



CELCURE

Celbrite TC : YOUR SOLUTION TO SAPSTAIN AND MOULD PROBLEMS IN WOOD COMPOSITE PANELS

- **Protects against sapstain and mould**
- **Adds value to panel**
- **Safe and easy to use**

Description

Celbrite TC has been specially developed to prevent the disfiguring of wood composite panel by sapstain, bluestain and mould fungi. The formulation was selected as a result of intensive research, providing a product which is highly effective, easy-to-use, and of low mammalian toxicity.

Active Ingredients

Methylene-Bis-Thiocyanate MBT
2 (Thiocyanomethylthio) Benzothiazole TCMTB

The components of Celbrite TC are water soluble, ensuring penetration of the active compounds into the wood.

Availability

Celbrite TC is manufactured as a concentrate, for dilution by addition to urea formaldehyde adhesive to produce the working solution. It is supplied in 25 litre and 200 litre drums.

Storage

Store drums of Celbrite TC concentrate in a secure place away from the general public, (particularly children) and livestock. Avoid extremes of temperature, both high and low [flash point = 47°C (116°F)].

Working Solution

The concentrate must be added to urea formaldehyde adhesive slowly, stirring thoroughly, to prepare the working solution. Do not mix by adding urea formaldehyde adhesive to the concentrate.

Dilution Rates

The risk of wood composite panel being disfigured by sapstain fungi and moulds varies considerably from factory to factory, according to the season and weather conditions, and depending on timber species and handling methods. Celbrite TC users can adjust to these differences quite easily, simply by changing the concentration of the working solution.

As a normal minimum, CELCURE suggest a concentration of 0.5%, in term of Celbrite TC to solid resin. If the risk of sapstain or mould occurring is high, then a higher concentration, up to 6.0% or so, is required. For any user's needs, CELCURE can advise on the correct concentration of Celbrite TC.

Application Method

Normally Celbrite TC concentrate is mixed into the liquid urea formaldehyde adhesive to the recommended concentration and the resulting working solution is then applied to the wood composite panel during the panel manufacturing process.

Should additional protection be required, spray a diluted Celbrite TC, which is obtained by mixing 2 litres of Celbrite TC to an organic solvent to 100 litres, onto the finished panel prior to shipment.

Safety

All the active ingredients of Celbrite TC are highly suitable on safety grounds for wood treatments. They have relatively low mammalian toxicity and have been used safely for many years as solutions in water, for example in mould and slime control in the packaging and paper industries. However, as with all biologically active material, care is needed, and particularly when they exist in concentrated form. When working with Celbrite TC, you should follow the recommended safety precautions listed on the drum label.

Performance

Celbrite TC acts by killing any fungal spores already present on the wood, and preventing future infection and growth. Some of the active chemicals become fixed onto the wood surface and so are concentrated where any spores and mould growth occur. At the same time one of the active ingredients diffuses into the wood and therefore prevents stain fungi developing internally where moisture conditions may be more favourable than at the surface.

For protection against insect attack, Celbrite TC should be used in conjunction with insecticides in wetttable powder or emulsion concentrate form. For advice on compatability of insecticides with Celbrite TC, consult CELCURE.

Waste Disposal

Spillages of concentrate or solution should be mopped up with sawdust and disposed off in accordance with local requirements. Empty containers should be thoroughly washed out and then rendered unfit for further use by puncturing or crushing. Do not contaminate ponds, waterways or ditches with chemical or used containers.

For further information, please contact:



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CELKURE

Celbrite TC : YOUR SOLUTION TO SAPSTAIN PROBLEMS

- Protects against sapstain
- Adds value to timber
- Safe and easy to use



As soon as trees are felled, or logs sawn into boards, the exposed wood surfaces become susceptible to infection by the spores of fungi. These fungi grow on and through the sapwood, and cause discoloration generally known as "sapstain", severely reducing the value of affected timber. The picture on the left shows a badly affected piece of timber in which sapstain has spread through the sapwood.

The simplest and most cost-effective method of preventing the development of sapstain involves the application of fungicides to the wood surface immediately after sawing. Thorough all-round treatment is generally achieved by dipping timber in dilute solutions of fungicide in water.

Reliable protection of timber from sapstain fungi, in conditions which favour their development, requires the use of highly effective fungicides. CELKURE's anti-sapstain product CELBRITE TC contains proven active ingredients for the protection of all kinds of sawn and round timber. The picture on the right shows CELBRITE TC treated packs of timber.



CELBRITE TC

Description

The Celbrite TC formulation has been specially developed to prevent the disfiguring of timber by sapstain, bluestain and mould fungi.

Applications include all timber with a high moisture content, such as freshly felled logs, sawn timbers after conversion, and timber after treatment with water-borne preservatives. Treatment is essential unless the timber is dried rapidly, and even where this is possible the use of Celbrite TC ensures complete protection of the timber surface.

The Celbrite TC formulation was selected as a result of intensive research, providing a product which is highly effective, easy-to-use, and of low mammalian toxicity.

