

## AMITEK EPOXY FLOOR TOPCOAT

### PRODUCT DESCRIPTION

A.P.P. Epoxy Floor top coat is self levelling epoxy resin base coating which is designed to provide a heavy duty chemical resistant floor finish. It provides floors with aesthetic appeal and is resistant to mechanical & chemical loading with high compressive and flexible strength. Top coats can be done using a variety of colors. Comes in matt & gloss finish both. It comes in three component. Pigment is provide according to the clients requirement.

### FEATURES :

- Self levelling coatings with excellent flow & levelling characteristics
- Provides a hygienic and dust free environment
- Hard wearing and chemically resistant
- Attractive, easy to clean and maintain
- Finds application in automobile, pharmaceutical units, food processing plants and chemical plants

### TECHNICAL CHARACTERISTICS :

Colour	RAL Range
Finish	Glossy
Recommended dry film thickness	1 mm
Theoretical Covering Capacity	0.55 sq.mtr/ kg @ 1 mm Dft
Drying time	Surface Dry : 4 hours Hard Dry :24 hours Full Cure : 7 days
Mixing ratio (By weight)	As per packing
Pot life	30 minutes

### MECHANICAL PROPERTIES :

Compressive strength (astM C 579)	41 Mpa
Flexural strength (astM C 580)	9.5 MPa
tensile strength (astM C 307)	7.5 MPa

The data given is for guideline only. The physical values are subject to normal manufacturing tolerances, colour and testing variances. The coverage & consumption figures are theoretical and do not allow for any additional material required due to surface porosity, surface profile, variations in level or wastage etc. The actual drying time/ overcoat interval may be shorter or longer, depending on film thickness, ventilation, humidity, temperature etc. the information provided above is at 30°C and 65% relative humidity.

### SURFACE PREPARATION :

#### SUBSTRATE QUALITY

- Concrete substrates must be sound and of sufficient compressive strength (minimum 20 Mpa) with a minimum tensile strength of 1.5 Mpa.
- A sound, clean and dry substrate is absolutely essential for successful coating application and ensuring maximum bonding between the substrate and coating system.
- The substrate must be clean, dry and free of all contaminants such as dirt, oil, grease, coatings and surface treatments, etc, and have a moisture content less than 5% prior to application of the primer. Ensure that the substrate does not suffer from rising moisture and potential osmosis problems.



### **New concrete floors:**

Should be at least 28 days old or have a moisture content of less than 5% before proceeding with epoxy primer application. Any deposits on new concrete floors are preferably removed by light grit/ shot blasting, mechanical scarifying or grinding to achieve an open textured surface.

### **Old concrete floors:**

- Determine the general condition, soundness, presence of contaminants, presence of moisture vapour emissions and the best methods to prepare the surface to receive a floor coating system. Mechanical surface profiling by grit or shot blasting, grinding or scarifying are the preferred floor preparation methods on old concrete floors.
- Hydrophobic contaminants can be identified by a simple water drop test. Other contaminants can be identified by pH.
- Remove localized weak or deteriorated materials from the surface. remove bond-inhibiting materials such as oils, grease, wax, fatty acids, and other contaminants. this can be accomplished by the use of detergent scrubbing, low pressure water cleaning (less than 5000 psi), steam cleaning, or chemical cleaning. Acids and alkalis can be removed by neutralizing to form a water soluble salt and then high pressure water cleaning and mopping it off to dry state.
- In the areas where the contaminants cannot be removed, complete removal and replacement of the contaminated surface is typically considered.
- Surface defects such as voids, bug holes, excess porosity, and physical and chemical damage are usually filled or repaired prior to the installation of the floor coating system. Materials such as slurries, mortars, and polymer concrete are used to level, smooth and patch concrete surfaces. High spots must be removed by grinding.

**Note:** Acid etching of the surface is not recommended as a preparation technique partly because of the implications for Health & safety but also because the surface is left saturated with water and calcareous salts which may ultimately lead to debonding or osmotic blistering.

### **FLOOR JOINTS**

- All cracks and construction joints present, based on the depth of the crack, should be filled either with epoxy putty or mortar after primer application.
- The expansion joints should not be overcoated with the coating and to be addressed with suitable material.

### **MIXING**

- A suitable power driven mixer such as a bucket mixer is recommended for uniform mixing of the screed material. Stir the base and hardener separately. Blend the aggregates in the bag. Mix hardener gradually into the base under continuous stirring. Mix the aggregates into the mixed resin portion uniformly under continuous mechanical agitation. Mix well for 3-4 minutes till the components become homogenous. apply after induction time and before expiry of pot life.

