

CN Timber Protective Emulsion

1.0 DESCRIPTION

Active Constituent:	15g/kg Copper (Cu) present as copper naphthenate in mineral oil. Naphthenic acid value 230 average (range 170 - 250).
Formulation:	Thickened oil-in-water emulsion with film forming ingredients
Appearance & Odour:	Light green gel-like paste with slight ammoniacal and oil odour.
pH:	8.5
Density:	0.90 kg/l @ 20°C
Viscosity:	High (>25,000 cp)
Flash Point:	>180°C (Abel Closed Cup)

2.0 FUNCTION

2.1 General

CN Timber Protective Emulsion (CN Emulsion) is intended for heavy duty protection of timber, and timber structures against fungal decay and borers, particularly in ground contact. Examples are for groundline treatment of poles, exposed endgrain, pile tops, bolt holes, interfaces and joints: any high hazard situations where exposure and dampness could promote decay. CN Emulsion does have a significant level of deterrence to certain species of termites although the product is not promoted as a termiticide as such. Users are advised that additional protective measures against termites may be required in some situations.

2.2 Mode of Action

CN Emulsion is formulated as a thick gel. This allows much more preservative to be applied directly to the timber than can normally be achieved with liquid products. Furthermore as it is formulated with a heavy non volatile oil, it forms a long lasting physical and chemical barrier against decay that resists leaching and weathering. On exposure to air the emulsion breaks. The water phase forms a continuous film at the external surface, whilst the oil phase is released from the emulsion. Any residual oil not immediately absorbed into the timber is trapped between the film and the timber. Depending on the condition of the timber, absorption of oil phase containing the copper naphthenate continues for approximately two weeks out of ground and for approximately three months in ground contact.

3.0 DIRECTIONS FOR USE

3.1 General

CN Emulsion can be applied by trowel, heavy brush, cartridge or by mechanical pumping. Clean up with warm water and detergent.

3.2 Timber surface preparation

For remedial treatment it is essential that any decayed wood be removed from the timber surface prior to application. For ground contact applications it is recommended that all non-pressure treated sapwood be removed in all cases.

3.3 Application

For pole groundline treatment, apply an even coating at least 6mm thick over the area to be protected. The normal recommendation is to coat the pole from approximately 450mm below ground to 100mm above ground. It is strongly recommended that for groundline treatment a wax or plastic coated paper or other light bandage material (ie. light plastic) is wrapped around the pole over the CN Emulsion application. The light bandage will maximise absorption into the pole and significantly enhance the performance of the product.

For above ground treatments (exposed end grain, pile tops) apply a coat up to 6mm thick over the full area requiring protection. A temporary bandage or covering may be required to prevent loss of product if rain is expected within 24 hours of application. For interfaces and timber joints apply a coat up to 3mm thick over the full area before joining.

3.4 After Treatment

On exposure to air the emulsion will darken and form a skin within a few hours. The oil component will continue to be absorbed and will creep along the timber grain. A dark green to black residue may remain and is easily scraped off. The timber itself, where treated, will change to a dark brown or black colour. Absorption may take up to two weeks out of ground contact.

3.5 Reapplication

Reapplication requirements will depend on the nature of the item being protected and the severity of the hazard. Extensive field testing has shown the CN Emulsion can provide protection from decay even in ground contact for over 10 years. In practice for ground contact situations such as utility poles, piles and other structures, reinspection is recommended after 5 years and re-application should be done at least every 10 years in most cases. Further information is available from Koppers-Hickson.

4.0 SAFETY AND HANDLING

4.1 Painting

Painting over timber treated with CN Timber Oil is not recommended.



TECHNICAL DATA SHEET
MAY 2001

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4.2 Metals, Fasteners and Others

CN Emulsion is not corrosive to mild steel, galvanised or other metals commonly used for timber fasteners and connections. In all cases for exterior timber work, galvanised nails and plates are recommended.

5.0 SAFETY AND HANDLING

5.1 General

Copper naphthenate is well recognised as a safe and effective timber preservative. For personal hygiene it is recommended that the following precautions be taken. A Material Safety Data Sheet is available on request for further information.

5.2 Handling the product

Oil resistant gloves should be worn when using the product. Excessive contact with the product can cause dryness and mild irritation to the skin. Wash hands with soap and water after use.

Eye protection should be used when there is a risk of spraying or splashing of the product (ie: pumping, spraying, working overhead). Contact with the eyes may cause moderate to severe irritation. If in the eyes, hold the eyes open and wash with plenty of water for at least 15 minutes and see a doctor.

The product uses very low volatility oils but care should be taken to avoid breathing any spray or mist resulting from application (ie: high pressure pumps). If swallowed give a glass of water and seek medical attention.

The product will stain clothing and animal hair eg. Wool.

5.3 Environmental Considerations

Avoid contamination of waterways and sewers as the product will form an oil pollution hazard.

6.0 STORAGE AND TRANSPORT

6.1 Storage

Store the product in the original closed container in a secure area. Avoid exposure to heat or direct sunlight as temperatures above 40°C may contribute to emulsion breakdown.

6.2 Transport

This product is exempt from dangerous goods classification.

7.0 PACKAGING

20 litre drum
200 litre drum
Other packaging options can be discussed on application

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