

Section 1 Identification of Chemical Product and Company

Code	Description	Size	Colour
44213	Metalex Ready To Use	1 Lt	Clear
44214	Metalex Ready To Use	4 Lt	Clear

Recommended use:		Timber Preservative	
HSNO Group Standard		HSR002680	
UN number, shipping name and packaging group:		Not regulated	
Supplier contact details:	SoudalLtd	Freephone: 0800 70 10 80	
	134 Kohia Drive	Phone: (07) 847 5540	
	Horotiu		
	Hamilton 3288	Email: info@soudal.co.nz	
New Zealand		Website: www.soudal.co.nz	
POISON CENTRE NUMBER: 0800 764 766 (24 hours)			

Section 2 Hazards Identification

Statement of Hazardous Nature

This product is classified as:

HAZARDOUS SUBSTANCE according to the criteria of HSNO.

NOT REGULATED under NZS5433:2020 Transport of Dangerous Goods on Land

Hazardous Substances and New Organisms (HSNO) classification:

Classification		GHS Hazard statements		
Flammable Liquid Category 4		H227	Combustible liquid	
Skin Sensitisation	Category 1	H317	May cause an allergic skin reaction	
Carcinogenicity	Category 2	H351	Suspected of causing cancer	
STOT – SE RTI	Category 3	H335	May cause respiratory irritation	
Aspiration	Category 1	H304	May be fatal if swallowed and enters airways	
Chronic Aquatic Hazard	Category 2	H411	Toxic to aquatic life with long lasting effects	

HSNO Signal Word:

DANGER



Precautionary Statements:

Keep out of reach of children

Ensure all safety directions are read and understood before use

P210 Keep away from heat, hot surface, sparks, open flames and

other ignition sources. No smoking

P260 Do not breathe mist/vapours/sprays P271 Use only outdoors or in well ventilated area

P280 Wear protective gloves/ protective clothing/ eye protection/

face protection

P264 Wash all exposed external body areas thoroughly after handling

P270 Do not eat, drink or smoke when using this product

P273 Avoid release to the environment

P405 Store locked up

P403+233 Store in a well-ventilated place. Keep container tightly closed



P501

Dispose of contents/ container to authorised hazardous or special waste collection point in accordance with any local regulation

Section 3. Composition/Information on Ingredients

Ingredient	CAS No.	Individual HSNO classification	Concentration (% by Wt.)
Distillates (petroleum) hydrotreated light	64742-47-8	Flammable Liquid Category 4; STOT – SE RTI Category 3; Aspiration Category 1; Chronic Aquatic Hazard Category 2	60 - 70
Zinc naphthenate, basic	84418-50-8	Skin Sensitisation Category 1; Chronic Aquatic Hazard Category 3	10 - 20
Naphtha (petroleum) hydrotreated heavy	64742-48-9	Flammable Liquid Category 3; Chronic Aquatic Hazard Category 2	10 - 15
Ingredients not contributing to the classific	balance		

Section 4 First Aid Measures74

NZ Poisons Centre 0800 POISON (0800 764 766) | NZ Emergency Services: 111

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.

Skin contact:

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

Inhalation:

remove from contaminated area. 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. Apply artificial respiration if not breathing, 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

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. 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:

Treat symptomatically.

Section 5 Fire-Fighting Measures

Extinguishing media:

Foam; Water spray, dry chemical or CO₂

Fire Incompatibility:

Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result

Special hazards due to combustion:

WARNING: In use may form flammable/ explosive vapour-air mixtures. Combustible. Slight fire hazard when exposed to heat or flame. Heating may cause expansion or decomposition leading to violent rupture of containers. On combustion, may emit toxic fumes of carbon monoxide (CO). May emit acrid smoke. Mists containing combustible materials may be explosive.

Advice for fire-fighters:

Alert Fire Brigade and tell them location and nature of hazard. Wear full body protective clothing with breathing apparatus. Prevent, by any means available, spillage from entering drains or water course. Use water delivered as a fine spray to control fire and cool adjacent area. Avoid spraying water onto liquid pools. 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.



Section 6 Accidental Release Measures

Minor Spills

Remove all ignition sources. Clean up all spills immediately. Avoid breathing vapours and contact with skin and eyes. Control personal contact with the substance, by using protective equipment. Contain and absorb spill with sand, earth, inert material or vermiculite. Wipe up. Place in a suitable, labelled container for waste disposal.

