



Code	Description	Size	Colour
20052	Toptec Raw Aluminium Protector	500 ml	Clear
20110	Toptec Raw Aluminium Protector	4 Lt	Clear
20115	Toptec Raw Aluminium Protector	500 ml	White
20111	Toptec Raw Aluminium Protector	4 Lt	White
20116	Toptec Raw Aluminium Protector	500 ml	White
20112	Toptec Raw Aluminium Protector	4 Lt	Bronze
20117	Toptec Raw Aluminium Protector	500 ml	Grey
20113	Toptec Raw Aluminium Protector	4 Lt	Grey

Recommended use:		Sealant
HSNO group standard:		HSR002662
UN number, shipping name and packaging group:		UN1263 Paint Related Material PG III
Supplier contact details:	Holdfast NZ Ltd	Freephone: 0800 TOPTEC
	14 Avalon Drive	Phone: (07) 847 5540
	Nawton	Fax: (07) 847 0324
	Hamilton 3200	Email: <a href="mailto:sales@toptec.co.nz">sales@toptec.co.nz</a>
	New Zealand	Website: <a href="http://www.toptec.co.nz">www.toptec.co.nz</a>
<b>NZ Poisons Centre 0800 POISON (0800 764 766)   NZ Emergency Services: 111</b>		

## 2. Hazards Identification

### 2.1 Hazardous Substances and New Organisms (HSNO) classification:

Classification	Hazard statements
<b>Flammable Liquid Category 2</b> <b>3.1B</b>	H225    Highly flammable liquid and vapour
<b>Acute Oral Toxicity Category 5</b> <b>6.1E</b>	H303    May be harmful if swallowed
<b>Skin Effects Category 2</b> <b>6.3A</b>	H315    Causes skin irritation
<b>Eye Effects Category 1</b> <b>6.4A</b>	H319    Causes serious eye irritation
<b>Skin Sensitisation Category 1</b> <b>6.5B</b>	H317    May cause an allergic skin reaction
<b>Reproductive Toxicity Category 2</b> <b>6.8B</b>	H361    Suspected of damaging fertility or the unborn child

<b>STOT – SE Category 2</b>	<b>6.9B</b>	H371	May cause damage to organs
<b>STOT – RE Category 2</b>	<b>6.9B</b>	H373	May cause damage to organs through prolonged or repeated exposure
<b>Chronic Aquatic Hazard Category 3</b>	<b>9.1C</b>	H412	Harmful to aquatic life with long lasting effects
<b>Vertebrate Toxicity Category 3</b>	<b>9.3C</b>	H433	Harm

## 2.2 Symbols:



## 2.3 Signal Word: DANGER

## 2.4 Precautionary Statements:

- P202 Do not handle until all safety precautions have been read and understood.
- P102 Keep out of reach of children.
- P210 Keep away from heat/ sparks/ open flames/ hot surfaces – No smoking
- P233 Keep container tightly closed
- P240 Ground/ bond container and receiving equipment
- P241 Use explosion proof electrical/ ventilating/ lighting/ intrinsically safe equipment
- P242 Use only non-sparking tools
- P243 Take precautionary measures against static discharge
- P260 Do not breathe fumes/ mists/ vapours/ dusts
- P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
- P281 Use personal protective equipment as required
- P264 Wash thoroughly after handling.
- P270 Do not eat, drink or smoke when using this product.
- P273 Avoid release to the environment
- P403+P235 Store in a well ventilated place. Keep cool
- P405 Store locked up

## 3. Composition/Information on Ingredients

### 3.1 Information on the ingredients used in the substance:

Ingredient	CAS No.	Individual HSNO classification	Concentration (%)
Toluene	108-88-3	Flammable Liquid Category 2; Acute Oral Toxicity Category 4; Acute Inhalation Toxicity Category 4; Skin Effects Category 2; Eye Effects Category 2; Reproductive Toxicity Category 2; STOT – SE Category 2; STOT – RE Category 2; Chronic Aquatic Hazard Category 4; Vertebrate Toxicity Category 3	10 – 60
White Spirits	64742-82-1	Flammable Liquid Category 3; Acute Dermal Toxicity Category 5; Acute Inhalation Toxicity Category 5; Skin effects Category 3; Eye Effects Category 2; Narcotic Effects Category 3; Aspiration Category 1; Chronic Aquatic Effects Category 2	10 - 60
Ingredients determined to be non-hazardous			10 – 60

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

## 4. First Aid Measures

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

### 4.1 Skin or hair contact:

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

### 4.2 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.

### 4.3 Inhalation:

Remove from contaminated area. Other measures are usually unnecessary.

