

Section 1 Identification of Chemical Product and Company

Code	Description	Size	Colour
44000	Metalex Timber Preservative Aerosol	400 ml	Clear

Recommended use:	Timber preservative		
HSNO Group Standard	HSR002515		
UN number, shipping name and packaging group:	UN1950 Aerosols		
Supplier contact details:	Soudal Ltd	Freephone: 0800 70 10 80	
	14 Avalon Drive	Phone: (07) 847 5540	
	Nawton		
	Hamilton 3200	Email: sales@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.

REGULATED under NZS5433:2020 Transport of Dangerous Goods on Land

Hazardous Substances and New Organisms (HSNO) classification:

Classification	GHS Hazard statements
Flammable Aerosol Category 1	H222 Extremely flammable aerosol H229 Pressurised container: May burst if heated H280 Contains gas under pressure. May explode if heated
Skin Sensitisation Category 1	H317 May cause an allergic skin reaction
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
- P211 Do not spray on an open flame or ignition source
- P251 Do not pierce or burn even after use
- P261 Avoid breathing mist/ vapours/ sprays
- P271 Use only 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 Store in a well-ventilated place

P410+412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C

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

SAFETY DATASHEET

Ingredient	CAS No.	Individual HSNO classification	Concentration (% by Wt.)
Naphtha (petroleum) hydrodesulfurised heavy	8052-41-3	Flammable Liquid Category 3; Chronic Aquatic Hazard Category 2	30 – 60
Zinc naphthenate	12001-85-3	Skin Sensitisation Category 1; Chronic Aquatic Hazard Category 3	10 – 30
Butane	106-97-8	Flammable Gas Category 1	10 – 30
Propane	74-98-6	Flammable Gas Category 1	1 – 10
Ingredients not contributing to the classification			balance

Section 4 First Aid Measures⁷⁴

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

Eye contact:

Immediately hold the eyelids apart and flush the eye continuously for at least 15 minutes 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. Transport to hospital or doctor without delay. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

Skin contact:

Flush skin and hair with running water (and soap if available). Remove any adhering solids with industrial skin cleansing cream. DO NOT use solvents. Seek medical attention in the event of irritation.

Inhalation:

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 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.

Ingestion:

Avoid giving milk or oils. Avoid giving alcohol. Not considered a normal route of entry. 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:

Liquid and vapour are highly flammable. Severe fire hazard when exposed to heat or flame. Vapour forms an explosive mixture with air. Severe explosion hazard, in the form of vapour, when exposed to flame or spark. Vapour may travel a considerable distance to source of ignition. Heating may cause expansion or decomposition with violent container rupture. Aerosol cans may explode on exposure to naked flames. Rupturing containers may rocket and scatter burning materials. Hazards may not be restricted to pressure effects. May emit acrid, poisonous or corrosive fumes. On combustion, may emit toxic fumes of carbon monoxide (CO).

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

Clean up all spills immediately. Avoid breathing vapours and contact with skin and eyes. Wear protective clothing, impervious gloves and safety glasses. Shut off all possible sources of ignition and increase ventilation. Wipe up. If safe, damaged cans should be placed in a container outdoors, away from all ignition sources, until pressure has dissipated. Undamaged cans should be gathered and stowed safely.

Major Spills

Clear area of all unprotected personnel and move upwind. Alert Emergency Authority and advise them of the location and nature of hazard. May be violently or explosively reactive. Wear full body clothing with breathing apparatus. Prevent by any means available, spillage from entering drains and watercourses. Consider evacuation. Shut off all possible sources of ignition and increase ventilation. No smoking or naked lights within area. Use extreme caution to prevent violent reaction. Stop leak only if safe to do. Water spray or fog may be used to disperse vapour. DO NOT enter confined space where gas may have collected. Keep area clear until gas has dispersed

Section 7 Handling and Storage

Handling:

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. DO NOT incinerate or puncture aerosol cans. DO NOT spray directly on humans, exposed food or food utensils. 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 are maintained.

Storage:

Keep dry to avoid corrosion of cans. Corrosion may result in container perforation and internal pressure may eject contents of can. Store in original containers in approved flammable aerosol storage area. DO NOT store in pits, depressions, basements or areas where vapours may be trapped. No smoking, naked lights, heat or ignition sources. Keep containers securely sealed. Contents under pressure. Store away from incompatible materials. Store in a cool, dry, well-ventilated area. Avoid storage at temperatures higher than 40 deg C. Store in an upright position. Protect containers against physical damage. Check regularly for spills and leaks. Observe manufacturer's storage and handling recommendations contained within this SDS.

Suitable Container:

Aerosol dispenser. Check that containers are clearly labelled.

