

Section 1 – Identification of Chemical Product and Company

Code	Description	Size	Colour
44004	Metalex Timber Preservative Concentrated	500 ml	Clear
44005	Metalex Timber Preservative Concentrated	1 Lt	Clear
44006	Metalex Timber Preservative Concentrated	4 Lt	Clear
44010	Metalex Timber Preservative Concentrated	20 Lt	Clear

Recommended use:	Preservative coating for timber; remedial	
Supplier contact details:	Holdfast NZ Ltd	Freephone: 0800 70 10 80
	14 Avalon Drive	Phone: (07) 847 5540
	Nawton	Fax: (07) 847 0324
	Hamilton 3200	Email: sales@holdfast.co.nz
	New Zealand	Website: www.holdfast.co.nz
NATIONAL POISONS CENTRE NUMBER: 0800 764 766 (24 hours)		
NZ Emergency Services (Fire, Police, Ambulance) 111		

Section 2 – Hazard Identification
Statement of Hazardous Nature

This product is classified as: **HAZARDOUS SUBSTANCE** according to the criteria of HSNO.

REGULATED under NZS5433:2012 Transport of Dangerous Goods on Land

Signal word: DANGER

Hazardous Substances and New Organisms (HSNO) classification:

Classification	Hazard statements
3.1D	H227 Combustible liquid and vapour
6.1E	H304 May be fatal if swallowed and enters airways
6.3A	H315 Causes skin irritation
6.4A	H319 Causes eye irritation
6.9B	H373 May cause damage to organs through prolonged or repeated inhalation or ingestion
9.1A	H410 Very toxic to aquatic life with long lasting effects

Globally Harmonised System (GHS) classifications:

Flammable Liquid – Category 4; Skin Effects – Category 3; Eye Effects – Category 2A; STOT – RE – Category 2; Aspiration Hazard – Category 1; Acute Aquatic Hazard – Category 1.

Pictograms:

Precautionary Statements:
Prevention

P102 Keep out of reach of children.

P103 Read label before use.

P210 Keep away from heat/sparks/open flames/ hot surfaces and other ignition sources. No smoking.

P264 Wash hands thoroughly after handling.

P273 Avoid release to environment.

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection

Response

P101 If medical advice is needed, have product container or label at hand.

P301 + P312 IF SWALLOWED: Call a POISON CENTRE or doctor if you feel unwell. P330 Rinse mouth. P331 Do NOT induce vomiting.

P302 + P352 IF ON SKIN: Wash with plenty of soap and water. P332 + P313 If skin irritation occurs: Get medical advice.

P362 Take off contaminated clothing and wash before re-use.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313 If eye irritation persists: Get medical advice.

P314 Get medical advice if you feel unwell.

P370 + P378 In case of fire: Use alcohol resistant foam, water spray or water fog.

P391 Collect spillage.

Storage

P403 + P235 Store in a well-ventilated area. Keep cool.

P405 Store locked up.

Disposal

P501 Dispose of safety in accordance with local regulations to solvent recovery facility or to landfill.

Section 3 - Composition/Information on Ingredients

Ingredient	CAS No.	Concentration (% w/w)
Solvent naphtha (petroleum) heavy	64742-94-5	50 – 60
Naphthenic acid, zinc salts	12001-85-3	<35
Other ingredients (do not affect hazardous classifications)	Trade secret	< 10

This is a commercial product whose exact ratio of components may vary slightly. Minor quantities of other non-hazardous ingredients are also possible.

Section 4 – First Aid Measures

If medical advice is needed, have product label or this SDS at hand. Call the **National Poisons Centre 0800 POISON (0800 764 766) or a doctor.**

Skin or hair contact:

Immediately remove all contaminated clothing, including footwear. Flush skin and hair with running water (and soap if available). Seek medical attention if irritation occurs.

Eye contact:

Wash out immediately 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. Seek medical attention without delay; if pain persists or recurs seek medical attention. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

Inhalation:

If fumes, aerosols or combustion products are inhaled remove from contaminated area. Keep at rest until recovered. Get medical advice if person feels unwell.

Ingestion:

If swallowed, do NOT induce vomiting. If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration. Observe the patient carefully. Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious. Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink. Seek medical advice.

Avoid giving milk or oils. Avoid giving alcohol. If spontaneous vomiting appears imminent or occurs, hold patient's head down, lower than their hips to help avoid possible aspiration of vomitus.