### **PRIMING**

- All surfaces to be primed with A.P.P. Epoxy floor primer designed for maximum absorption and adhesion to concrete substrates. The primer should be applied immediately to the prepared substrate using stiff brushes, rollers or spray. The primer should be well 'scrubbed' into the substrate to ensure full coverage.
- Allow the primer to dry before proceeding to the next stage; do not proceed whilst the primer is 'tacky' as this will lead to unsightly marks in the finished surface.
- Porous substrates may require a second primer coat - when the first coat is directly absorbed into the substrate, but minimum over-coating times must still be observed.
- Freshly applied primer should be protected from damp, condensation and water for at least 24 hours.

### **SCREED APPLICATION :**

- A.P.P. Epoxy Floor screed should be applied by a serrated/ notch trowel to the required thickness. The entire mixed material should be poured onto the prepared and primed surface and spread slowly and evenly. to ensure proper levelling and appearance avoid overspreading. The laid material should be rolled firmly with a spike roller to ensure compactness and de-aeration of the film. Always wear spike shoes when rolling with spike roller. The rolling should be carried out using a 'back and forth' technique along the same path. an overlap of 50% with adjacent paths is recommended. Further light rolling may be required to remove surface imperfections, or for subsequent release of trapped air. This should be done prior to the setting of the product. to avoid roller marks prevent over rolling of the coating.
  - The coverage & levelling would vary significantly based on the nature & levelling of the concrete surface.
  - Freshly applied A.P.P. Epoxy Floor screed should be protected from damp, condensation and water for at least 24 hours.
  - At low temperatures, the chemical reactions are slowed down; this lengthens the pot life, open time & curing times. High temperatures speed up the chemical reactions thus the time frames mentioned above are shortened accordingly.
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### Topcoat APPLICATION :

- A.P.P. Epoxy Floor Topcoat should be applied by a serrated/ notch trowel over the screed. The entire mixed material should be poured onto the prepared surface and spread slowly and evenly. To ensure proper levelling and appearance avoid overspreading. the laid material should be rolled firmly with a roller to ensure , the rolling should be carried out using a 'back and forth' technique along the same path. Further light rolling may be required to remove surface imperfections, or for subsequent release of trapped air. this should be done prior to the setting of the product. To avoid roller marks prevent over rolling of the coating.
- The coverage & levelling would vary significantly based on the nature & levelling of the concrete surface.
- Freshly applied Amflor epoxy floor Topcoat should be protected from damp, condensation and water for atleast 24 hours.
- At low temperatures, the chemical reactions are slowed down; this lengthens the pot life, open time & curing times. High temperatures speed up the chemical reactions thus the time frames mentioned above are shortened accordingly.

### APPLICATION CONDITIONS

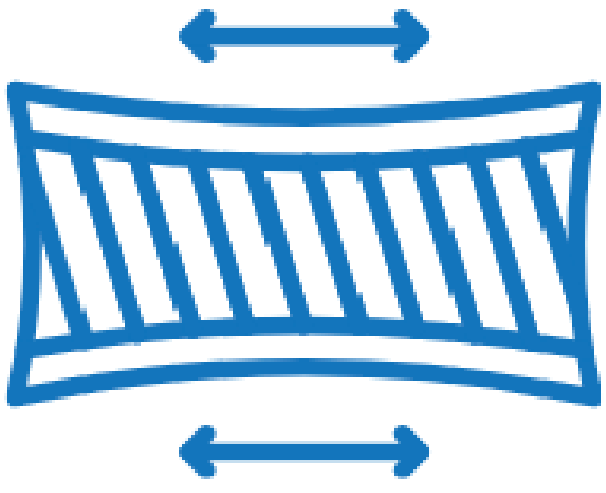

- Residual moisture content of the concrete substrate should not exceed 5%.
- No rising moisture & potential osmosis problems.
- Substrate temperature should be at least 3°C above dew point but not above 50°C.
- Recommended ambient temperature for application is between 10°C - 40°C.
- Relative air Humidity (rH) to not exceed beyond 80%.
- Only epoxy based colorant recommended for clear composition of Amfloor epoxy flooring topcoat.

### CLEANING

All tools and equipment can be cleaned with A.P.P. Paint & Chemical Thinner immediately after use.