Section 8 Exposure Controls/Personal Protection

Exposure Limits



CAS no.	Substance or ingredient	WES-TWA		WES-STEL
8052-41-3	Naphtha (petroleum), hydrodesulfurised heavy	525 mg/m ³	100 ppm	
106-97-8	Butane	1900 mg/m ³	80 ppm	


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 AX 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.	
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Section 9 Physical and Chemical Properties

General substance properties:

Property	Details
Appearance	Aerosol
Odour	Characteristic
pH	No data
Vapour pressure	No data kPa
Viscosity	No data
Vapour Density	1.8
Boiling Point	No data °C
Volatile materials	No data %
Freezing/melting point	No data °C
Solubility	Immiscible
Specific gravity/density	0.8 g/ml
Flash point	-81 °C
Danger of explosion	Not applicable
Autoignition temperature	431 °C
Upper and lower flammability limits	LEL 1.5 % UEL 10.0 %
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:

Avoid 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 is not thought to produce either adverse health effects or irritation of the respiratory tract following inhalation (as classified by EC Directives using animal models). Nevertheless, adverse systemic effects have been produced following exposure of animals by at least one other route and good hygiene practice requires that exposure be kept to a minimum and that suitable control measures be used in an occupational setting. 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 incoordination. WARNING: Intentional misuse by concentrating/inhaling contents may be lethal.
Oral	Accidental ingestion of the material may be damaging to the health of the individual. Not normally a hazard due to physical form of product. Considered an unlikely route of entry in commercial/industrial environments Considered an unlikely route of entry in commercial/industrial environments. The liquid may produce gastrointestinal discomfort and may be harmful if swallowed.
Dermal	Repeated exposure may cause skin cracking, flaking or drying following normal handling and use. Skin contact with the material may damage the health of the individual; systemic effects may result following absorption. There is some evidence to suggest that this material can cause inflammation of the skin on contact in some persons. Spray mist may produce discomfort 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. The material may accentuate any pre-existing dermatitis condition 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.
Eye	There is some evidence to suggest that this material can cause eye irritation and damage in some persons. Not considered to be a risk because of the extreme volatility of the gas. 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	Long-term exposure to the product is not thought to produce chronic effects adverse to the health (as classified by EC Directives using animal models); nevertheless, exposure by all routes should be minimised as a matter of course. Prolonged or repeated skin contact may cause drying with cracking, irritation and possible dermatitis following. Oil may contact the skin or be inhaled. Extended exposure can lead to eczema, inflammation of hair follicles, pigmentation of the face and warts on the soles of the feet. 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. Main route of exposure to the gas in the workplace is by inhalation. There has been concern that this material can cause cancer or mutations, but there is not enough data to make an assessment.

	Oral LD ₅₀ mg/m ³	Dermal LD ₅₀ mg/m ³	Inhalation LC ₅₀ mg/L
Naphtha (petroleum), hydrodesulfurised heavy	>4500	>1900	>1.58/ 4h
zinc naphthenate	>2000	>2000	>11.6 / 4h
Butane			658 / 4h
Propane			13023 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
Naphtha (petroleum) Hydrodesulfuried heavy	LC _{50 96hr} 0.5	EC _{50 48hr} >100	EC _{50 72hr} 13
Zinc naphthenate	LC _{50 96hr} >65.7		
Butane	LC _{50 96hr} 24.11		EC _{50 72hr} 7.7
Propane	LC _{50 96hr} 24.11		EC _{50 72hr} 7.7

	Persistence H ₂ O/ Soil	Persistence Air	Bioaccumulation	Mobility

Butane	LOW	LOW	LOW	LOW
Propane	LOW	LOW	LOW	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



HAZCHEM Not applicable

Land Transport UNDG

Class or division **2.1**
 Subsidiary Risk
 UN Number **1950**
 UN Packing Group Not applicable
 Environmental hazard Not applicable
 Shipping Name **Aerosols**
 Special Provisions **63 190 277 327 344 381**
 Limited Quantities **1000 mL**

Air Transport IATA

ICAO/IATA Class **2.1**
 ICAO/IATA Subrisk
 UN/ID Number **1950**
 ERG Code **10L**
 Packing Group Not applicable
 Environmental hazard Not applicable
 Special provision **A145 A167 A802 A1**
 Cargo only
 Packing instructions **203**
 Maximum Qty/pack **150 Kg**
 Passenger and Cargo
 Packing instructions **203**
 Maximum Qty/pack **75 Kg: Forbidden**
 Passenger & Cargo Limited Quantity
 Packing instructions **Y203**
 Maximum Qty/pack **30 Kg G : Forbidden**
 Shipping Name **Aerosols, flammable**

Marine Transport IMDG

IMDG Class **2.1**
 IMDG Subrisk

UN Number **1950**
 UN Packing Group Not applicable
 Environmental hazard Not applicable
 EmS Number **F-D S-U**
 Special provisions **63 190 277 327 344 381 959**
 Limited quantities **1000 mL**
 Shipping Name **Aerosols**

Section 15 Regulatory Information

HSNO approval number and Group Standard:
 HSR002515 Aerosols, Flammable

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 3000 Lt equivalent.
Certified Handler	Not required
Tracking	Not required
Bunding and secondary containment	Not applicable
Signage	Required when present in quantities >3000 Lt equivalent
Location Compliance certificate	Flammable Aerosol Category 1 required when quantities exceed 3000Lt equivalent
Hazardous Atmosphere Zone	Required to meet the requirements of AS/NZS60079.10
Fire extinguisher	2x required

National Inventories

Y = All ingredients are on the inventory

Australia	AICS	Y
Canada	DSL	Y
Canada	NDSL	N
China	IECSC	Y
Europe	EINEC/ELINCS/NLP	Y
Japan	ENCS	Y
Korea	KECI	Y
New Zealand	NZIOC	Y
Philippines	PICCS	Y
USA	TSCA	Y
Taiwan	TCSI	Y
Mexico	INSQ	N
Vietnam	NCI	Y
Russia	ARIPS	Y

Section 16 Other Information

Revision History:

August 2021 Review and update to GHS v7 format
 August 2016 Inclusion of Product number
 March 2016 Initial Preparation

Abbreviations:

Abbreviation	Description
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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
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End of SDS