

MATERIAL SAFETY DATA SHEET

(In accordance with SANS ISO 11014-1)

TANALITH® C OXIDE LIQUOR

Section 1 - PRODUCT AND COMPANY IDENTIFICATION

Product name : Tanalith® C Oxide Liquor
Product Code : Not Available
Recommended use : Industrial wood preservative for the pressure impregnation of timber against fungal and insect attack.

Supplier : Arch Wood Protection (SA) (Pty) Ltd

Address : PO Box 54344, Marburg, 4252
Emergency Telephone Number : Office Hours - 039 688 6801 (Office)
 All Hours - 0800 202 202 (Drizit)
ACEAN - **001-800-654-6911 / 001-423-780-2970**

Fax No. : 039 682 6022 (Office)

Section 2 - COMPOSITION/INFORMATION ON COMPONENTS

Substance / preparation : Preparation
Chemical nature : A solution in water

Hazardous components : -

Chemical Name	CAS No.	Concentration	EEC symbols & risk phrases
Arsenic pentoxide	1303-28-2	19.9 % m/m	T, N; R45-23/25-50/53
Chromium trioxide	1333-82-0	27.9 % m/m	T, N; R24/25-26-35-42/43-45-46-48/23-50/53-62
Cupric oxide	1317-38-0	11.2 % m/m	N; R50

Section 3 - HAZARDS IDENTIFICATION

Classification

Dangerous goods : UN 2994
Risk Symbols : T; N
Risk Phrases : R8-24/25-26-35-42/43-45-46-48/23-50/53-62
Physical/chemical hazards : Toxic; may cause oxidation reactions.
Human health hazard : Toxic to Category 3. Severe eye and skin irritant. Carcinogenic to Category 1, Sensitising, Mutagenic to Category 2, Corrosive.
Environmental health hazard : Harmful to the environment, very toxic to aquatic organisms.

Section 4 - FIRST AID MEASURES

Eye contact : Rinse immediately for at least 20 minutes with lukewarm water. Lift upper and lower lids until no evidence of chemical remains. Seek immediate medical attention.

Skin contact : Wash thoroughly with soap and water. Remove contaminated clothing. Seek medical attention if symptoms persist.

Ingestion : DO NOT induce vomiting. Give large amounts of water or milk to dilute substance if person is conscious. NEVER give anything by mouth to an unconscious person. May require whole bowel irrigation with a balanced electrolyte solution. Seek immediate medical attention

Inhalation : Move victim to fresh air. Do not apply mouth to mouth resuscitation, use mask equipped with one-way valve. Seek immediate medical attention.



MATERIAL SAFETY DATA SHEET

(In accordance with SANS ISO 11014-1)

TANALITH® C OXIDE LIQUOR

Note to Physician

: On evidence of significant absorption promptly give Dimercaprol 3mg/kg (or 0.3 ml/kg) every 4 hours for 2 days and then 2mg/kg every 12 hours for a total of 10 days. Dimercaprol is available as a 10% solution in oil for intramuscular administration. Next, give Penicillamine, up to 100mg/kg/day (maximum 1g/day) divided into 4 doses for no longer than 1 week. Give the drug orally half an hour before meals. If a longer administration period is warranted, dosage should not exceed 40 mg/kg/day. Urinary arsenic and chromium levels should be regularly determined through medical surveillance.

Section 5 - FIRE-FIGHTING MEASURES

The product is not flammable or combustible.

- Suitable extinguishing media** : All media required to fight surrounding fire.
- Special protective equipment** : Full SCBA.
- Specific hazards** : Irritating and toxic fumes may liberated be when breakdown occurs in large fires. In large fires use full SCBA gear and fight fire from maximum distance and evacuation may be required. Do not wash product into drains or sewers with water jets.

Section 6 - ACCIDENTAL RELEASE MEASURES

- Personal precautions** : Avoid contact with skin and eyes.
- Environmental precautions** : Avoid run-off of undiluted material into water courses.
- Methods for cleaning up** : Small quantities - Dilute with water and allow to soak away. Large quantities – Collect and dispose as hazardous waste. Contain and absorb spillage with sand or soil. Wear full protective clothing. Plug or close leak if safe to do so. If possible prevent spillage from entering drains, sewers or watercourses. If this happens advise water authority immediately. Recover as much product as possible into suitable containers for recycling or disposal. Lime, ferrous sulphate and sand can be used to neutralise unrecoverable product. Dispose of contaminated adsorbent and waste product by a registered and approved waste disposal company. On site disposal of dilute or undiluted chemical is not acceptable.

