OSMOSE ACQ PRESERVE TREATED WOOD

ChemWatch Material Safety Data Sheet (REVIEW)
CHEMWATCH 6040-62
Date of Issue: Wed 10-Oct-2001

STATEMENT OF HAZARDOUS NATURE

Not classified as hazardous according to Worksafe Australia criteria.

SUPPLIER

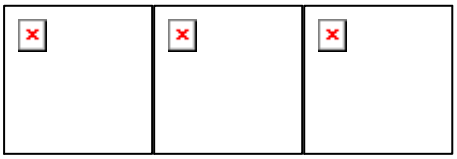
Company: Osmose Australia P/L
Address:
Cafrpirco Road ABN: 75 088 260 575
Mt Gambier
SA
Australia
Telephone: (+61 8) 8723 1399
Emergency Telephone: 1800 039 008
Fax: (+61 8) 8723 0010

CHEMWATCH HAZARD RATINGS

Flammability: 1
Toxicity: 0
Body Contact: 0
Reactivity: 0
Chronic: 4

SCALE: Min/Nil=0 Low=1 Moderate=2 High=3 Extreme=4

PERSONAL PROTECTIVE EQUIPMENT FOR INDUSTRIAL/COMMERCIAL ENVIRONMENTS



Product Name: Osmose ACQ Preserve Treated Wood
8/01

CAS RN No(s): None
UN Number: None
Packing Group: None
Dangerous Goods Class: None
Subsidiary Risk: None
Hazchem Code: None
Poisons Schedule Number: S6

USE

Used for outdoor applications in garden furniture, fencing, pergolas and decking, particularly where below ground borer and rot resistant timber is required.
Sawing and sanding produces dust which contains preservative chemicals.

PHYSICAL DESCRIPTION/PROPERTIES

APPEARANCE

Green or brown coloured dressed and natural timber, sections, logs, poles and posts which are dry and aged for 4 to 6 weeks after vacuum/pressure impregnation with ammoniacal copper quaternary (ACQ) liquid
treatment to protect timber from fungi and insects. The ACQ solution is fixed by chemical reaction which changes the water-soluble ACQ material into an insoluble preservative in the treated timber.
The product weathers to various shades of brown-grey over several years.

Boiling Point (°C):	Not applicable.
Melting Point (°C):	Not applicable.
Vapour Pressure (kPa):	Not applicable
Specific Gravity:	Not available
Flash Point (°C):	Not applicable
Lower Explosive Limit (%):	Not available.
Upper Explosive Limit (%):	Not available.
Solubility in Water (g/L):	Insoluble.

INGREDIENTS

NAME	CAS RN	%
softwood		> 97
impregnation residuals, as		
copper	7440-50-8	0.1-1.0
didecyldimethylammonium chloride	7173-51-5	0.1-1.0
In use, may generate		
wood dust	Not avail.	

No other ingredient information disclosed.

HEALTH HAZARD

ACUTE HEALTH EFFECTS

SWALLOWED

Overexposure is unlikely in this form and quantity.
Considered an unlikely route of entry in commercial/industrial environments

EYE

The dust may produce eye discomfort and abrasive eye inflammation.

SKIN

The material may be mildly discomforting to the skin and is capable of causing skin reactions which may lead to dermatitis

INHALED

Not normally a hazard due to non-volatile nature of product
Inhalation hazard is increased at higher temperatures.

CHRONIC HEALTH EFFECTS

Principal routes of exposure are by skin contact, inhalation of machining dust and exposure to volatile copper compounds when treated timber is burnt. Treated timber for childrens playground equipment or for use in log cabins, should before use be:
(a) Aged 4 to 6 weeks to "fix" treatment chemicals and thoroughly dry timber; and (b) washed well with water to remove soluble salts.
This as recommended by Australian Standard AS 1924. Failure to observe above may result in timber wet with treatment chemicals being handled, with considerably increased hazard, particularly from dust if timber is sawn or sanded. It is believed that no absorption of ACQ into the skin will occur after the fixation period.
ACQ-treated timber has a long history of safe use with human and stock exposure, provided reasonable occupational hygiene is observed.
Treated timber must NOT be used for cooking over open fires, barbecues, spit roasts.

FIRST AID

SWALLOWED

If ACQ treated dust is swallowed, give water to drink. Seek medical attention if any abdominal discomfort occurs.

EYE

If this product comes in contact with the eyes:
Immediately hold the eyes open and wash with fresh running water.
Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.
If pain persists or recurs seek medical attention.

Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

SKIN

Remove all contaminated clothing, including footwear. Wash thoroughly all affected areas with water and soap.

