

Your Product Datasheet

Catalyst and Accelerex



vuba
7.5kg Mixed Weight
Valtex™ Binder
Award Winning High Strength UVR Resin Binder
Welcome to the vuba resin revolution
Valtex Binder is a Synthetic, blend of polyurethane resin, UV-Cure, blended in UV
Resin A 3.75kg
Step by step
Step 1 Ensure you have consulted the mix design, and ensure your delivery to be mixed correctly.
Step 2 Pour the Accelerator if you're using the Resin A 3.75kg and both components for 90 seconds.
Step 3 Place the bucket into the forced air box, OBEY start mixing and before the resin is used.
Step 4 Keep the bucket open and the mixing paddle, and allow the resin to be mixed for 90 seconds.
Step 5 Each mix head is meant for a continuous mixing. Do not stop mixing during the 90 seconds.
Step 6 Get the bucket into the forced air box, OBEY start mixing and before the resin is used. Make sure you are wearing the correct PPE and safety glasses. Be aware of the temperature to allow for completion.

Literature Code:
VG-AS-2020-01

Introduction

Catalyst, chemically known as Dibutyltin Dilaurate Catalyst, is used to speed up the cross-linking process of two-component polyurethane systems. Catalyst favours the reaction between the resin and the hardener, limiting side reactions such as the hardener and water.

Sufficient catalyst is important to prevent moisture damage in resin bound systems, and to prevent damage from elongated curing times from animals etc.

Catalyst is a key variable of the curing process, along with temperature. But more importantly, catalyst is the key variable that we can control quickly and easily. Vuba Resin Bound Systems are supplied in either a Pre-Catalysed kit or an Un-Catalysed kit.

Take a look at the two different resin options below.

Pre-Catalysed Resins:

In pre-catalysed resin kits, the catalysed component is in the Part A of the Resin.

During our manufacturing process we catalyse the resin, we use 14 grades to suit the current ambient temperature. The advantage of pre-catalysed resin is that it's convenient and reduces the chance of error.

The disadvantage is a lack of flexibility with changing weather conditions from the time of production to usage on site.

Ambient Temp (°C)	Grades available	
0-5	14	Winter cold
6 to 7	13	
8 to 9	12	
10 to 11	11	Winter
12 to 13	10	
14 to 15	9	
16 to 17	8	Spring
18 to 19	7	
20 to 21	6	Summer
22 to 23	5	
24 to 25	4	
26 to 27	3	Summer hot
28	2	

Un-Catalysed Resins:

You must add catalyst to un-catalysed resin kits for them to cure. Catalyst addition is to the Part A of the Resin Bound Kit.

We recommend to add the amounts shown in the table below of Vuba Catalyst. For lower temperatures you would add more catalyst, and less for higher temperatures. For experienced contractors, adding your own catalyst gives you a lot more freedom and ability to select the exact right amount of catalyst for that particular day of application.

Recommended Catalyst Addition:

Ambient Temp (°C)	Recommended Catalyst Addition (ml)
0-5	16
6 to 7	14
8 to 9	13
10 to 11	12
12 to 13	11
14 to 15	10
16 to 17	9
18 to 19	8
20 to 21	7.5
22 to 23	7
24 to 25	6
26 to 27	4
28	3.5

Catalyst

Adding Catalyst:

First you should check the ambient temperature for the day using weather apps. Surface temperatures can be higher and so it is also recommended to take a reading of the surface temperature using an Infrared Thermometer. High surfaces temperatures should be taken into consideration when deciding upon catalyst addition, reducing as necessary.

Catalyst addition does not have to be a constant throughout the laying process, and small changes will not make a difference to appearance. We would recommend to reduce the catalyst addition as you progress to the hottest part of the day, and you can increase towards the end of your project as these kits will have less curing time than those laid at the start. Just ensure you do not shorten the pot life of the kit too much.

Pro Tips

A pro tip is to put part of a mix on to the lid of a Part A tub and observe the curing profile. You can reduce the amount of catalyst if you believe it is curing too fast, or increase if you believe it is not curing fast enough.

Do not be afraid to dispose of a mix which has the incorrect amount of catalyst addition. A mix curing too fast will not be able to knit into the following mix, leaving an unattractive join leave.

As you become more familiar with Vuba catalyst these changes and additions will become easier and easier.



How is Catalyst Supplied?

Vuba Resin Bound Catalyst is supplied in a 200ml container. Using an average of 10ml per mix, each 200ml container will last for 20 mixes of resin bound surfacing.

Vuba Catalyst:	Vuba Accelerex:
Add to Un-Catalysed Resin	Add to Pre-Catalysed Resin
High Strength Catalyst	Diluted Catalyst
Sold in 200ml Bottles	Sold in 600ml Tubs
Use Table Guidance	Add in 4ml Doses

Vuba Catalyst is for use in addition to un-catalysed resins, and is fantastic for experienced contractors. Experienced contractors will be able to adjust the level of catalyst throughout the project to suit their needs.

Vuba Accelerex is for use in increasing the curing speed of existing pre-catalysed resins. This could be useful when conditions are colder than expected, or if you are expecting inclement weather conditions.

Accelerex

It is possible to speed up the curing process of Pre-Catalysed Resin using the Vuba Accelerex additive. Accelerex is a highly catalysed polyurethane resin (Part A). Catalyst is diluted in resin to enable the addition of small amounts of catalyst without risk of over catalysing the resin.

Adding Accelerex:

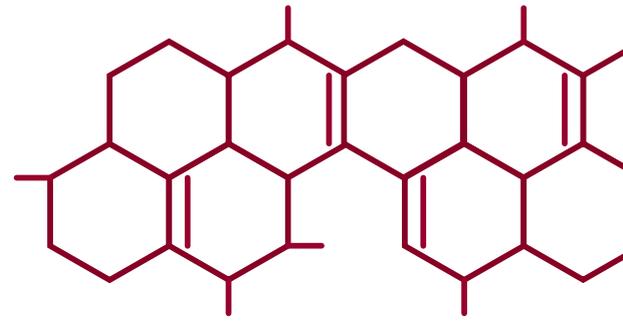
When using Accelerex, you are speeding up the curing process of an already catalysed resin.

You would not use Accelerex with an un-catalysed resin because a large amount would be required to be added to each kit.

We recommend to add Accelerex in doses of 4ml. The change will be dependent upon the amount of existing catalyst - see table.

General Guidance:

It is recommended to begin the project with less Accelerex addition than anticipated, and observe the curing profile. In general, contractors should gain experience before use of Accelerex. If not familiar with resin surfacing, we would recommend to simply avoid laying resin bound in low temperatures or when there is a risk of rain or frost before the resin system has had the opportunity to reach its gel time.



Ambient Temp (°C)	Catalyst Addition / 7.5kg Kit (ml)	Addition of Accelerex per 4ml dose
0-5	14	11%
6 to 7	13	13%
8 to 9	12	14%
10 to 11	11	14%
12 to 13	10	15%
14 to 15	9	16%
16 to 17	8	18%
18 to 19	7	19%
20 to 21	6	21%
22 to 23	5	22%
24 to 25	4	25%
26 to 27	3	33%
28	2	40%