Section 7 - HANDLING AND STORAGE

- Safe handling advice** : Prevent skin or eye contact. Prevent spills. Avoid generation of spray mist or vapours. Wear the correct PPE (personal protective equipment)
- Storage conditions** : Do not store on wood floors. Storage areas must be secure, bunded and not accessible to unauthorised persons. Store in cool, well ventilated areas. Inspect regularly for leaks.

Section 8 - EXPOSURE CONTROL/PERSONAL PROTECTION

- Exposure limits**
 - Arsenic pentoxide : 0.1 mg (As)/ m³ (TLV-TWA)
 - Chromium trioxide : 0.05 mg (CrO₃)/m³ (TLV-TWA)
 - Cupric oxide : 1.0 mg/m³ (TWA)
- Personal protective equipment** : -
- Eye protection** : Safety goggles or face shield.
- Skin and body protection** : Use Neoprene or butyl rubber gloves with low permeation rate.



MATERIAL SAFETY DATA SHEET

(In accordance with SANS ISO 11014-1)

TANALITH® C OXIDE LIQUOR

Protective measures : Use special chemical resistant clothing and boots.
 : Eye-wash and quick drench shower required within the immediate plant area. Suitable equipped first-aid station required on site.

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

Physical state : Liquid
Colour : Dark brown
Odour : Slight acidic, metallic.
Initial boiling point : 105 deg. C
Flash point : Not applicable
pH : 2 of a 2% m/v solution @ 20 °C
Specific gravity : 1.8
Water solubility : Completely Soluble

Section 10 - STABILITY AND REACTIVITY

Conditions to avoid : Hot, poorly ventilated areas where vapours may accumulate.
 Do not allow evaporation to dryness. Heat.
Materials to avoid : Accumulation of dried residue in contact with organic material may cause combustion. Avoid combustible and organic materials.
 Reacts with some metals – aluminium, zinc, galvanised iron and iron. Potential that toxic gasses can be produced. Avoid oxidizing agents.
Hazardous decomposition products : Irritating and toxic vapours and fumes in large fires.
Hazardous polymerisation : Will not occur.
 Stable under recommended storage conditions

Section 11 - TOXICOLOGICAL INFORMATION

LD50 Acute oral
 Arsenic pentoxide : 8 mg/kg/rat
 Chromium trioxide : 100 mg/kg/rat
 Cupric oxide : >2500 mg/kg/rat
 Tanalith C Oxide : 180-500 mg/kg

LD50 Acute dermal
 Chromium trioxide : 300 mg/kg/rat
 Tanalith C Oxide : 200 - 600 mg/kg

Eye irritant
 Arsenic pentoxide : Not listed. Irritation of conjunctiva, edema of eyelids and corneal necrosis may occur. Ophthalmic consultation is advised.
 Chromium trioxide : Not listed. Conjunctivitis may occur.
 Cupric oxide : Not listed
 Tanalith C Oxide : Prolonged eye contact may cause chemical burns

Skin irritant
 Arsenic pentoxide : Not listed. Pigmentation inflammation, desquamative eczematoid dermatitis and hyperkeratosis may occur.
 Chromium trioxide : Not listed. Dermatitis and deep ulceration may occur.
 Cupric oxide : Not listed
 Tanalith C Oxide : Prolonged skin contact may cause chemical burns
 May cause systemic effects
 Stains the skin
 May cause sensitisation by skin contact

Carcinogen/Mutagen/Fertility
 Arsenic pentoxide : Carcinogen – Cat. 1A



MATERIAL SAFETY DATA SHEET

(In accordance with SANS ISO 11014-1)

TANALITH® C OXIDE LIQUOR

Chromium trioxide : Carcinogen – Cat.1; Mutagen – Cat. 2; Fertility – Cat. 3
 Cupric oxide : Not listed
 Tanalith C Oxide : May cause cancer and heritable genetic damage

Acute exposure symptoms

Arsenic pentoxide : A metallic or garlic taste, vomiting, abdominal pain, dysphagia, and profuse diarrhea may occur. Dehydration, intense thirst, and fluid-electrolyte disturbances are common. Hypovolemia from capillary leaking is common. Symptoms may be delayed.

Chromium trioxide : May cause intense gastrointestinal irritation or ulceration and corrosion, epigastric pain, nausea, vomiting, diarrhea, vertigo, fever, muscle cramps, hemorrhagic diathesis, toxic nephritis, renal failure, intravascular hemolysis, liver damage, acute multisystem shock and coma. Symptoms may be delayed.