Active Ingredients

Methylene-Bis-Thiocyanate – MBT

2 – (Thiocyanomethylthio) Benzothiazole – TCMTB

The components of Celbrite TC are water soluble, ensuring penetration of the active compounds into the timber before they bind to the internal timber structure.

Availability

Celbrite TC is manufactured as a concentrate, for dilution by addition to water to produce the working solution. It is supplied in 25 litre and 200 litre drums.

Storage

Store drums of Celbrite TC concentrate in a secure place away from the general public, (particularly children) and livestock. Avoid extremes of temperature, both high and low [flash point = 47°C (116°F)]. The prepared working solution is non-flammable and non-corrosive in contact with mild steel.

Working Solution

The concentrate must be added to water slowly, stirring thoroughly, to prepare the working solution. Do not mix by adding water to the concentrate.

Dilution Rates

The risk of timber being disfigured by sapstain fungi and moulds varies considerably from region to region, according to the season and weather conditions, and depending on timber species and handling methods. Celbrite TC users can adjust to these differences quite easily, simply by changing the concentration of the working solution.

As a normal minimum, CELCURE suggest a concentration of 1.5%. If the risk of sapstain occurring is high, or if protection is required over a longer period, then a higher concentration, up to 3.0%, is required. For any user's needs, CELCURE can advise on the correct concentration of Celbrite TC.

Calculating the amounts of concentrate and water required to prepare Celbrite TC working solution is very easy. For a 1.5% solution, 1½ litres of concentrate is mixed with water to 100 litres, and for a 2.0% solution, 2 litres of concentrate is mixed to 100 litres with water, and so on.

Application Method

Immediately after de-barking round wood or after converting sawn timber, the working solution should be applied to the moist timber by immersion or coarse-spray deluge. Ensure that all surfaces are thoroughly wetted with Celbrite TC solution. CELCURE recommend dipping, with each piece remaining immersed for 1 minute, since by this method complete coverage and adequate uptake are assured. If timber is dipped in pack form, then longer immersion times are required, for open stacked pieces 10 minutes, and up to 20 minutes for close-packed timber. After immersion, the most effective protection is achieved by open stacking of the pieces of treated timber.

Uptake of Solution

The volume of treatment solution taken up by the timber will vary according to the method of application, and the dimensions and surface roughness of the timber. Typically, 15-20 litres of working solution is absorbed per cubic metre of timber.

Safety

All the active ingredients of Celbrite TC are highly suitable on safety grounds for surface treatments of timber. They have relatively low mammalian toxicity and have been used safely for many years as solutions in water, for example in mould and slime control in the packaging and paper industries. However, as with all biologically active material, care is needed, and particularly when they exist in concentrated form.

When working with Celbrite TC, you should follow the recommended safety precautions listed on the drum label. These apply mainly to the handling of the concentrate itself. The working solution and freshly-treated timber are much safer, and the treated timber once dry can be handled normally.

Performance

The different active ingredients of Celbrite TC have been identified individually by researchers as effective chemicals against sapstain and mould. They have proved to be effective, both separately and as mixtures, in laboratory and field trials. These trials generally involve extremes of temperature and humidity, and either the introduction of large amounts of a particular fungus, or exposure to a wide range of fungi under natural conditions.

Celbrite TC acts by killing any fungal spores already present on the timber, and preventing future infection and growth. Some of the active chemicals become fixed onto the wood surface and so are concentrated where any spores and mould growth occur. At the same time one of the active ingredients diffuses into the wood to a depth of several millimeters, and therefore prevents stain fungi developing internally where moisture conditions may be more favourable than at the surface.

For protection against insect attack, Celbrite TC should be used in conjunction with insecticides in wettable powder or emulsion concentrate form. For advice on compatibility of insecticides with Celbrite TC, consult CELCURE.

Celbrite TC has been used in practical mill trials in regions where there is a very high risk of sapstain and mould growth. The results of these trials have confirmed the performance of Celbrite TC and have demonstrated the cost effectiveness of the Celbrite TC formulation.



The picture on the left illustrates the results of a test to confirm the recommended CELBRITE TC concentration. The left-hand board is untreated, while the concentration used on the right-hand board has provided full protection.

Waste Disposal

Spillages of concentrate or solution should be mopped up with sawdust which is then incinerated. If small spillages of solution occur, add an equal volume of household bleach and wash down with large amounts of water. Empty containers should be washed with water which is then used to prepare new solution. Dispose of debris from dip tanks by adding clean sawdust, drying, and then incinerating.

Empty containers should be thoroughly washed out and then rendered unfit for further use by puncturing or crushing.

Do not contaminate ponds, waterways or ditches with chemical or used containers.

Preservative Treated Timber

Timber treated with water-borne preservatives, by pressure impregnation or dip-diffusion, may be susceptible to staining and mould growth. Celbrite TC can be used by post-treatment dip or coarse-spray deluge for prevention of sapstain and mould in timber treated with these preservatives.

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