INHALED

If dust is inhaled, remove to fresh air.
Encourage patient to blow nose to ensure clear breathing passages.
If irritation or discomfort persists seek medical attention.
If fumes or combustion products are inhaled: Remove to fresh air.
Lay patient down. Keep warm and rested.
Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures
If available, administer medical oxygen by trained personnel.
If breathing is shallow or has stopped, ensure clear airway and apply resuscitation, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary.
Transport to hospital, or doctor, without delay.

ADVICE TO DOCTOR

Treat symptomatically.

PRECAUTIONS FOR USE

EXPOSURE STANDARDS

None assigned. Refer to individual constituents.

EXPOSURE STANDARDS FOR MIXTURE

"Worst Case" computer-aided prediction of spray/ mist or fume/ dust components
and concentration:

Composite Exposure Standard for Mixture (TWA) :1.4651 mg/m³.
Operations which produce a spray/mist or fume/dust, introduce particulates to
the breathing zone.
If the breathing zone concentration of ANY of the components listed below is
exceeded, "Worst Case" considerations deem the individual to be over
overexposed.
Component Breathing Zone ppm Breathing Zone mg/m³ Mixture Conc (%)

copper	0.6977	10
wood dust	0.0698	01
didecyldimethylammonium chloride	0.6977	10

INGREDIENT DATA

COPPER:
TLV TWA: 0.2 mg/m³ Fume [ACGIH]
TLV TWA: 1 mg/m³ Dusts and mists as Cu [ACGIH]
PEL TWA: 1 mg/m³ [OSHA Z1]
copper dusts and mists, as Cu (A.Wt: 63.54)
ES TWA: 1 mg/m³
TLV TWA: 1 mg/m³
OES TWA: 1 mg/m³; STEL: 2 mg/m³
copper fume, as Cu
ES-TWA: 0.2 mg/m³
TLV-TWA: 0.2 mg/m³
OES-TWA: 0.2 mg/m³
IDLH Level: 100 mg/m³ (fume)

DIDECYLDIMETHYLAMMONIUM CHLORIDE:
It is the goal of the ACGIH (and other Agencies) to recommend TLVs (or their equivalent) for all substances for which there is evidence of health effects at airborne concentrations encountered in the workplace.
At this time no TLV has been established, even though this material may produce adverse health effects (as evidenced in animal experiments or clinical experience). Airborne concentrations must be maintained as low as is practically possible and occupational exposure must be kept to a minimum.
NOTE: The ACGIH occupational exposure standard for Particles Not Otherwise Classified (P.N.O.C,s) does NOT apply.

WOOD DUST:
certain hard woods as beech & oak:
TLV TWA: 1 mg/m³ A1
WARNING: This substance has been classified by the ACGIH as A1 CONFIRMED HUMAN CARCINOGEN
ES TWA: 1 mg/m³ (Sensitiser) (Under review)
soft wood:
TLV TWA: 5 mg/m³; STEL: 10 mg/m³
ES TWA: 5 mg/m³; STEL: 10 mg/m³ (Sensitiser) (Under review)
Wood dusts produce dermatitis and an increased risk of upper respiratory disease. Epidemiological studies in furniture workers show an increased risk of lung, tongue, pharynx and nasal cancer. An excess risk of leukaemia amongst

millwrights probably is associated with exposure to various components used in
wood preservation.
Impairment of nasal mucociliary function may occur below 5 mg/m³ and may be
important in the development of nasal adenocarcinoma amongst furniture workers
exposed to hardwoods.
Certain exotic hardwoods contain alkaloids which may produce headache,
anorexia, nausea, bradycardia and dyspnoea.
The softwood TLV-TWA reflects the apparent low risk for upper respiratory tract
involvement amongst workers in the building industry. A separate TLV-TWA, for
hard woods, is based on impaired nasal mucociliary function reported to
contribute to nasal adenocarcinoma and related hyperplasia found in furniture
workers.
The TLVs for hardwood and softwood specifically exclude the issue of
occupational asthma and related allergic respiratory response associated with
exposure to red cedar dusts and similar woods.
TRK: 2 mg/m³
(measured as inhalable fraction of the aerosol)
The technical exposure limit, TRK (Technische Richtkonzentrationen), defines
the airborne concentration of named carcinogenic materials which is the minimum
possible given the state of current technologies. TRK values are assigned only
for materials for which there is no current MAK (German exposure standard).
Observance of the TRK value is intended to reduce the risk of adverse effects
on health but does NOT completely eliminate it. Since no threshold doses can be
determined for carcinogens, health considerations require that the exposure
limits be kept as far as possible below the TRK and that the TRK value be
gradually reduced. The limitation of exposure peaks is regulated as follows;
Short-term exposure limit: 5 x TRK
Short-term exposure duration: 15 min/average
Frequency per work shift: 5 times
Interval: 1 hour
Report No. 35 1999, Deutsche Forschungsgemeinschaft.

