Altex Coatings Ltd

Version No: 5.14

Safety Data Sheet according to the Health and Safety at Work (Hazardous Substances) Regulations 2017

Chemwatch Hazard Alert Code: 4

Issue Date: **08/05/2025** Print Date: **08/05/2025** S.GHS.NZL.EN

SECTION 1 Identification of the substance / mixture and of the company / undertaking

roduct Identifier		
Product name	Altex AYB No.5 Antifouling	
Synonyms	Not Available	
Proper shipping name	PAINT RELATED MATERIAL (including paint thinning or reducing compound); PAINT RELATED MATERIAL (including paint thinning or reducing compound)	
Other means of identification	Not Available	
Relevant identified uses	substance or mixture and uses advised against Antifouling Coating NOT FOR USE IN NEW ZEALAND	
	importer of the safety data sheet	
Registered company name	Altex Coatings Ltd	
Address	91-111 Oropi Road,Tauranga 3112 Tauranga New Zealand	
Telephone	+64 7 541 1221	
Fax	Not Available	
Website	www.altexcoatings.com	
Email	neil.debenham@altexcoatings.co.nz	

Emergency telephone number

Association / Organisation	NZ POISONS (24hr 7days)	CHEMWATCH EMERGENCY RESPONSE (24/7)
Emergency telephone number(s)	0800 764766	+64 800 700 112 (ID#: 9-369391)
Other emergency telephone number(s)	0800 700112	+61 3 9573 3188

SECTION 2 Hazards identification

Classification of the substance or mixture

Considered a Hazardous Substance according to the criteria of the New Zealand Hazardous Substances New Organisms legislation. Classified as Dangerous Goods for transport purposes.

Classification ^[1]	Flammable Liquids Category 3, Acute Toxicity (Oral) Category 4, Skin Corrosion/Irritation Category 2, Sensitisation (Skin) Category 1, Serious Eye Damage/Eye Irritation Category 1, Acute Toxicity (Inhalation) Category 4, Specific Target Organ Toxicity - Single Exposure (Respiratory Tract Irritation) Category 3, Specific Target Organ Toxicity - Single Exposure (Narcotic Effects) Category 3, Reproductive Toxicity Category 2, Specific Target Organ Toxicity - Repeated Exposure Category 2, Hazardous to the Aquatic Environment Acute Hazard Category 1, Hazardous to the Aquatic Environment Long-Term Hazard Category 1
Legend:	1. Classified by Chemwatch; 2. Classification drawn from CCID EPA NZ; 3. Classification drawn from Regulation (EU) No 1272/2008 - Annex VI

Label elements

Hazard pictogram(s)	
Signal word	Danger

Hazard statement(s)

H226 Flammable liquid and vapour.	
H302 Harmful if swallowed.	
H315 Causes skin irritation.	
H317 May cause an allergic skin reaction.	
H318 Causes serious eye damage.	
H332 Harmful if inhaled.	
H335 May cause respiratory irritation.	
H336 May cause drowsiness or dizziness.	
H361 Suspected of damaging fertility or the unborn child.	
H373 May cause damage to organs through prolonged or repeated exposure.	
H410 Very toxic to aquatic life with long lasting effects.	
Precautionary statement(s) Prevention	
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.	
P260 Do not breathe mist/vapours/spray.	
P271 Use only a well-ventilated area.	
P280 Wear protective gloves, protective clothing, eye protection and face protection.	
P240 Ground and bond container and receiving equipment.	
P241 Use explosion-proof electrical/ventilating/lighting/intrinsically safe equipment.	
P242 Use non-sparking tools.	
P243 Take action to prevent static discharges.	
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.	
P272 Contaminated work clothing should not be allowed out of the workplace.	

Precautionary statement(s) Response

P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313	IF exposed or concerned: Get medical advice/ attention.
P310	Immediately call a POISON CENTER/doctor/physician/first aider.
P370+P378	In case of fire: Use alcohol resistant foam or normal protein foam to extinguish.
P302+P352	IF ON SKIN: Wash with plenty of water and soap.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash it before reuse.
P391	Collect spillage.
P301+P312	IF SWALLOWED: Call a POISON CENTER/doctor/physician/first aider if you feel unwell.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P330	Rinse mouth.

Precautionary statement(s) Storage

• • • • • •	
P403+P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.
Precautionary statement(s) Disposal	

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

Substances

See section below for composition of Mixtures

Mixtures

CAS No	%[weight]	Name
1317-39-1	30-40	<u>copper(l) oxide</u>
8050-09-7	10-20	rosin-colophony
71-36-3	10-20	n-butanol
64742-95-6.	1-10	naphtha petroleum, light aromatic solvent
137-26-8	<2.5	thiram
Legend:	1. Classified by Chemwatch; 2. C VI; 4. Classification drawn from C	assification drawn from CCID EPA NZ; 3. Classification drawn from Regulation (EU) No 1272/2008 - Annex &L * EU IOELVs available