### 4.4 Ingestion:

**If swallowed do NOT induce vomiting.** If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration. Observe the patient carefully. Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious. Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink. Seek medical advice. Avoid giving milk or oils. Avoid giving alcohol. If spontaneous vomiting appears imminent or occurs, hold patient's head down, lower than their hips to help avoid possible aspiration of vomitus.

### 4.5 General advice and advice for physicians:

Treat symptomatically.

You should call The Poisons Information Centre if you feel that you may have been poisoned, burned or irritated by this product. The number is 0800 764766 from anywhere in New Zealand (13 1126 in Australia) and is available at all times. Have this SDS or product label with you when you call.

## 5. Fire-Fighting Measures

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### 5.1 Extinguishing media:

Foam; water spray; carbon dioxide

### 5.2 Fire/ Explosion Hazard

Liquid and vapour are highly flammable. Severe fire hazard when exposed to heat, flame and/or oxidisers. Vapour may travel a considerable distance to source of ignition. Heating may cause expansion or decomposition leading to violent

### 5.3 Advice for fire-fighters:

Alert Fire Brigade and tell them location and nature of hazard. Wear breathing apparatus plus protective gloves in the event of a fire. Prevent, by any means available, spillage from entering drains or water courses. Use firefighting procedures suitable for surrounding area. 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. Equipment should be thoroughly decontaminated after use.

## 6. Accidental Release Measures

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### 6.1 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.

## 6.2 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.

## 6.3 Special hazards due to combustion

May emit poisonous fumes. May emit corrosive fumes.

## 7. Handling and Storage

### 7.1 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.** Electrostatic discharge may be generated during pumping - this may result in fire. Ensure electrical continuity by bonding and grounding (earthing) all equipment. Restrict line velocity during pumping in order to avoid generation of electrostatic discharge ( $\leq 1$  m/sec until fill pipe submerged to twice its diameter, then  $\leq 7$  m/sec). Avoid splash filling. Do NOT use compressed air for filling discharging or handling operations. 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, heat or ignition sources. When handling, **DO NOT eat, drink or smoke.** Vapour may ignite on pumping or pouring due to static electricity. **DO NOT use plastic buckets.**

Earth and secure metal containers when dispensing or pouring product. Use spark-free tools when handling. Avoid contact with incompatible materials. Keep containers securely sealed. 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**

### 7.2 Storage:

Store in original containers in approved flame-proof area. No smoking, naked lights, heat or ignition sources. **DO NOT store in pits, depressions, basements or areas where vapours may be trapped.** Keep containers securely sealed.

Store away from incompatible materials in a cool, dry well ventilated area. Protect containers against physical damage and check regularly for leaks. Observe manufacturer's storage and handling recommendations contained within this SDS.

## 8. Exposure Controls/Personal Protection

### 8.1 Exposure limits:






CAS no.	Substance or ingredient	WES-TWA		WES-STEL
108-88-3	Toluene	188 mg/m <sup>3</sup>	50 ppm	
64742-82-1	White spirits	525 mg/m <sup>3</sup>	100 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.

### 8.2 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.

### 8.3 Exposure controls:

Control	Protective measure
Eye	Safety glasses with side shields. Chemical goggles. 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], [AS/NZS 1336 or national equivalent] 
Respiratory	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. 
Skin	PE/EVAL/PE recommended. Avoid skin contact. If skin contact or contamination clothing is likely, protective clothing should be worn. [AS 2161] Wear protective clothing.   

## 9. Physical and Chemical Properties

### 9.1 General substance properties:

Property	Details
Appearance	Viscous Paste
Odour	Characteristic
pH	No data.
Vapour pressure	No data.
Viscosity	110 – 200 C
Boiling Point	No data.
Volatile materials	No data.
Freezing/melting point	No data.
Water Solubility	Insoluble in water
Specific gravity/density	0.94 g/ml

<b>Flash point</b>	4 C
<b>Auto-ignition temperature</b>	No data.
<b>Upper and lower flammability limits</b>	Lower - 1.1 %                      Upper -6.0 %
<b>Corrosiveness</b>	No data.