Cupric oxide : Gastroenteritis with vomiting may occur. Mucosal erosions, a metallic taste, burning epigastric sensation and diarrhoea may also occur.

Section 12 - ECOLOGICAL INFORMATION

Persistence/degradability

Tanalith C Oxide : BOD no data available

Ecotoxicity

Tanalith C Oxide : Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

Bioaccumulation

Tanalith C Oxide : No data available

Mobility in Soil

Tanalith C Oxide : No data available

Section 13 - DISPOSAL CONSIDERATIONS

Product : Dispose as hazardous waste by specialist operator. Waste residues not allowed to contaminate soil or water.

Containers : Empty containers to be rinsed three times with water and contaminated water to be added to treating solution. Empty containers to be returned to the supplier or disposed as hazardous waste by specialist operator.

Contaminated packaging : Dispose as hazardous waste by specialist operator.

Section 14 - TRANSPORT INFORMATION

Road and rail transport

UN No : 2994
 Shipping name : ARSENICAL PESTICIDE, LIQUID, TOXIC.
 Class : 6.1
 Packing Group : III
 ERG : 151



Sea and air, (IMDG) and (IATA)

UN No : 2994
 Shipping name : ARSENICAL PESTICIDE, LIQUID, TOXIC
 Class : 6.1
 Packing Group : III
 Marine pollutant : Yes



MATERIAL SAFETY DATA SHEET

(In accordance with SANS ISO 11014-1)

TANALITH® C OXIDE LIQUOR

Section 15 - REGULATORY INFORMATION

15.1 National legislation (South Africa)

- Hazardous substances** : Occupational Health And Safety Act, Act 85 of 1995 - Regulations for hazardous chemical substances.
- Transport** : National Road Traffic Act, Act 93 of 1996 – Chapter VII of the regulations.
- Waste disposal** : National Water Act, Act 36 of 1998
- Pesticide/fungicide** : Fertilizers, Farm Feeds, Agricultural Remedies and Stock Remedies Act, Act No 36 of 1947.
- Pesticide Registration No.** : L3150

15.2 Other regulations

- 1999/45/EEC requirements**
- Hazard Symbols** : T; N

Hazard label :



Risk phrases :

- R8 Contact with combustible material may cause fire
- R24/25 - Toxic when in contact with skin and if swallowed
- R26 - Very toxic by inhalation
- R35 – Causes severe burns
- R42/43 – May cause sensitization by inhalation and skin contact
- R45 - May cause cancer
- R46 – May cause heritable genetic damage.
- R48/23 – Toxic: danger of serious damage to health by prolonged exposure through inhalation
- R50/53 – Very toxic to aquatic organisms and may cause long term adverse effects in the aquatic environment
- R62 - Possible risk of impaired fertility

Safety phrases :

- S53 – Avoid exposure -obtain special instructions before use.
- S23 – Do not breathe vapour
- S26 – in case of contact with eyes, rinse immediately with plenty of water and seek medical advice
- S28 – After contact with skin, wash immediately with plenty of water
- S36/37/39 – Wear suitable protective clothing, gloves and eye/face protection.
- S45 – In case of accident or if you feel unwell, seek medical advice immediately (show the label whenever possible)
- S60 - This material and its container must be disposed of as hazardous waste
- S61 - Avoid release to the environment. Refer to special instructions / material safety data sheets

MATERIAL SAFETY DATA SHEET

(In accordance with SANS ISO 11014-1)

TANALITH® C OXIDE LIQUOR

Section 16 - OTHER INFORMATION

16.1 This Material Safety Data Sheet has been prepared using data supplied by the manufacturers of the ingredients and summarises our best knowledge, at the date of issue, and of the health and safety information of the product and how to safely handle and use the product in the workplace. Since Arch Wood Protection (SA) (Pty) Ltd cannot anticipate or control the conditions under which the product may be used, each user must prior to usage, review this Material Safety Data Sheet in the context of how the user intends to handle and use the product in the workplace. If clarification or further information is needed to ensure that an appropriate risk assessment can be made, the user should contact Arch Wood Protection (SA) (Pty) Ltd.

16.2 Original : January 1999

Revised : November 2010 – Revision 4
 August 2011 – Revision 5
 June 2012 – Revision 6
 September 2012 – Revision 7
 January 2016 – Revision 8
 September 2016 – Revision 9

End of MSDS