SECTION 4 First aid measures

Eye Contact	 If this product comes in contact with the eyes: Immediately hold eyelids apart and flush the eye continuously with 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. Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes. Transport to hospital or doctor without delay. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
Skin Contact	 If skin or hair contact occurs: Quickly but gently, wipe material off skin with a dry, clean cloth. Immediately remove all contaminated clothing, including footwear. Wash skin and hair with running water. Continue flushing with water until advised to stop by the Poisons Information Centre. Transport to hospital, or doctor.
Inhalation	 If fumes or combustion products are inhaled 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, REFER FOR MEDICAL ATTENTION, WHERE POSSIBLE, WITHOUT DELAY. For advice, contact a Poisons Information Centre or a doctor. Urgent hospital treatment is likely to be needed. In the mean time, qualified first-aid personnel should treat the patient following observation and employing supportive measures as indicated by the patient's condition. If the services of a medical officer or medical doctor are readily available, the patient should be placed in his/her care and a copy of the SDS should be provided. Further action will be the responsibility of the medical specialist. If medical attention is not available on the worksite or surroundings send the patient to a hospital together with a copy of the SDS. Where medical attention is not immediately available or where the patient is more than 15 minutes from a hospital or unless instructed otherwise: INDUCE vomiting with fingers down the back of the throat, ONLY IF CONSCIOUS. Lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration. NOTE: Wear a protective glove when inducing vomiting by mechanical means.

Indication of any immediate medical attention and special treatment needed

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.

SECTION 5 Firefighting measures

Extinguishing media

Special hazards arising from the substrate or mixture

Fire Incompatibility

Advice for firefighters	
Fire Fighting	
Fire/Explosion Hazard	 Liquid and vapour are flammable. Moderate fire hazard when exposed to heat or flame. Vapour forms an explosive mixture with air. Moderate explosion hazard when exposed to heat or flame. Vapour may travel a considerable distance to source of ignition. Heating may cause expansion or decomposition leading to violent rupture of containers. On combustion, may emit toxic fumes of carbon monoxide (CO). Combustion products include: carbon dioxide (CO2) carbon monoxide (CO) acrolein metal oxides other pyrolysis products typical of burning organic material.

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

SECTION 6 Accidental release measures

Personal precautions, protective equipment and emergency procedures See section 8

Environmental precautions

See section 12

Methods and material for containment and cleaning up

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 small quantities with vermiculite or other absorbent material. Wipe up. Collect residues in a flammable waste container.
Major Spills	 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. Stop leak if safe to do so.

Contain spill with sand, earth or vermiculite.
Collect recoverable product into labelled containers for recycling.
Neutralise/decontaminate residue (see Section 13 for specific agent).
Collect solid residues and seal in labelled drums for disposal.
Wash area and prevent runoff into drains.
After clean up operations, decontaminate and launder all protective clothing and equipment before storing and re-using.
If contamination of drains or waterways occurs, advise emergency services.

Personal Protective Equipment advice is contained in Section 8 of the SDS.

SECTION 7 Handling and storage

Safe handling	 Even with proper grounding and bonding, this material can still accumulate an electrostatic charge. If sufficient charge is allowed to accumulate, electrostatic discharge and ignition of flammable air-vapour mixtures can occur. 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 overexposure occurs. Use in a well-ventilated area. Prevent concentration in hollows and sumps. DO NOT enter confined spaces until atmosphere has been checked. Avoid sgeneration of static electricity. DO NOT use plastic buckets. Earth all lines and equipment. Use spark-free tools when handling. 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. Avoid physical damage to containers. 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 all plany checked against established exposure standards to ensure safe working conditions.
Other information	 Store in original containers in approved flammable liquid storage area. Store away from incompatible materials in a cool, dry, well-ventilated area. DO NOT store in pits, depressions, basements or areas where vapours may be trapped. No smoking, naked lights, heat or ignition sources. Storage areas should be clearly identified, well illuminated, clear of obstruction and accessible only to trained and authorised personnel - adequate security must be provided so that unauthorised personnel do not have access. Store according to applicable regulations for flammable materials for storage tanks, containers, piping, buildings, rooms, cabinets, allowable quantities and minimum storage distances. Use non-sparking ventilation systems, approved explosion proof equipment and intrinsically safe electrical systems. Have appropriate extinguishing capability in storage area (e.g. portable fire extinguishers - dry chemical, foam or carbon dioxide) and flammable gas detectors. Keep adsorbents for leaks and spills readily available. Protect containers against physical damage and check regularly for leaks. Observe manufacturer's storage and handling recommendations contained within this SDS.

Conditions for safe storage, including any incompatibilities

Storage incompatibility	 Manufactured product that requires stirring before use and having a viscosity of at least 20 cSt (25 deg. C): (i) Removable head packaging; (ii) Cans with friction closures and (iii) low pressure tubes and cartridges may be used. Vigorous reactions, sometimes amounting to explosions, can result from the contact between aromatic rings and strong oxidising agents. Aromatics can react exothermically with bases and with diazo compounds.
	Avoid strong acids, acid chlorides, acid anhydrides and chloroformates.



Х - Must not be stored together

 May be stored together with specific preventions
 May be stored together 0

+

Note: Depending on other risk factors, compatibility assessment based on the table above may not be relevant to storage situations, particularly where large volumes of dangerous goods are stored and handled. Reference should be made to the Safety Data Sheets for each substance or article and risks assessed accordingly.