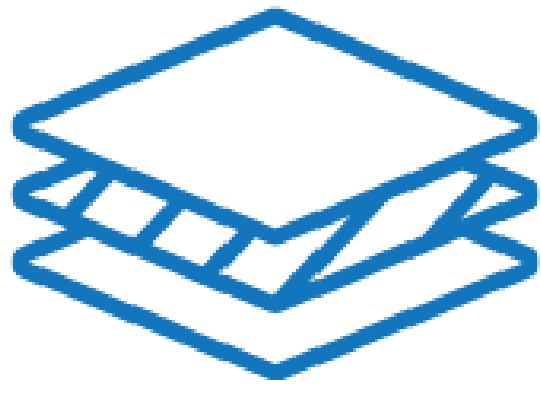
**Note:** A.P.P. Epoxy Floor Topcoat should not be applied to asphalt, weak or friable concrete, unmodified sand/cement screeds, PVC tiles or sheet or substrates known to move substantially e.g. steel walkways. In common with all epoxy materials some light shade changes may be experienced over the long term when placed in adverse exposure conditions. Any such change in shade is not regarded as being detrimental to performance.

### APPLICATION INSTRUCTION :

<p>1</p> 	<p><b>Compressive Strength</b> of concrete minimum 25MPa.</p> <p><b>Surface tensile strength</b> should be minimum 1.5MPa All joints should be treated by PU sealant.</p> <p><b>Concrete surface</b> profile needed CSP 3 to 5</p> <p><b>Moisture level</b> should be <math>\leq 5\%</math> Rh &lt; 75%</p>
<p>2</p> 	<p><b>First apply 2 component primer (Binder + Curing Agent)</b> Mixing ratio 1:1 Drying time 12 hours</p>



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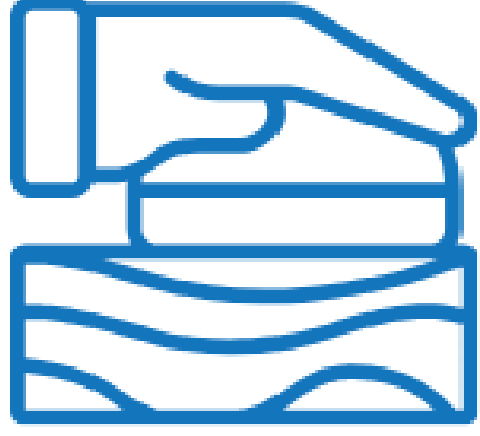


**Then apply 2mm 3 component screed  
(Binder + Curing agent + Fillers)**

Mixing ratio 2:1:7

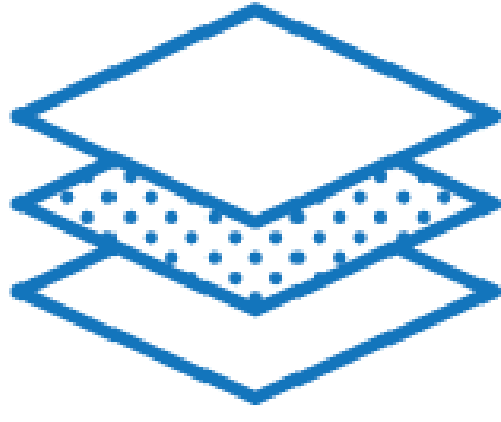
Drying time 12 to 24 hours

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**After the drying of screed do sanding**