General advice and advice for physicians:

For acute or short term repeated exposures to petroleum distillates or related hydrocarbons:

Primary threat to life, from pure petroleum distillate ingestion and/or inhalation, is respiratory failure. Patients should be quickly evaluated for signs of respiratory distress (e.g. cyanosis, tachypnoea, intercostal retraction, obtundation) and given oxygen. Patients with inadequate tidal volumes or poor arterial blood gases (pO₂ 50 mm Hg) should be intubated. Arrhythmias complicate some hydrocarbon ingestion and/or inhalation and electrocardiographic evidence of myocardial injury has been reported; intravenous lines and cardiac monitors should be established in obviously symptomatic patients. The lungs excrete inhaled solvents, so that hyperventilation improves clearance. A chest x-ray should be taken immediately after stabilisation of breathing and circulation to document aspiration and detect the presence of pneumothorax. Epinephrine (adrenalin) is not recommended for treatment of bronchospasm because of potential myocardial sensitisation to catecholamines. Inhaled cardioselective bronchodilators (e.g. Alupent, Salbutamol) are the preferred agents, with aminophylline a second choice. Lavage is indicated in patients who require decontamination; ensure use of cuffed endotracheal tube in adult patients.

[Ellenhorn and Barceloux: Medical Toxicology]

Any material aspirated during vomiting may produce lung injury. Therefore, emesis should not be induced mechanically or pharmacologically. Mechanical means should be used if it is considered necessary to evacuate the stomach contents; these include gastric lavage after endotracheal intubation. If spontaneous vomiting has occurred after ingestion, the patient should be monitored for difficult breathing, as adverse effects of aspiration into the lungs may be delayed up to 48 hours. Treat symptomatically.

For copper intoxication: Unless extensive vomiting has occurred empty the stomach by lavage with water, milk, sodium bicarbonate solution or a 0.1% solution of potassium ferrocyanide (the resulting copper ferrocyanide is insoluble). Administer egg white and other demulcents. Maintain

SAFETY DATASHEET

electrolyte and fluid balances. Morphine or meperidine (Demerol) may be necessary for control of pain. If symptoms persist or intensify (especially circulatory collapse or cerebral disturbances, try BAL intramuscularly or penicillamine in accordance with the supplier's recommendations. Treat shock vigorously with blood transfusions and perhaps vasopressor amines. If intravascular haemolysis becomes evident protect the kidneys by maintaining a diuresis with mannitol and perhaps by alkalinising the urine with sodium bicarbonate. It is unlikely that methylene blue would be effective against the occasional methemoglobinemia and it might exacerbate the subsequent haemolytic episode. Institute measures for impending renal and hepatic failure.

[GOSSELIN, SMITH & HODGE: *Commercial Toxicology of Commercial Products*]

A role for activated for charcoals or emesis is, as yet, unproven. In severe poisoning CaNa₂EDTA has been proposed.

[ELLENHORN & BARCELOUX: *Medical Toxicology*]

Section 5 - Fire-Fighting Measures
Extinguishing media:

Alcohol resistant foam; water spray or fog; carbon dioxide. Do NOT use straight streams of water.

Special hazards due to combustion:

Combustible liquid and vapour. This product should be stored and used in a well-ventilated area away from naked flames, heat, sparks and other sources of ignition. Electrically link and ground metal containers for transfer of the product to prevent accumulation of static electricity. Keep the container tightly closed.

Advice for fire-fighters:

When fighting fires involving significant quantities of this product, fire-fighters must wear a gas tight chemical resistant suit, and limit exposure duration to 1BA set 30 minutes. Take account of environmentally hazardous fire-fighting water.

Section 6 - Accidental Release Measures
Personal precautions:

Remove or isolate all ignition sources. Wear personal protective equipment as described in Section 8. For large spillages, SCBA should be used inside encapsulating suit. Clear area of personnel and move upwind, avoid breathing vapour.

Environmental precautions:

Contain the liquid spill. Use appropriate containment to avoid environmental contamination.

Methods for cleaning up:

Recover any liquid if possible. Take up remaining liquid spill into absorbent material e.g. sand/earth/vermiculite. Shovel absorbed substance and any contaminated materials into labelled drums that can be sealed. Clean contaminated equipment with detergent and water. Wash clothing and protective equipment after use.

Disposal:

Take collected liquid/contaminated materials to manufacturer/competent authority for recycling or for disposal to landfill.

Section 7 - Handling and Storage
Handling:

Read label before use. Wear personal protective equipment as described in Section 8. Observe normal hygiene standards. Remove contaminated clothing immediately and wash before re-use. Use only in well ventilated areas. No smoking.

Storage:

Store locked up in original containers in well-ventilated place and out of direct sunlight. Make sure that containers of this product are kept tightly closed.

Section 8 - Exposure Controls/Personal Protection
Exposure limits:

Worksafe New Zealand do not list any component in the Workplace Exposure Standard and Biological Exposure Indices, edition 8, June 2016. The following table lists compounds that are similar too, or relevant to components in the product.