SECTION 8 Exposure controls / personal protection

Control parameters

Occupational Exposure Limits (OEL)

INGREDIENT DATA						
Source	Ingredient	Material name	TWA	STEL	Peak	Notes
New Zealand Workplace Exposure Standards (WES)	thiram	Thiram	0.2 mg/m3	Not Available	Not Available	ifv - The Inhalable Fraction and Vapour (ifv) notation is used when a material exerts sufficient vapour pressure such that it may be present in both particle and vapour phases, with each contributing to a

Source	Ingredient	Material name	TWA	STEL	Peak	Notes
						significant portion of exposure dsen - Dermal sensitiser
New Zealand Workplace Exposure Standards (WES)	copper(I) oxide	Inhalable dust (not otherwise classified)	10 mg/m3	Not Available	Not Available	Not Available
New Zealand Workplace Exposure Standards (WES)	copper(I) oxide	Respirable dust (not otherwise classified)	3 mg/m3	Not Available	Not Available	Not Available
New Zealand Workplace Exposure Standards (WES)	copper(I) oxide	Copper and its inorganic compounds, as Cu respirable dust	0.01 mg/m3	Not Available	Not Available	dsen - Dermal sensitiser
New Zealand Workplace Exposure Standards (WES)	rosin- colophony	Rosin core solder thermal decomposition products as resin acids (colophony)	Not Available	Not Available	Not Available	dsen - Dermal sensitiser rsen - Respiratory sensitiser
New Zealand Workplace Exposure Standards (WES)	n-butanol	n-Butyl alcohol	20 ppm / 61 mg/m3	Not Available	Not Available	Not Available

Exposure controls

	Engineering controls are used to remove a hazard or place can be highly effective in protecting workers and will typica The basic types of engineering controls are: Process controls which involve changing the way a job acti Enclosure and/or isolation of emission source which keeps strategically 'adds' and 'removes' air in the work environme design of a ventilation system must match the particular pro Employers may need to use multiple types of controls to pr For flammable liquids and flammable gases, local exhaust equipment should be explosion-resistant. Air contaminants generated in the workplace possess vary circulating air required to effectively remove the contaminant	Ily be independent of worker intera vity or process is done to reduce th a selected hazard 'physically' awa nt. Ventilation can remove or dilute ocess and chemical or contaminan event employee overexposure. ventilation or a process enclosure ing 'escape' velocities which, in tur	ctions to provide this high level one risk. y from the worker and ventilation e an air contaminant if designed t in use. ventilation system may be requi	of protection. n that properly. The red. Ventilation	
	Type of Contaminant:			Air Speed:	
	solvent, vapours, degreasing etc., evaporating from tank (in still air).				
	aerosols, fumes from pouring operations, intermittent com plating acid fumes, pickling (released at low velocity into z		ansfers, welding, spray drift,	0.5-1 m/s (100-200 f/min.)	
	direct spray, spray painting in shallow booths, drum filling, conveyer loading, crusher dusts, gas discharge (active generation into zone of rapid air motion)				
Appropriate engineering controls	Within each range the appropriate value depends on:				
	Lower end of the range	Upper end of the range			
	1: Room air currents minimal or favourable to capture	1: Disturbing room air currents			
	2: Contaminants of low toxicity or of nuisance value only.	2: Contaminants of high toxicity			
	3: Intermittent, low production.	3: High production, heavy use			
	4: Large hood or large air mass in motion	4: Small hood-local control only			
	Simple theory shows that air velocity falls rapidly with distance away from the opening of a simple extraction pipe. Velocity generally decreases with the square of distance from the extraction point (in simple cases). Therefore the air speed at the extraction point should be adjusted, accordingly, after reference to distance from the contaminating source. The air velocity at the extraction point. Other mechanical considerations, producing performance deficits within the extraction apparatus, make it essential that theoretical air velocities are multiplied by factors of 10 or more when extraction systems are installed or used. • Adequate ventilation is typically taken to be that which limits the average concentration to no more than 25% of the LEL within the building, room or enclosure containing the dangerous substance. • Ventilation for plant and machinery is normally considered adequate if it limits the average concentration of any dangerous substance that might potentially be present to no more than 25% of the LEL. However, an increase up to a maximum 50% LEL can be acceptable where additional safeguards are provided to prevent the formation of a hazardous explosive atmosphere. For example, gas detectors linked to emergency shutdown of the process might be used together with maintaining or increasing the exhaust ventilation on solvent evaporating ovens and gas turbine enclosures. • Temporary exhaust ventilation systems may be provided for non-routine higher-risk activities, such as cleaning, repair or maintenance in tanks or other confined spaces or in an emergency after a release. The work procedures for such activities should be carefully considered. The atmosphere should be continuously monitored to ensure that ventilation is adequate and the area remains safe. Where workers will enter the space, the ventilation should ensure that concentration of the dangerous substance does not exceed 10% of the LEL (irrespective of the provision of suitable breathing apparatus)				
Individual protection measures, such as personal protective equipment	(irrespective of the provision of suitable breathing apparatus)				

Safety glasses with side shields.

- Contact (plasses will sub stillads.
 Chemical goggles. [AS/NZS 1337.1, EN166 or national equivalent]
 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. [CDC NIOSH Current Intelligence Bulletin 59].

