	112.5 grams	150 grams	187.5 grams	225 grams
8.0kg	80 grams	120 grams	160 grams	200 grams	240 grams
8.5kg	85 grams	127.5 grams	170 grams	212.5 grams	255 grams
9.0kg	90 grams	135 grams	180 grams	225 grams	270 grams
9.5kg	95 grams	142.50 grams	190 grams	237.5 grams	285 grams
10.0kg	100 grams	150 grams	200 grams	250 grams	300 grams
10.5kg	105 grams	157.5 grams	210 grams	262.5 grams	315 grams
11.0kg	110 grams	165 grams	220 grams	275 grams	330 grams
11.5kg	115 grams	172.50 grams	230 grams	287.5 grams	345 grams
12.0kg	120 grams	180 grams	240 grams	300 grams	360 grams

### CAUTION:

Catalysts & Aerosil require careful handling and all precautions should be taken when handling these products.

### HEALTH & SAFETY: Refer safety data sheets (SDS).

- Wear gloves.
- Wear appropriate face mask.
- Wash hands with warm, soapy water after any skin contact.
- Re-seal all containers tightly.

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Replaces: NA

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