Major Spills

Moderate hazard. Clear area of personnel and move upwind. 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 course. No smoking, naked lights or ignition sources. Increase ventilation. Stop leak if safe to do so. Contain spill with sand, earth or vermiculite. Collect recoverable product into labelled containers for recycling. Absorb remaining product with sand, earth or vermiculite. Collect solid residues and seal in labelled drums for disposal. Wash area and prevent runoff into drains. If contamination of drains or waterways occurs, advise emergency services.

Section 7 Handling and Storage

Handling:

Containers, even those that have been emptied, may contain explosive vapours. Do NOT cut, drill, grind, weld or perform similar operations on or near containers. Avoid all personal contact, including inhalation. Wear protective clothing when risk of exposure occurs. Use in a well-ventilated area. Prevent concentration in hollows and sumps. DO NOT enter confined spaces until atmosphere has been checked. Avoid smoking, naked lights or ignition sources. Avoid contact with incompatible materials. When handling, DO NOT eat, drink or smoke. Keep containers securely sealed when not in use. Avoid physical damage to containers. Always wash hands with soap and water after handling. Work clothes should be laundered separately. Use good occupational work practice. Observe manufacturer's storage and handling recommendations contained within this SDS. Atmosphere should be regularly checked against established exposure standards to ensure safe working conditions. DO NOT allow clothing wet with material to stay in contact with skin

Storage:

Store in original containers. Keep containers securely sealed. No smoking, naked lights or ignition sources. Store in a cool, dry, well-ventilated area. Store away from incompatible materials and foodstuff containers. Protect containers against physical damage and check regularly for leaks. Observe manufacturer's storage and handling recommendations contained within this SDS

Suitable Container:

Metal can or drum Packaging as recommended by manufacturer. Check all containers are clearly labelled and free from leaks

Section 8 Exposure Controls/Personal Protection

Exposure Limits

CAS no.	Substance or ingredient	WES-TWA	WES-STEL
64742-47-8	Distillates (petroleum), hydrotreated light	5 mg/m³	10 mg/m³
84418-50-8	Zinc naphthenate, basic	3 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:

Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection. The basic types of engineering controls are: Process controls which involve changing the way a job activity or process is done to reduce the risk. Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment. Ventilation can remove or dilute an air contaminant if designed properly. The design of a ventilation system must match the particular process and chemical or contaminant in use. Employers may need to use multiple types of controls to prevent employee overexposure. For flammable liquids and flammable gases, local exhaust ventilation or a process enclosure ventilation system may be required. Ventilation equipment should be explosion-resistant. Air contaminants generated in the workplace possess varying "escape" velocities which, in turn, determine the "capture velocities" of fresh circulating air required to effectively remove the contaminant.

Exposure controls:

Control	Protective measure
Eye	Safety glasses with side shields. Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available. In the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as practicable. Lens should be removed at the first signs of eye redness or irritation - lens should be removed in a clean environment only after workers have washed hands thoroughly. [AS/NZS 1336 or national equivalent] Close fitting gas tight goggles



Respiratory	Not normally required. Where inadequate ventilation exists then a Type A filter is recommended	
Skin	Nitrile+PVC gloves. Avoid skin contact. If skin contact or contamination of clothing is likely, protective clothing should be worn. [AS 2161] Wear protective clothing.	TOT

Section 9 Physical and Chemical Properties

General substance properties:

General substance properties:	
Property	Details
Appearance	Clear liquid
Odour	Hydrocarbon
рН	No data
Vapour pressure	No data kPa
Viscosity	No data
Vapour Density	No data
Boiling Point	187 - 218 ℃
Volatile materials	No data %
Freezing/melting point	No data ℃
Solubility	Immiscible
Specific gravity/density	0.82 – 0.84 g/ml
Flash point	64℃
Danger of explosion	Not applicable
Autoignition temperature	>200 ℃
Upper and lower flammability limits	LEL 0.6 % UEL 7.0 %
Evaporation Rate	> 1 Butyl acetate = 1
Corrosiveness	No data

Section 10 Stability and Reactivity

Stability:

Stable under normal conditions.

Conditions to avoid:

Exposure to excessive heat, open flames and sparks. Avoid conditions that favour the formation of excessive mists and/or fumes. Contact with water may release flammable gases.