Eye and face protection

Skin protection	See Hand protection below
Hands/feet protection	 Wear chemical protective gloves, e.g. PVC. Wear safely footwear or safety gumboots, e.g. Rubber NOTE: The material may produce skin sensitisation in predisposed individuals. Care must be taken, when removing gloves and other protective equipment, to avoid all possible skin contact. Contaminated leather items, such as shoes, beits and watch-bands should be removed and destroyed. The selection of suitable gloves does not only depend on the material, but also on further marks of quality which vary from manufacturer to manufacturer. Where the chemical is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application. The selection of suitable gloves does not only depend on the material, but also on further marks of quality which vary from manufacturer to manufacturer. Where the chemical is a preparation of several substances, the resistance of the gloves and has to be observed when making a final choice. Personal hygiene is a key element of effective hand care. Gloves must only be worn on clean hands. After using gloves, hands should be washed and dired throughly. Application of a non-perfumed molisturiser is recommended. Suitability and durability of glove material, glove thickness and devicity Select gloves tested to a relevant standard (e.g. Europe EN 374, US F739, AS/NZS 2161.1 or national equivalent). When only bief contact is expected, a glove with a protection class of 5 or higher (breakthrough time greater than 240 minutes according to EN 374, AS/NZS 2161.10.1 or national equivalent) is recommended. Some glove polymer types are less affected by movement and this should be taken into account when considering gloves for long-term use. Contaminated gloves should be replaced. As defined in ASTM F-739-96 in any applicatio
Body protection	See Other protection below
Other protection	 Overalls. PVC Apron. PVC protective suit may be required if exposure severe. Eyewash unit. Ensure there is ready access to a safety shower. Some plastic personal protective equipment (PPE) (e.g. gloves, aprons, overshoes) are not recommended as they may produce static electricity. For large scale or continuous use wear tight-weave non-static clothing (no metallic fasteners, cuffs or pockets). Non sparking safety or conductive footwear should be considered. Conductive footwear describes a boot or shoe with a sole made from a conductive compound chemically bound to the bottom components, for permanent control to electrical resistance must range between 0 to 500,000 ohms. Conductive shoes should be stored in lockers close to the room in which they are worn. Personnel who have been issued conductive footwear should not wear them from their place of work to their homes and return.
Decommonded meteric ¹⁽⁻⁾	Provinciant and address a

Recommended material(s)

GLOVE SELECTION INDEX

Glove selection is based on a modified presentation of the:

'Forsberg Clothing Performance Index'.

The effect(s) of the following substance(s) are taken into account in the *computer-generated* selection:

Altex AYB No.5 Antifouling

Material	CPI
BUTYL	С
BUTYL/NEOPRENE	С
HYPALON	С
NAT+NEOPR+NITRILE	С
NATURAL RUBBER	С
NATURAL+NEOPRENE	С
NEOPRENE	С
NEOPRENE/NATURAL	С
NITRILE	С
NITRILE+PVC	С
PE	С
PE/EVAL/PE	С
PVA	С
PVC	С
PVDC/PE/PVDC	С

Respiratory protection

Type A-P Filter of sufficient capacity. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent)

Where the concentration of gas/particulates in the breathing zone, approaches or exceeds the 'Exposure Standard' (or ES), respiratory protection is required. Degree of protection varies with both face-piece and Class of filter; the nature of protection varies with Type of filter.

Required Minimum Protection Factor	Half-Face Respirator	Full-Face Respirator	Powered Air Respirator
up to 10 x ES	A-AUS P2	-	A-PAPR-AUS / Class 1 P2
up to 50 x ES	-	A-AUS / Class 1 P2	-
up to 100 x ES	-	A-2 P2	A-PAPR-2 P2 ^

^ - Full-face

A(All classes) = Organic vapours, B AUS or B1 = Acid gasses, B2 = Acid gas or hydrogen cyanide(HCN), B3 = Acid gas or hydrogen cyanide(HCN), E = Sulfur dioxide(SO2), G = Agricultural chemicals, K = Ammonia(NH3), Hg = Mercury, NO = Oxides of nitrogen, MB = Methyl bromide, AX = Low boiling point organic compounds(below 65 degC)

- Cartridge respirators should never be used for emergency ingress or in areas of unknown vapour concentrations or oxygen content.
- The wearer must be warned to leave the contaminated area immediately on detecting any odours through the respirator. The odour may indicate that the mask is not functioning properly, that the vapour concentration is too high, or that the mask is not properly fitted. Because of these limitations, only restricted use of cartridge respirators is considered appropriate.

TEFLON	С
VITON	C

* CPI - Chemwatch Performance Index

A: Best Selection

B: Satisfactory; may degrade after 4 hours continuous immersion

C: Poor to Dangerous Choice for other than short term immersion NOTE: As a series of factors will influence the actual performance of the glove, a final

* Where the glove is to be used on a short term, casual or infrequent basis, factors

such as 'feel' or convenience (e.g. disposability), may dictate a choice of gloves which might otherwise be unsuitable following long-term or frequent use. A qualified practitioner should be consulted.