ENGINEERING CONTROLS

Avoid generating and breathing dust. Effective dust extraction and good
ventilation is required when using cutting, shaping or sanding tools. Wear a
disposable dust mask AS 1715 (1991) class P1 or P2 when machining.
Avoid sawing or sanding of timber that is wet (not dry) with treatment

chemicals.

PERSONAL PROTECTION

EYE

When sawing, machining or sanding use safety glasses with side shields. Contact
lenses pose a special hazard; soft lenses absorb irritants and all lenses
concentrate them.

HANDS/FEET

Impervious gloves
Safety footwear

OTHER

Overalls
Barrier cream
Eyewash unit.

RESPIRATOR

Selection of the Class and Type of respirator will depend upon the level of
breathing zone contaminant and the chemical nature of the contaminant.
Protection Factors (defined as the ratio of contaminant outside and inside the
mask) may also be important.

Breathing Zone Level ppm (volume)	Maximum Protection Factor	Half-face Respirator	Full-Face Respirator
1000	10	-AUS P	-
1000	50	-	-AUS P
5000	50	Airline *	-
5000	100	-	-2 P
10000	100	-	-3 P
	100+		Airline**

* - Continuous Flow ** - Continuous-flow or positive pressure demand

The local concentration of material, quantity and conditions of use determine
the type of personal protective equipment required. For further information

consult site specific CHEMWATCH data (if available), or your Occupational
Health and Safety Advisor.

SAFE HANDLING

STORAGE AND TRANSPORT

SUITABLE CONTAINER

Not applicable

STORAGE INCOMPATIBILITY

None known

STORAGE REQUIREMENTS

Keep dry.
Store under cover.
Store in a well ventilated area.
Store away from sources of heat or ignition.
Observe manufacturer's storing and handling recommendations.
No smoking, naked lights or ignition sources.

TRANSPORTATION

No restrictions.

SPILLS AND DISPOSAL

MINOR SPILLS

Refer to major spills.

MAJOR SPILLS

Minor hazard.
Clear area of personnel.
Alert Fire Brigade and tell them location and nature of hazard.
Wear physical protective gloves e.g. Leather.
Contain spill/secure load if safe to do so.
Bundle/collect recoverable product and label for recycling.
Collect remaining product and place in appropriate containers for disposal.
Clean up/sweep up area.
Water may be required.

DISPOSAL

Recycle wherever possible or consult manufacturer for recycling options.
Consult State Land Waste Management Authority for disposal.
Bury residue in an authorised landfill.
Recycle containers if possible, or dispose of in an authorised landfill.

FIRE FIGHTERS' REPORT

EXTINGUISHING MEDIA

Water spray or fog.
Foam.
Dry chemical powder.
BCF (where regulations permit).
Carbon dioxide.

FIRE FIGHTING

Alert Fire Brigade and tell them location and nature of hazard.
Wear breathing apparatus plus protective gloves.
Prevent, by any means available, spillage from entering drains or water courses.
Use water delivered as a fine spray to control fire and cool adjacent
DO NOT approach containers suspected to be hot.
Cool fire exposed containers with water spray from a protected location.
If safe to do so, remove containers from path of fire.
Equipment should be thoroughly decontaminated after use.

FIRE/EXPLOSION HAZARD

Combustible
Moderate fire hazard when exposed to heat or flame.
Avoid creating dust - may present dust explosion hazard. Dry dust can be electrostatically charged by turbulence, pneumatic transport, pouring, in exhaust ducts and during transport. Build-up of electrostatic charge may be prevented by grounding.
On combustion, emits toxic fumes of carbon monoxide (CO) , carbon dioxide (CO2)
and copper

FIRE INCOMPATIBILITY

Avoid reaction with oxidising agents

HAZCHEM

None

CONTACT POINT

COMPANY CONTACT
1800 039 008

AUSTRALIAN POISONS INFORMATION CENTRE
24 HOUR SERVICE: 13 11 26
POLICE, FIRE BRIGADE OR AMBULANCE: 000

NEW ZEALAND POISONS INFORMATION CENTRE
24 HOUR SERVICE: (03) 4747 000
NZ EMERGENCY SERVICES: 111

End of Report

Issue Date: Wed 10-Oct-2001

Print Date: Mon 12-Aug-2002

This document is copyright. Apart from any fair dealing for the purposes of private study, research, review or criticism, as permitted under the Copyright Act, no part may be reproduced by any process without written permission from
CHEMWATCH. TEL (+61 3) 9572 4700.