Ampreg Thixotropic Pregel

RESIN ADDITIVE

- **Reduces drainage of vertical laminates**
- **Useable with a range Gurit laminating hardeners**
- **Can be used as a core bonding adhesive**

INTRODUCTION

Ampreg Thixotropic Pregel is a resin additive with a grease-like consistency, which can be used with a variety of hardeners from the Gurit laminating resin range. It is used primarily as a thixotrope - to be added to low viscosity laminating resins for applications where resin drainage is a concern. It is therefore typically used in vertical and overhead laminating situations, particularly where heavy, open weave fabrics are being used, since these are the most prone to resin drainage.

Ampreg Thixotropic Pregel can be used as the base resin component of an adhesive for bonding honeycomb & foam cores, and other rigid materials.

The properties of an Ampreg Thixotropic Pregel/laminating hardener combination are broadly similar to those of the hardener with its usual resin. This is because the thixotropic agents are added to a high quality resin base and because the Pregel is usually added to the laminating system at relatively low levels. At high addition levels, the resulting laminate will appear to be more brittle than the 'neat' laminating system.

INSTRUCTIONS FOR USE

WORKSHOP CONDITIONS

Ampreg Thixotropic Pregel is optimised for use between 18 - 25°C. At lower temperatures the product thickens and may become unworkable. At higher temperatures working times will be significantly reduced (see relevant laminating system datasheets). Maximum relative humidity for use is 70%.

MIXING AND HANDLING

Ampreg Thixotropic Pregel can be used with a variety of hardeners. Ampreg Thixotropic Pregel should be used in accordance with Fig 1.

The resin / hardener mixture should be well mixed paying particular attention to the sides and bottom of the mixing vessel. The mixture should then be transferred to shallow trays in order to reduce the exothermic heat build up which would reduce pot life and working time. Accurate measurement of the components and thorough mixing are essential. Deviating from the prescribed mix ratio will not speed the cure and can seriously degrade the properties of the system.

USE WITH AMPREG 21

It should be noted that when used with Ampreg 21 at high loadings (>50%), the pot life of the system is significantly reduced. Therefore at high Pre-gel loadings, consideration should be given to utilising a slower hardener speed.

APPLICATION

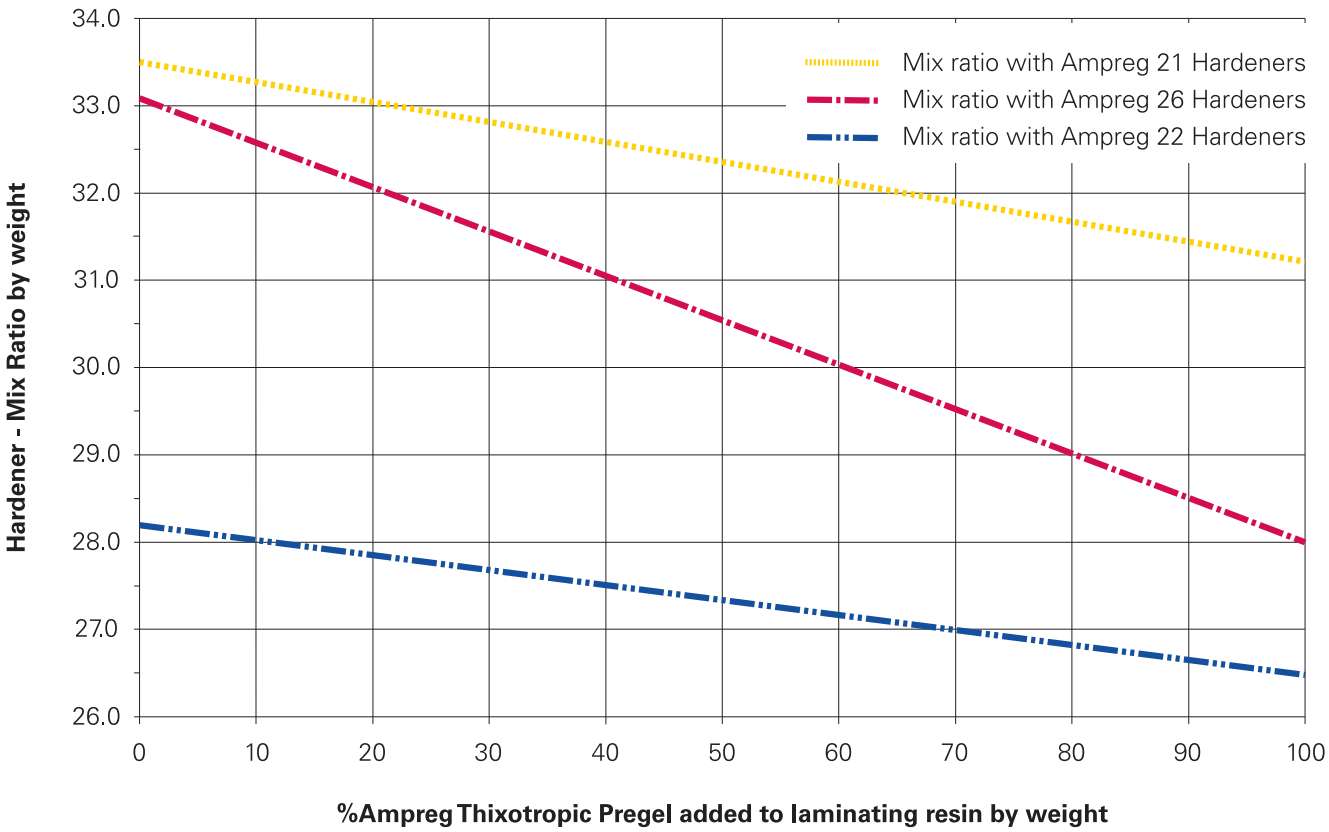
Ampreg Thixotropic Pregel can be used in the following situations:

- As a resin modifier to reduce drainage in laminates.
- As an adhesive mix for bonding core materials to Ampreg 21, Ampreg 22 and Ampreg 26 laminate skins.