SECTION 9 Physical and chemical properties

Information on basic physical and chemical properties

 Cartridge performance is affected by humidity. Cartridges should be changed after 2 hr of continuous use unless it is determined that the humidity is less than 75%, in which case, cartridges can be used for 4 hr. Used cartridges should be discarded daily, regardless of the length of time used

Appearance	coloured viscous liquid		
Physical state	Liquid	Relative density (Water = 1)	1.79
Odour	Not Available	Partition coefficient n-octanol / water	Not Available
Odour threshold	Not Available	Auto-ignition temperature (°C)	389
pH (as supplied)	Not Available	Decomposition temperature (°C)	Not Available
Melting point / freezing point (°C)	Not Available	Viscosity (cSt)	837.989
Initial boiling point and boiling range (°C)	126	Molecular weight (g/mol)	Not Available
Flash point (°C)	29	Taste	Not Available
Evaporation rate	0.8 BuAC = 1	Explosive properties	Not Available
Flammability	Flammable.	Oxidising properties	Not Available
Upper Explosive Limit (%)	9.9	Surface Tension (dyn/cm or mN/m)	Not Available
Lower Explosive Limit (%)	1.5	Volatile Component (%vol)	24
Vapour pressure (kPa)	1.3	Gas group	Not Available
Solubility in water	Immiscible	pH as a solution (1%)	Not Available
Vapour density (Air = 1)	3.3	VOC g/L	428
Heat of Combustion (kJ/g)	Not Available	Ignition Distance (cm)	Not Available
Flame Height (cm)	Not Available	Flame Duration (s)	Not Available
Enclosed Space Ignition Time Equivalent (s/m3)	Not Available	Enclosed Space Ignition Deflagration Density (g/m3)	Not Available

SECTION 10 Stability and reactivity

Reactivity	See section 7
Chemical stability	 Unstable in the presence of incompatible materials. Product is considered stable. Hazardous polymerisation will not occur.
Possibility of hazardous reactions	See section 7
Conditions to avoid	See section 7
Incompatible materials	See section 7
Hazardous decomposition products	See section 5

SECTION 11 Toxicological information

Information on toxicological ef	fects
a) Acute Toxicity	There is sufficient evidence to classify this material as acutely toxic.
b) Skin Irritation/Corrosion	There is sufficient evidence to classify this material as skin corrosive or irritating.
c) Serious Eye Damage/Irritation	There is sufficient evidence to classify this material as eye damaging or irritating
d) Respiratory or Skin sensitisation	There is sufficient evidence to classify this material as sensitising to skin or the respiratory system
e) Mutagenicity	Based on available data, the classification criteria are not met.
f) Carcinogenicity	Based on available data, the classification criteria are not met.
g) Reproductivity	There is sufficient evidence to classify this material as toxic to reproductivity
h) STOT - Single Exposure	There is sufficient evidence to classify this material as toxic to specific organs through single exposure
i) STOT - Repeated Exposure	There is sufficient evidence to classify this material as toxic to specific organs through repeated exposure
j) Aspiration Hazard	Based on available data, the classification criteria are not met.

n-butanol		IRRIT			
	Oral (rat) LD50: 10768 mg/kg ^[2] Oral (rat) LD50: 13100 mg/kg ^[2]				
	Oral (rat) LD50: =12700 mg/kg ^[2]		Skin: no adverse effect observed (
rosin-colopholiy	Oral (rabbit) LD50: 3200 mg/kg ⁽²⁾ Oral (rat) LD50: =10700 mg/kg ^[2]		Eye: no adverse effect observed (not irritating) ^[1] Skin (rabbit): 500 mg/24h-moderate		
rosin-colophony	Oral (guinea pig) LD50: 4700 mg/kg ^[2] Oral (rabbit) LD50: 3200 mg/kg ^[2]		Eye (rabbit): 20 mg/24h - moderate		
	Inhalation (rat) LC50: 389.55501 mg/l/4h ^[2]		Eye (rabbit): 20 mg (open)-SEVERE		
	Dermal (rabbit) LD50: 3200 mg/kg ^[2]		Eye (human): 300 mg		
	TOXICITY IRRITATION				
	Oral (Rat) LD50: 470 mg/kg ^[2]				
copper(i) oxide	Inhalation (Rat) LC50: 2.92 mg/l4h ^[1]				
copper(I) oxide	dermal (rat) LD50: >2000 mg/kg ^[1]			Not Available	
	ΤΟΧΙCΙΤΥ			IRRITATION	
			Skin (rabbit) LDLo: 1 mg/kg Skin: no adverse effect observed (not irritating) ^[1]		
tniraM	Oral (rat) LD50: 560 mg/kg ^[2]		e: no adverse effect observed (not i in (rabbit) LDLo: 1 mg/kg	mauly). *	
thiram	Dermal (rabbit) LD50: >2000 mg/kg ^[2]		e (rabbit): 100 mg/24h-moderate e: no adverse effect observed (not i	rritating)[1]	
	TOXICITY		RITATION		
	TOMOTY				
	Oral (Rat) LD50: >4500 mg/kg ^[1]	s	kin: adverse effect observed (irritation	ng) ^[1]	
aromatic solvent	Inhalation (Rat) LC50: >4.42 mg/L4h ^[1] Eye: no adverse effect observed			: irritating) ^[1]	
naphtha petroleum, light	Dermal (rabbit) LD50: >1900 mg/kg ^[1] Eye (Rodent - rabbit): 100uL			fild	
	ΤΟΧΙΟΙΤΥ	IF	RRITATION		
	Oral (Rat) LD50: 773 mg/kg ^[2]				
Altex N5L	Inhalation (Rat) LC50: 1.7 mg/l(D&M)/4h ^[2]				
	dermal (rat) LD50: 45833 mg/kg ^[2]			Not Available	
	ΤΟΧΙΟΙΤΥ			IRRITATION	
	Substance accumulation, in the human body, may o exposure.	occur and may	cause some concern following repe	ated or long-term occupational	
Chronic	that can be inherited. Ample evidence exists from experimentation that re			-	
Chronic	Skin contact with the material is more likely to caus Based on experiments and other information, there	e a sensitisatio	on reaction in some persons compar	red to the general population.	
	Long-term exposure to respiratory irritants may res Inhaling this product is more likely to cause a sensi			, , , , , , , , , , , , , , , , , , ,	
Eye	If applied to the eyes, this material causes severe e	•	3		
Skin Contact	following entry through wounds, lesions or abrasion Open cuts, abraded or irritated skin should not be e Entry into the blood-stream, through, for example, o skin prior to the use of the material and ensure that	ns. exposed to this cuts, abrasions	material ; or lesions, may produce systemic i		
	There is strong evidence to suggest that this material, on a single contact with skin, can cause serious, irreversible damage of organs. Skin contact is not thought to produce harmful health effects (as classified under EC Directives using animal models). Systemic harm, however, has been identified following exposure of animals by at least one other route and the material may still produce health damage				
Ingestion	following a single exposure by swallowing. The material is not thought to produce adverse health effects following ingestion (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. 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.				
	respiratory depression and may be fatal. Strong evidence exists that exposure to the materia				
	There is strong evidence to suggest that this material can cause, if inhaled once, serious, irreversible damage of organs. 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				
Inhaled	lack of co-ordination, and vertigo.				