CAS no.	Substance or ingredient	WES-TWA		WES-STEL
8052-41-3	Low aromatic hydrocarbon solvent	525 mg/m ³	100 ppm	
1314-13-2	Zinc oxide fume	0.3 mg/m ³		10 mg/m ³
	Dust	10 mg/m ³		

The TWA exposure value is the average airborne concentration of a particular substance when calculated over a normal 8 hour working day for a 5 day working week. The STEL (Short Term Exposure Limit) is an exposure value that may be equalled (but should not be exceeded) for no longer than 15 minutes and should not be repeated more than 4 times per day. There should be at least 60 minutes between successive exposures at the STEL. The term "peak" is used when the TWA limit, because of the rapid action of the substance, should never be exceeded, even briefly.

Engineering Controls:

Use spark/explosion proof equipment and lighting system. Keep away from naked flames and heat. Keep away from ignition sources and sparks.

This product should only be used where there is ventilation that is adequate to keep exposure below the TWA levels. If necessary, use a fan. Have eyewash unit and handwashing facility nearby.

Exposure controls:

Control	Protective measure
Eye	Wear safety glasses with side shields or goggles when handling this material. [AS 2919]
Respiratory	Type A organic vapour mask.
Skin	Butyl/ natural rubber/ neoprene/ nitrile/ viton gloves. Avoid skin contact. If skin contact or contamination of clothing is likely, protective clothing should be worn. [AS 2161] Wear protective clothing and closed in footwear.

Section 9 - Physical and Chemical Properties
General substance properties:

Property	Description
Appearance	Clear homogenous liquid
Odour	Hydrocarbon
Odour threshold	No data
pH	Not applicable
Vapour pressure	No data
Vapour density	No data
Kinematic Viscosity	No data.
Boiling Point/Range	No data
Volatile materials	No data
Freezing/melting point	No data.
Solubility	No data.
Partition coefficient: n-octanol/water	No data.
Specific gravity/density	0.868 g/ml at 20°C
Flash point	>63 °C
Upper and lower flammability limits	Lower – no data Upper -no data
Auto-ignition temperature	No data.
Decomposition temperature	No data.
Corrosiveness	No data.

Section 10 - Stability and Reactivity
Stability:

Stable under normal conditions of use and storage.

Conditions to avoid:

Reacts violently with strong oxidisers; exposure to heat or ignition sources.

Incompatible materials to avoid:

Avoid oxidising agents,

Hazardous decomposition products:

Combustion will result in the release of carbon monoxide and carbon dioxide and other toxic or corrosive vapours.

Section 11 - Toxicological Information
Summary of Toxicity

This product is classified according to mixture rules.

Toxicity	Data and symptoms of exposure
Oral	May be fatal if swallowed and enters airways
Skin	Irritant. Possible symptoms of redness. Prolonged or repeated contact may result in skin redness.
Inhalation	For some individuals there may be irritation of the respiratory system following inhalation of vapours.
Eye	Eye irritant. Possible symptoms of redness, tearing and swelling.
Sensitisation	Product is not considered to be either a respiratory or a skin sensitizer.
Mutagenicity	Product not considered mutagenic. No constituent identified with mutagenic classification.
Carcinogenicity	Product may contain an impurity that is considered to be a possible carcinogen
Reproductive/developmental	Product is not considered to be a suspected reproductive/developmental toxicant. No constituents identified as suspected reproductive/ developmental toxicants
Systemic/targeted organs	Product is classified as a suspected target organ toxicant by oral or inhalation exposure routes. Kidneys, stomach, immune system may be affected.

Section 12 - Ecological Information
Summary of Ecotoxicity

This product is classified according to mixture rules.

Ecotoxicological data:

Zinc oxide Algae EC₅₀ (72 h) 0.03 mg/L
 Daphnia magna LC₅₀ (48h) 0.03 mg/L
 Collinus virginianus LD₅₀ 566 mg/kg/b.w.

Ecotoxicity	Data
Aquatic ecotoxicity	Product is considered to be an aquatic toxicant with long-lasting effects.
Soil ecotoxicity	Product is not classified as a soil toxicant due to lack of data.
Terrestrial vertebrate	Classification threshold not reached to classify for terrestrial vertebrates.
Terrestrial invertebrate	No data to indicate product has adverse effects on terrestrial invertebrates.
Bioaccumulation	No data.
Mobility	No data. Product has a high concentration of components that have limited solubility in water. Hydrocarbon solvent will evaporate to air.
Degradability	No data. Zinc will not degrade.