Acting as a flow retardant, Ampreg Thixotropic Pregel will slow the wet-out of reinforcements. This should be borne in mind when selecting the appropriate speed of hardener.

Consult the datasheet for the resin system with which Ampreg pregel is to be used, for information regarding application and cure schedule.

Test panels should always be made prior to application to ensure the correct Pregel loading and hardener have been selected for the given working conditions.



Mix Ratio of Ampreg Thixed Pregel / Laminating Resin blend with Ampreg Hardeners

MIX RATIO OF AMPREG THIXED PREGEL / LAMINATING RESIN BLEND WITH AMPREG HARDENERS				
Resin Blend by weight (g)		**Hardener** Mix Ratio by weight (g)		
Thixotropic Pregel	**Ampreg Laminating Resin**	**Ampreg 21 Hardeners***	**Ampreg 22 Hardeners****	**Ampreg 26 Hardeners*****
100	0	31	27	28
75	25	32	27	29
50	50	32	27	30
25	75	33	28	32
0	100	33	28	33

* When mixed with Ampreg Thixed Pregel / Ampreg 21 Resin

** When mixed with Ampreg Thixed Pregel / Ampreg 22 Resin

*** When mixed with Ampreg Thixed Pregel / Ampreg 26 Resin

HEALTH AND SAFETY

The following points must be considered:

1. Skin contact must be avoided by wearing protective gloves. Gurit recommends the use of disposable nitrile gloves for most applications. The use of barrier creams is not recommended, but to preserve skin condition a moisturising cream should be used after washing.

2. Overalls or other protective clothing should be worn when mixing, laminating or sanding. Contaminated work clothes should be thoroughly cleaned before re-use.

3. Eye protection should be worn if there is a risk of resin, hardener, solvent or dust entering the eyes. If this occurs flush the eye with water for 15 minutes, holding the eyelid open, and seek medical attention.

4. Ensure adequate ventilation in work areas. Respiratory protection should be worn if there is insufficient ventilation. Solvent vapours should not be inhaled as they can cause dizziness, headaches, loss of consciousness and can have long term health effects.

5. If the skin becomes contaminated, then the area must be immediately cleansed. The use of resin-removing cleansers is recommended. To finish, wash with soap and warm water. The use of solvents on the skin to remove resins etc must be avoided.

Washing should be part of routine practice:

- ¬ before eating or drinking
- ¬ before smoking
- ¬ before using the lavatory
- ¬ after finishing work

6. The inhalation of sanding dust should be avoided and if it settles on the skin then it should be washed off. After more extensive sanding operations a shower/bath and hair wash is advised.

Gurit produces a separate full Safety Data Sheet for all hazardous products. Please ensure that you have the correct SDS to hand for the materials you are using before commencing work. A more detailed guide for the safe use of Gurit resin systems is also available from Gurit, and can be found at www.gurit.com

APPLICABLE RISK & SAFETY PHRASES

Please refer to product SDS for up to date information specific to this product.

TRANSPORT & STORAGE

The material should be kept in securely closed containers during transport and storage. Any accidental spillage should be soaked up with sand, sawdust, cotton waste or any other absorbent material. The area should then be washed clean (see appropriate Safety Data Sheet).

Adequate long term storage conditions for the material will result in a minimum shelf life of 1 year. Ideally, storage should be in a warm dry place out of direct sunlight and protected from frost. The temperature should be between 10°C and 25°C. Containers should be firmly closed. Hardeners, in particular, will suffer serious degradation if left exposed to air.

NOTICE

All advice, instruction or recommendation is given in good faith but Gurit AG (the company) only warrants that advice in writing is given with reasonable skill and care. No further duty or responsibility is accepted by the Company. All advice is given subject to the terms and conditions of sale (the Conditions) which are available on request from the Company or may be viewed at the Company's Website: http://www.gurit.com/terms-and-conditions.aspx

The Company strongly recommends that Customers make test panels and conduct appropriate testing of any goods or materials supplied by the Company to ensure that they are suitable for the Customer's planned application. Such testing should include testing under conditions as close as possible to those to which the final component may be subjected. The Company specifically excludes any warranty of fitness for purpose of the goods other than as set out in writing by the Company. The Company reserves the right to change specifications and prices without notice and Customers should satisfy themselves that information relied on by the Customer is that which is currently published by the Company on its website. Any queries may be addressed to the Technical Services Department.

Gurit are continuously reviewing and updating literature. Please ensure that you have the current version, by contacting Gurit Marketing Communications or your sales contact and quoting the revision number in the bottom right-hand corner of this page.

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