Inhalation (Rat) LC50: 8000 ppm4h ^[2]	Eye (Human): 990ppm/1H
Oral (Rat) LD50: 790 mg/kg ^[2]	Eye (Rodent - rabbit): 0.005mL - Severe
	Eye (Rodent - rabbit): 0.1mL
	Eye (Rodent - rabbit): 1.62mg - Severe
	Eye (Rodent - rabbit): 2mg/24H - Severe
	Eye: adverse effect observed (irreversible damage) ^[1]
	Skin (Human): 20uL/20M
	Skin (Rodent - rabbit): 20mg/24H - Moderate
	Skin: adverse effect observed (irritating) ^[1]

Legend:

1. Value obtained from Europe ECHA Registered Substances - Acute toxicity 2. Value obtained from manufacturer's SDS. Unless otherwise specified data extracted from RTECS - Register of Toxic Effect of chemical Substances

Skin Irritation/Corrosion	Reproductivity	
		×
Serious Eye Damage/Irritation	STOT - Single Exposure	*
Respiratory or Skin sensitisation	STOT - Repeated Exposure	*
Mutagenicity X	Aspiration Hazard	×

Legend: X – Data either not available or does not fill the criteria for classification

SECTION 12 Ecological information

	Endpoint	Endpoint Test Duration (hr)		Species			Value	Sourc
Altex N5L	LC50	LC50 72		Algae/F	Plant Demodesmus subspicatus(Algae	e)	5.4mg/L	8
	LC50	LC50 48		Crustad	Crustacea Daphnia magna		5.1mg/L	8
	LC50 96		Fish Da	anio rerio (Zebra Fish)		0.7mg/L	8	
	Endpoint	Т	est Duration (hr)	<u> </u>	Species		Value	Source
	EC50		48h		Crustacea		6.14mg/l	1
naphtha petroleum, light	EC50	72h			Algae or other aquatic plants		19mg/l	1
aromatic solvent	EC50		6h		Algae or other aquatic plants		64mg/l	2
	NOEC(ECx)		2h		Algae or other aquatic plants		1mg/l	1
	En du siné	-			0	V		0
	Endpoint		est Duration (hr)		Species		lue	Source
	EC50		48h		Crustacea		011mg/L	2
thiram	EC50	72h 96h			Algae or other aquatic plants		04mg/l	4
	EC50				Algae or other aquatic plants		.1mg/l	1
	NOEC(ECx))4h		Fish		003mg/l	1
	LC50	96	Sh		Fish		003mg/L	1
	Endpoint	Test	Duration (hr)		Species	Val	ue	Source
	EC50	48h			Crustacea	0.5	1mg/l	1
	EC50	72h			Algae or other aquatic plants	0.0	17mg/L	2
copper(I) oxide	EC50	96h			Algae or other aquatic plants		ng/l	1
	EC0(ECx)	48h			Crustacea		8mg/l	1
	LC50	96h			Fish		03mg/L	2
	Endpoint	Test	Duration (hr)		Species	Valu	e	Source
	EC50	48h			Crustacea	4.5m	ıg/l	1
rosin-colophony	EC50	72h			Algae or other aquatic plants	>10<	20mg/l	2
rosin-colophony	EC50	96h			Algae or other aquatic plants		1mg/l	2
	EC0(ECx)	48h			Crustacea		mg/l	1
	LC50	96h			Fish	1.5m	ıg/l	2
n-butanol	_		_					-
	Endpoint		st Duration (hr)		Species	Valu		Source
	EC50	48	h		Crustacea	>500)mg/l	1

	EC50	72h	Algae or other aquatic plants	>500mg/l	1
	EC50	96h	Algae or other aquatic plants	225mg/l	2
	LC50	96h	Fish	100-500mg/l	4
Legend:	Extracted from 1. IUC	ID Toxicity Data 2. Europe ECH	A Registered Substances - Ecotoxicological Info	ormation - Aquatic Toxic	ity 4. US EPA

nd: Extracted from 1. IUCLID Toxicity Data 2. Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic Toxicity 4. US EPA, Ecotox database - Aquatic Toxicity Data 5. ECETOC Aquatic Hazard Assessment Data 6. NITE (Japan) - Bioconcentration Data 7. METI (Japan) - Bioconcentration Data 8. Vendor Data

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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.

Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
thiram	HIGH	HIGH
copper(I) oxide	HIGH	HIGH
rosin-colophony	HIGH	HIGH
n-butanol	LOW (Half-life = 54 days)	LOW (Half-life = 3.65 days)

Bioaccumulative potential

Ingredient	Bioaccumulation
thiram	LOW (BCF = 91)
copper(I) oxide	LOW (BCF = 3.162)
rosin-colophony	HIGH (LogKOW = 6.46)
n-butanol	LOW (BCF = 0.64)

Mobility in soil

Ingredient	Mobility
thiram	LOW (Log KOC = 10)
copper(I) oxide	LOW (Log KOC = 23.74)
rosin-colophony	LOW (Log KOC = 21990)
n-butanol	MEDIUM (Log KOC = 2.443)

SECTION 13 Disposal considerations

	Containers may still present a chemical hazard/ danger when empty.
	Return to supplier for reuse/ recycling if possible.
	Otherwise:
	If container can not 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.
	Legislation addressing waste disposal requirements may differ by country, state and/ or territory. Each user must refer to laws operating in their area. In some areas, certain wastes must be tracked.
	A Hierarchy of Controls seems to be common - the user should investigate:
	▶ Reduction
	▶ Reuse
	Recycling
	 Disposal (if all else fails)
Product / Packaging disposal	This material may be recycled if unused, or if it has not been contaminated so as to make it unsuitable for its intended use. If it has been contaminated, it may be possible to reclaim the product by filtration, distillation or some other means. Shelf life considerations should also b applied in making decisions of this type. Note that properties of a material may change in use, and recycling or reuse may not always be
	appropriate.
	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.
	Consult manufacturer for recycling options or consult local or regional waste management authority for disposal if no suitable treatment or disposal facility can be identified.
	 Dispose of by: burial in a land-fill specifically licensed to accept chemical and / or pharmaceutical wastes or Incineration in a licensed apparatus (after admixture with suitable combustible material).
	Decontaminate empty containers. Observe all label safeguards until containers are cleaned and destroyed.

Ensure that the hazardous substance is disposed in accordance with the Hazardous Substances (Disposal) Notice 2017

Disposal Requirements

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

Labels Required	
Marine Pollutant	
HAZCHEM	•3Y

Land transport (UN)

14.1. UN number or ID number	1263	
14.2. UN proper shipping name	PAINT RELATED MAT reducing compound)	ERIAL (including paint thinning or reducing compound); PAINT RELATED MATERIAL (including paint thinning or
14.3. Transport hazard class(es)	Class Subsidiary Hazard	3 Not Applicable
14.4. Packing group	Ш	
14.5. Environmental hazard	Environmentally hazar	dous
14.6. Special precautions for user	Special provisions Limited quantity	163; 223; 367 5 L

Air transport (ICAO-IATA / DGR)

14.1. UN number	1263					
14.2. UN proper shipping name	Paint related material (including pai polish, liquid filler and liquid lacquer		ounds); Paint (including pair	nt, lacquer, enamel, stain, shellac, varnish,		
	ICAO/IATA Class	3				
14.3. Transport hazard class(es)	ICAO / IATA Subsidiary Hazard Not Applicable					
01400(00)	ERG Code	3L				
14.4. Packing group	III					
14.5. Environmental hazard	Environmentally hazardous					
	Special provisions		A3 A72 A192			
	Cargo Only Packing Instructions		366			
	Cargo Only Maximum Qty / Pack		220 L			
14.6. Special precautions for user	Passenger and Cargo Packing In	structions	355			
u301	Passenger and Cargo Maximum	Qty / Pack	60 L			
	Passenger and Cargo Limited Qu	antity Packing Instructions	Y344			
	Passenger and Cargo Limited Ma	aximum Qty / Pack	10 L			

Sea transport (IMDG-Code / GGVSee)

14.1. UN number	1263		
14.2. UN proper shipping name	PAINT RELATED MATERIAL (including paint thinning or reducing compound); PAINT (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base)		
14.3. Transport hazard	IMDG Class	3	
class(es)	IMDG Subsidiary Ha	zard Not Applicable	
14.4. Packing group	II		
14.5 Environmental hazard	Marine Pollutant		
14.6. Special precautions for user	EMS Number	F-E , S-E	
	Special provisions	163 223 367 955	
	Limited Quantities	5 L	

14.7. Maritime transport in bulk according to IMO instruments

14.7.1. Transport in bulk according to Annex II of MARPOL and the IBC code Not Applicable

14.7.2. Transport in bulk in accordance with MARPOL Annex V and the IMSBC Code

copper(I) oxide

rosin-colophony

n-butanol

Altex AYB No.5 Antifouling

Product name	Group		
naphtha petroleum, light aromatic solvent	Not Available		
thiram	Not Available		
copper(I) oxide	Not Available		
rosin-colophony	Not Available		
n-butanol	Not Available		
14.7.3. Transport in bulk in acc	ordance with the IGC Code		
Product name	Ship Type		
naphtha petroleum, light aromatic solvent	Not Available		
thiram	Not Available		

SECTION 15 Regulatory information

Safety, health and environmental regulations / legislation specific for the substance or mixture

This substance is to be managed using the conditions specified in an applicable Group Standard

Not Available

Not Available Not Available

HSR Number	Group Standard	
HSC100500	Altex Export Antifouling Cuprous Oxide + Thiram in Containment for Export	

Please refer to Section 8 of the SDS for any applicable tolerable exposure limit or Section 12 for environmental exposure limit.