Incompatible materials to avoid:

 $\label{lem:avoid_strong} A void oxidising agents, strong acids and strong bases.$

Hazardous decomposition products:

Combustion will result in the release of carbon monoxide (CO), carbon dioxide (CO₂); and pyrolysis products typical of burning organic material. May emit corrosive fumes.



Section 11 Toxicological Information

Test	Data and symptoms of exposure
Inhaled	The material can cause respiratory irritation in some persons. The body's response to such irritation can cause further lung damage. Inhalation of vapours may cause drowsiness and dizziness. This may be accompanied by sleepiness, reduced alertness, loss of reflexes, lack of co-ordination, and vertigo. Inhalation hazard is increased at higher temperatures. Inhaling high concentrations of mixed hydrocarbons can cause narcosis, with nausea, vomiting and light-headedness. Central nervous system (CNS) depression may include general discomfort, symptoms of giddiness, headache, dizziness, nausea, anaesthetic effects, slowed reaction time, slurred speech and may progress to unconsciousness. Serious poisonings may result in respiratory depression and may be fatal. Inhalation of high concentrations of gas/vapour causes lung irritation with coughing and nausea, central nervous depression with headache and dizziness, slowing of reflexes, fatigue and inco-ordination.
Oral	Swallowing of the liquid may cause aspiration into the lungs with the risk of chemical pneumonitis; serious consequences may result. Accidental ingestion of the material may be damaging to the health of the individual. Ingestion of petroleum hydrocarbons can irritate the pharynx, oesophagus, stomach and small intestine, and cause swellings and ulcers of the mucous. Symptoms include a burning mouth and throat; larger amounts can cause nausea and vomiting, narcosis, weakness, dizziness, slow and shallow breathing, abdominal swelling, unconsciousness and convulsions. The vomitus is usually green/blue and discolours contaminated skin. Naphthenic acids have mild cumulative effect. Symptoms include central nervous system depression, convulsions and respiratory arrest. Inflammation of the liver tissues around the bile duct has been demonstrated. There may be a short term appetite suppression, the mechanism of which is yet to be determined. There may also be cerebral haemorrhage, increased vascular permeability, or damage to the arterioles in the heart. Side effects are most marked in the highest dose of oral exposure
Dermal	This material can cause inflammation of the skin on contact in some persons. The material may accentuate any pre- existing dermatitis condition Skin contact with the material may damage the health of the individual; systemic effects may result following absorption. Open cuts, abraded or irritated skin should not be exposed to this material Entry into the blood-stream through, for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected. The liquid may be able to be mixed with fats or oils and may degrease the skin, producing a skin reaction described as non-allergic contact dermatitis. The material is unlikely to produce an irritant dermatitis as described in EC Directives
Eye	This material can cause eye irritation and damage in some persons. Direct eye contact with petroleum hydrocarbons can be painful, and the corneal epithelium may be temporarily damaged. Aromatic species can cause irritation and excessive tear secretion.
Chronic	Repeated or long-term occupational exposure is likely to produce cumulative health effects involving organs or biochemical systems. Long-term exposure to respiratory irritants may result in airways disease, involving difficulty breathing and related whole-body problems. Constant or exposure over long periods to mixed hydrocarbons may produce stupor with dizziness, weakness and visual disturbance, weight loss and anaemia, and reduced liver and kidney function. Skin exposure may result in drying and cracking and redness of the skin. Acute toxicity: There are no reliable acute oral toxicity results available. There has been some concern that this material can cause cancer or mutations but there is not enough data to make an assessment. Prolonged or repeated skin contact may cause drying with cracking, irritation and possible dermatitis following. Chronic solvent inhalation exposures may result in nervous system impairment and liver and blood changes. [PATTYS]

	Oral LD ₅₀ mg/m ³	Dermal LD ₅₀ mg/m ³	Inhalation LC₅omg/L
Distillates (petroleum) hydrotreated light	>5000	>2000	>4.3/ 4h
Zinc naphthenate, basic	>5000	>2000	>420 / 4h
Naphtha (petroleum) hydrotreated heavy	>8000	>4000	3400 ppm/ 4h

Section 12 Ecological Information

Summary of Ecotoxicity

Toxic to aquatic life with long lasting effects. Do NOT allow product to come in contact with surface waters or to intertidal areas below the mean high-water mark. Do not contaminate water when cleaning equipment or disposing of equipment wash-waters. Wastes resulting from use of the product must be disposed of on site or at approved waste sites. DO NOT discharge into sewer or waterways.