Section 13 - Disposal Considerations**Disposal methods:**

This product may be disposed of in a landfill provided this product will be kept separated from contact with explosives, oxidisers and ignition sources at all times. This product may be disposed of by solvent recovery, or burning in an incineration facility. This product may be disposed of by purging. Consult local and regional authorities.

Disposal restrictions:

The product must not be disposed of in a landfill or purged within range of legally located persons and places, where upon ignition, would expose them to more blast pressure and heat radiation that described in regulation 6(3)(b) of the Hazardous Substances (Disposal) Regulations 2001. Burning must be managed to the performance requirements of regulation 6(3)(b) of the Hazardous Substances (Disposal) Regulations 2001. Disposal of this product by landfill, burning or purging must not exceed any relevant exposure limits and/or environmental exposure limits set for the substance or any of its components. Further details can be provided by local and regional authorities.

Special precautions for disposal:

No data.

Section 14 - Transport Information

HAZCHEM **3Z**

Land Transport UNDG

Class or division 9
Subsidiary Risk
UN Number **3082**
UN Packing Group III
Shipping Name **ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, NOS** (contains zinc, hydrocarbons)
Special Provisions 274, 331, 335
Limited Quantities 5 Lt

Air Transport IATA

ICAO/IATA Class 9
ICAO/IATA Subrisk
UN/ID Number **3082**
Packing Group III
Special provision
Cargo only
 Packing instructions
 Maximum Qty/pack
Passenger and Cargo
 Packing instructions
 Maximum Qty/pack
Passenger & Cargo Limited Quantity
 Packing instructions
 Maximum Qty/pack

Shipping Name **ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, NOS** (contains zinc, hydrocarbons)

Marine Transport IMDG

IMDG Class 9
IMDG Subrisk
UN Number **3082**
UN Packing Group III
EmS Number
Special provisions
Limited quantities
Marine pollutant Yes
Shipping Name **ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, NOS** (contains zinc, hydrocarbons)

Section 15 - Regulatory Information**HSNO approval number and Group Standard:**

HSR002657

Surface Coatings and Colourants (Combustible)

Group Standard conditions and other regulations:

Condition	Requirement
SDS	Safety data sheet must be available to a person handling the substance within 10 minutes.
Emergency plan	Required when present in quantities >1000 L.
Approved handler	Not required
Tracking	Not applicable
Bunding and secondary containment	Bunding is dependent upon pack size and total volume
Signage	Required when present in quantity >1000 L.
Test certificate	Not required.
Hazardous Atmosphere zone	Not required.
Fire extinguisher	A minimum of 2 required in vehicle when transporting quantities in excess of 500 L.
Passenger Service Vehicle	Required to be in sealed container and not to exceed 2.5L.
Packaging	UNIII when >450 L, otherwise Schedule 4 applies. Permanent identification on packaging to identify as toxic, unless only used in place of work.
Child Resistant Packaging	Applied when packaging ,2.5L unless only used in place of work where children have no access.

Hydrocarbon solvent (CAS 64742-94-5) is found on the following regulatory list

- New Zealand Inventory of Chemicals (NZIoC)

Naphthenic acid, zinc salts (CAS 12001-85-3) is found on the following regulatory list

- New Zealand Inventory of Chemicals (NZIoC)

Section 16 – Other Information

Issue date: 24 August 2017.

Reason for issue: Change in composition (hydrocarbon solvent) and properties.

Replaces: SDS issued November 2014

Abbreviations:

Abbreviation	Description
CAS number	Number assigned to chemical in the Chemical Abstracts Service registry
HAZCHEM code	Code used by fire-fighters to determine correct method of action in the case of fire
HSNO	Hazardous Substances and New Organisms (Act)
ICAO Technical Instructions	International Civil Aviation Organization Technical Instructions
IMDG code	International Maritime Dangerous Goods code controlled by the International Maritime Organization (IMO)
L or Lt	Litre
LC ₅₀	Lethal concentration 50% - concentration fatal to 50% of the tested population
LD ₅₀	Lethal dose 50% - dose fatal to 50% of the tested population

NZS 5433	New Zealand Standard 5433 (Transport of Dangerous Goods on Land): 2012.
SDS	Safety data sheet
STEL	Short term exposure limit
TWA	Time weighted average (typically measured as 8 hours)
UN number	United Nations number
WES	Workplace exposure standard

References

Chemical properties and HSNO classifications derived from the New Zealand chemical classification information database (CCID). www.epa.govt.nz.

Workplace exposure limits derived from Workplace Exposure Standards and Biological Exposure Indices 7th Edition. www.mbie.govt.nz.

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material in combination with any other material or in any process, unless specified in the text.

This SDS was prepared by J Drysdale in accordance with the EPA Notice: Hazardous Substances (Safety Data Sheets) Notice 2017.
Phone +64 9 299 9435

End of SDS