1.0 Description

1.1 Constituents
- 524g/L Quaternary ammonium compounds
- 65g/L Methylene bisthiocyanate
- 13g/L Octhilinone

1.2 Formulation
Soluble in water giving clear solutions

1.3 Appearance
Clear yellow liquid

1.4 Density
1.012

1.5 pH 4 (4% solution)

2.0 Function

2.1 General
SENTRY® is an aqueous solution of microbiocides formulated for the protection of freshly debarked logs and sawn timber against sapstain and moulds. SENTRY is particularly suited for the protection of export logs and provides protection for up to 6 months.

2.2 Mode of Action
SENTRY® incorporates three different biocides to provide a broad spectrum of activity and special wetting agents to enhance absorption on and penetration of the active constituents into the logs.

3.0 Directions for Use

3.1 General
SENTRY® should be diluted with clean water and applied to all wood surfaces IMMEDIATELY after sawing or peeling.

3.2 Recommended Procedures
Dilute with water at a rate of 40 to 100 litres of concentrate per 1000 litres of solution as required. SENTRY® concentrate should be slowly added to water with agitation. As the product foams, avoid aeration. Once mixed, the dilute liquid should be stirred occasionally. Tanks containing dilute SENTRY® should be kept free of excess sawdust and dirt.

3.3 Application to Logs and Timber
Logs or timber to be treated should be free of stain, mould and decay. SENTRY® should be applied by spray or dip ensuring complete coverage to all surfaces. Use of a marker dye such as Malachite Green is recommended for easy visual identification of treated stock and for confirmation that an even and consistent coverage is being achieved. Expected usage rate is approximately 2 litres of solution per tonne or cubic meter of logs depending on size and surface condition. Excess solution from the spray or dip operation should be recovered and returned to the application system for re-use.

3.4 Recommended Strength
- Summer - severe conditions: 9.0 % v/v
- Spring/autumn – moderate conditions: 5.0% v/v
- Winter – low hazard: 4.0% v/v
These dilution rates are given for guidance only for Radiata pine in New Zealand. It may be necessary to adjust the concentration to allow for local conditions, storage time, seasonal variations, timber species and application methods. A concentration test kit is available from Lonza.

3.5 Other Recommendations
Addition of a marking dye to the solution such as Malachite Green is recommended for easy identification of treated stock. Do NOT mix SENTRY® with any other chemicals except under guidance from Lonza. Due to the corrosive nature (low pH), SENTRY® should not be used with concrete or mild steel application systems unless these are protected by a suitable robust and impervious protective coating. SENTRY® will NOT remove stain from timber that is already infected.

4.0 Safety and Handling

4.1 General
The SENTRY® concentrate is combustible (flash point 70˚ C), acutely toxic to humans, corrosive and a marine pollutant. Please refer to the Material Safety Data Sheet for further information. Do not open containers or use the product before reviewing the MSDS.

4.2 Handling the Product
Protective clothing of overalls, boots, impervious gloves and goggles should be worn at all times when handling SENTRY® concentrate. Overalls, apron, boots and impervious gloves should be worn when handling SENTRY® dilute solution or freshly-treated wood. Use eye protection where there is a risk of splashing. Do NOT eat, drink or smoke whilst using the product. Wash exposed skin before breaks. Launder work clothes separately from household laundry.
4.3 Safety and First Aid
In case of eye contact, flush eyes with cool water for 15 minutes, then seek medical attention.
In case of skin contact remove contaminated clothing, wash skin with soap and water and seek medical attention.
If swallowed, DO NOT INDUCE VOMITING. Seek medical attention immediately.
If inhaled, remove from exposure, remove any visible product from around the face. Give artificial respiration if required, seek medical attention immediately.

5.0 Transport and Storage

5.1 Transport
UN Number 2922; Corrosive liquid, toxic, NOS (benzalkonium chloride), ecotoxic, marine pollutant.
Dangerous Good Class: 8, 6.
Packaging group: II
Hazchem: 2X

5.2 Storage
Avoid storage of harmful substances with food. Keep containers closed in order to minimise contamination.
Keep away from extreme heat and open flame. Avoid contact with incompatible substances as listed in Section 10 of MSDS. A location test certificate must be available if storing more than 500L. Containers and outer packaging must contain hazchem code, UN number, flammability warning and name of contents.

5.3 Spills and Disposal
Shut off all possible sources of ignition. Wear protective clothing. Recover free liquid, absorb remainder with sand, earth or vermiculite. Dispose of material at an approved site.

5.4 Tracking
Sentry is a tracked substance under the NZEPA. A current Approved Handlers certificate must be held by a nominated individual on the site in order to receive and use this product.

© Sentry is a registered trademark of Chemcolour Industries Limited, 24 Poland Road, North Shore, 0627 New Zealand
© Copyright Lonza 2017