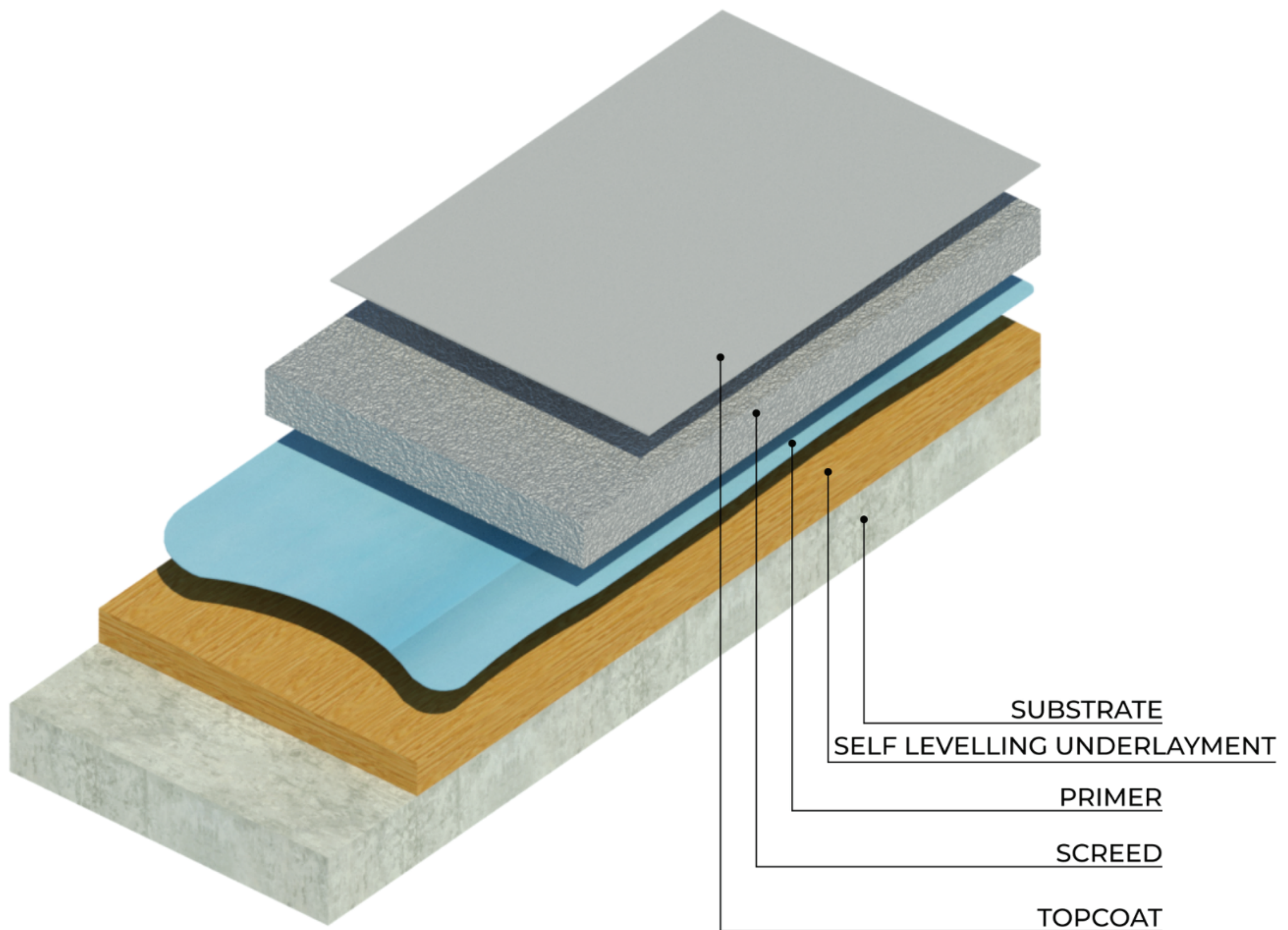
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**After sanding apply 4 component  
(Binder + Curing Agent + Filler + Pigment)**

Mixing ratio 4:1:7:1

Drying time 12 to 18 hours



<b>PACK SIZE</b>	15 kgs 30 Kgs
<b>STORAGE REGULATORY</b>	<b>Shelf Life:</b> at least 12 months if stored properly in original, unopened and undamaged sealed packaging, in dry conditions at temperatures between 5°C to 35°C, subject to inspection thereafter. store in a cool, dry place and in accordance with local regulations
<b>INFORMATION</b>	<b>Flash Point:</b> Base - Not less than 24°C; Hardener - Not less than 24°C <b>VOC: 51</b> gm/ ltr as per usa-ePa Method 24

- As a general safety measure, inhalation of solvent vapours or paint mist and contact of liquid paint with skin & eyes should be avoided. Forced ventilation should be provided when applying paint in confined spaces or stagnant air, even when ventilation is provided, respiratory, skin and eye protection is always recommended while spraying paint.
- Please refer our Material safety Data sheet prior to using the product.

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## DISCLAIMER:

*The information above is believed to be accurate & represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use, handling and from contact. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no way, AMITEK manufactured by APP Paint Chemicals Private Limited will be liable for any claims, losses, or damages of any third party or for lost any special, indirect, incidental, consequential or exemplary charge, however arising, even APP Paint Chemicals Private Limited has been advised of the possibility of such damages.*

MANUFACTURED BY -

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