Additional Regulatory Information

Not Applicable

Hazardous Substance Location

Subject to the Health and Safety at Work (Hazardous Substances) Regulations 2017.

Hazard Class	Quantity (Closed Containers)	Quantity (Open Containers)
Flammable Liquid Category 3	500 L in containers more than 5 L	250 L
Flammable Liquid Category 3	1 500 L in containers up to and including 5 L	250 L

Certified Handler

Subject to Part 4 of the Health and Safety at Work (Hazardous Substances) Regulations 2017.

Class of substance	Quantities
Not Applicable	Not Applicable

Refer Group Standards for further information

Maximum quantities of certain hazardous substances permitted on passenger service vehicles

Subject to Regulation 13.14 of the Health and Safety at Work (Hazardous Substances) Regulations 2017.

Hazard Class	Liquid (L)	Maximum quantity per package for each classification
Skin Sensitisation Category 1	1	
Flammable Liquid Category 3		10 L

Tracking Requirements

Not Applicable

National Inventory Status

National Inventory	Status	
Australia - AIIC / Australia Non- Industrial Use	Yes	
Canada - DSL	No	
Canada - NDSL	No (naphtha petroleum, light aromatic solvent; thiram; copper(I) oxide; rosin-colophony; n-butanol)	
China - IECSC	No	
Europe - EINEC / ELINCS / NLP	No	
Japan - ENCS	Yes	
Korea - KECI	No	

National Inventory	Status	
New Zealand - NZIoC	No	
Philippines - PICCS	No	
USA - TSCA	No	
Taiwan - TCSI	No	
Mexico - INSQ	No	
Vietnam - NCI	No	
Russia - FBEPH	No	
Legend:	Yes = All CAS declared ingredients are on the inventory No = One or more of the CAS listed ingredients are not on the inventory. These ingredients may be exempt or will require registration.	

SECTION 16 Other information

Revision Date	08/05/2025
Initial Date	31/03/2017

SDS Version Summary

Version	Date of Update	Sections Updated
4.14	21/02/2024	Toxicological information - Acute Health (eye), Toxicological information - Acute Health (inhaled), Toxicological information - Acute Health (skin), Toxicological information - Acute Health (swallowed), First Aid measures - Advice to Doctor, Toxicological information - Chronic Health, Hazards identification - Classification, Ecological Information - Environmental, Exposure controls / personal protection - Exposure Standard, Firefighting measures - Fire Fighter (fire/explosion hazard), First Aid measures - First Aid (swallowed), Handling and storage - Handling Procedure, Composition / information on ingredients - Ingredients, Exposure controls / personal protection - Personal Protection (Respirator), Accidental release measures - Spills (major), Accidental release measures - Spills (minor), Handling and storage - Storage (storage incompatibility), Toxicological information - Toxicity and Irritation (Other), Identification of the substance / mixture and of the company / undertaking - Use

Other information

The SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

Definitions and abbreviations

- PC TWA: Permissible Concentration-Time Weighted Average
- PC STEL: Permissible Concentration-Short Term Exposure Limit
- IARC: International Agency for Research on Cancer
- ACGIH: American Conference of Governmental Industrial Hygienists

- STEL: Short Term Exposure Limit
 TEEL: Temporary Emergency Exposure Limit,
 IDLH: Immediately Dangerous to Life or Health Concentrations
- ES: Exposure Standard
- OSF: Odour Safety Factor
- NOAEL: No Observed Adverse Effect Level
- LOAEL: Lowest Observed Adverse Effect Level
- TLV: Threshold Limit Value
- LOD: Limit Of Detection
- OTV: Odour Threshold Value
- BCF: BioConcentration Factors
- BEI: Biological Exposure Index
- DNEL: Derived No-Effect Level
- PNEC: Predicted no-effect concentration
- MARPOL: International Convention for the Prevention of Pollution from Ships
- IMSBC: International Maritime Solid Bulk Cargoes Code
- IGC: International Gas Carrier Code
- IBC: International Bulk Chemical Code
- AIIC: Australian Inventory of Industrial Chemicals
- DSL: Domestic Substances List
- NDSL: Non-Domestic Substances List
- IECSC: Inventory of Existing Chemical Substance in China
- EINECS: European INventory of Existing Commercial chemical Substances
- ELINCS: European List of Notified Chemical Substances
- NLP: No-Longer Polymers
- ENCS: Existing and New Chemical Substances Inventory
- KECI: Korea Existing Chemicals Inventory
- NZIoC: New Zealand Inventory of Chemicals
- PICCS: Philippine Inventory of Chemicals and Chemical Substances
- TSCA: Toxic Substances Control Act
- TCSI: Taiwan Chemical Substance Inventory INSQ: Inventario Nacional de Sustancias Químicas
- NCI: National Chemical Inventory
 FBEPH: Russian Register of Potentially Hazardous Chemical and Biological Substances

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