	Fish mg/L	Crustacea mg/L	Algae mg/L
Zinc naphthenate, basic	LC _{50 96hr} 5	EC _{50 48hr} 1	EC _{50 72hr} 3.62
Naphtha (petroleum) hydrotreated heavy			EC _{50 96hr} 64



	Persistence H₂O/ Soil	Persistence Air	Bioaccumulation	Mobility
Distillates (petroleum), hydrotreated light			LOW	

Section 13 Disposal Considerations

Disposal methods:

Containers may still present a chemical hazard/ danger when empty. Return to supplier for reuse/ recycling if possible. Otherwise: If container cannot be cleaned sufficiently well to ensure that residuals do not remain or if the container cannot be used to store the same product, then puncture containers, to prevent re-use, and bury at an authorised landfill. Where possible retain label warnings and SDS and observe all notices pertaining to the product. DO NOT allow wash water from cleaning or process equipment to enter drains. It may be necessary to collect all wash water for treatment before disposal. In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first. Where in doubt contact the responsible authority. Recycle wherever possible or consult manufacturer for recycling options. Consult Land Waste Authority for disposal. Bury or incinerate residue at an approved site. Packages that have been in direct contact with the hazardous substance must be only disposed if the hazardous substance was appropriately removed and cleaned out from the package. The package must be disposed according to the manufacturer's directions taking into account the material it is made of. Packages which hazardous content have been appropriately treated and removed may be recycled. The hazardous substance must only be disposed if it has been treated by a method that changed the characteristics or composition of the substance and it is no longer hazardous. Only dispose to the environment if a tolerable exposure limit has been set for the substance. Only deposit the hazardous substance into or onto a landfill or sewage facility or incinerator, where the hazardous substance can be handled and treated appropriately.

Packages that have been in direct contact with the hazardous substance must be only disposed if the hazardous substance was appropriately removed and cleaned out from the package. The package must be disposed according to the manufacturer's directions taking into account the material it is made of. Packages which hazardous content have been appropriately treated and removed may be recycled.

The hazardous substance must only be disposed if it has been treated by a method that changed the characteristics or composition of the substance and it is no longer hazardous. DO NOT deposit the hazardous substance into or onto a landfill or a sewage facility. Burning the hazardous substance must happen under controlled conditions with no person or place exposed to (1) a blast overpressure of more than 9 kPa; or (2) an unsafe level of heat radiation. The disposed hazardous substance must not come into contact with class 1 or 5 substances.

Section 14 Transport Information

NOT REGULATED

HAZCHEM Not applicable

Section 15 Regulatory Information

${\bf HSNO\ approval\ number\ and\ Group\ Standard:}$

HSR002680 Surface Coatings & Colourants Combustible, Carcinogeni

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 Lt equivalent.
Certified Handler	Not required
Tracking	Not required
Bunding and secondary containment	Required dependent upon total quantity and pack size
Signage	Required when present in quantities 1000 Lt equivalent
Location Compliance certificate	Not required
Hazardous Atmosphere Zone	Required to meet the requirements of AS/NZS60079.10
Fire extinguisher	Not required



National Inventories

Y = All ingredients are on the inventory			
Australia	AICS	Ν	
Canada	DSL	Ν	
Canada	NDSL	Ν	
China	IECSC	Υ	
Europe	EINEC/ELINCS/NLP	Υ	
Japan	ENCS	Ν	
Korea	KECI	Υ	
New Zealand	NZIOC	Υ	
Philippines	PICCS	Ν	
USA	TSCA	Ν	
Mexico	INSQ	Υ	
Vietnam	NCI	Ν	
Russia	ARIPS	Υ	

Section 16 Other Information

Revision History:

August 2021 Review and update to GHS v7 format

November 2017 Initial preparation

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)
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 (Standard for the Transport of Dangerous Goods on Land)
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 12-1 Edition.

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 Collievale Enterprises Ltd in accord with the Hazardous Substances (Safety Data Sheets) Notice 2017 http://www.collievale.com Phone +64 7 5432428

End of SDS