## 10. Stability and Reactivity

### 10.1 Stability:

Stable under normal conditions.

### 10.2 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. Contact with water causes a chemical reaction

### 10.3 Incompatible materials to avoid:

Mild steel; Copper alloys; strong acids

### 10.4 Hazardous decomposition products:

Combustion will result in the release of carbon monoxide; carbon dioxide and other pyrolysis products typical of burning organic materials

## 11. Toxicological Information

### 11.1 Summary of Toxicity

#### 11.2 Acute toxicity:

Test	Data and symptoms of exposure
<b>Oral</b>	Accidental ingestion of the material may be harmful; animal experiments indicate that ingestion of less than 150 gram may be fatal or may produce serious damage to the health of the individual. Swallowing of the liquid may cause aspiration into the lungs with the risk of chemical pneumonitis; serious consequences may result.
<b>Dermal</b>	This material can cause inflammation of the skin on contact in some persons. The material may accentuate any pre-existing dermatitis condition Toxic effects may result from skin 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.
<b>Inhaled</b>	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. There is some evidence to suggest that the material can cause respiratory irritation in some persons. The body's response to such irritation can cause further lung damage. The acute toxicity of inhaled alkylbenzenes is best described by central nervous system depression. As a rule, these compounds may also act as general anaesthetics. Systemic poisoning produced by general anaesthesia is characterised by light-headedness, nervousness, apprehension, euphoria, confusion, dizziness, drowsiness, tinnitus, blurred or double vision, vomiting and sensations of heat, cold or numbness, twitching, tremors, convulsions, unconsciousness and respiratory depression and arrest. Cardiac arrest may result from cardiovascular collapse. Bradycardia, and hypotension may also be produced. Inhaled alkylbenzene vapours cause death in animals at air levels that are relatively similar (typically LC50s are in the range 5000 - 8000 ppm for 4 to 8 hour exposures). It is likely that acute inhalation exposure to alkylbenzenes resembles that to general anaesthetics. Alkylbenzenes are not generally toxic other than at high levels of exposure. This may be because their metabolites have a low order of toxicity and are easily excreted. There is little or no evidence to suggest that metabolic pathways can become saturated leading to spill over to alternate pathways. Nor is there evidence that toxic reactive intermediates, which may produce

	subsequent toxic or mutagenic effects, are formed. On exposure to mixed trimethylbenzenes, some people may become nervous, tensed, anxious and have difficulty breathing. There may be a reduction red blood cells and bleeding abnormalities. There may also be drowsiness.
<b>Eye</b>	This material can cause eye irritation and damage in some persons.
<b>Chronic</b>	Based on experience with animal studies, exposure to the material may result in toxic effects to the development of the foetus, at levels which do not cause significant toxic effects to the mother. Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure. Intentional abuse (glue sniffing) or occupational exposure to toluene can result in chronic habituation. Chronic abuse has caused incoordination, tremors of the extremities (due to widespread cerebrum withering), headache, abnormal speech, temporary memory loss, convulsions, coma, drowsiness, reduced colour perception, blindness, nystagmus (rapid, involuntary eye movements), hearing loss leading to deafness and mild dementia. There has been 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.

## 12. Ecological Information

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**

## 13. Disposal Considerations

### 13.1 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.

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) 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 be 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 disposal of material is carried out in accordance with Hazardous Substances (Disposal) Regulations 2001.

## 14. Transport Information



HAZCHEM 3YE

**Land Transport UNDG**

Class or division 3  
Subsidiary Risk  
UN Number 1263  
UN Packing Group II  
Shipping Name Paint Related Material  
Special Provisions 163 367  
Limited Quantities 5 L

**Air Transport IATA**

ICAO/IATA Class 3  
ICAO/IATA Subrisk  
UN/ID Number 1263  
Packing Group II  
Special provision A3 A72 A192  
Cargo only  
Packing instructions 364  
Maximum Qty/pack 60 L  
Passenger and Cargo  
Packing instructions 353  
Maximum Qty/pack 5 L  
Passenger & Cargo Limited Quantity  
Packing instructions Y341  
Maximum Qty/pack 1 L  
Shipping Name Paint Related Material

**Marine Transport IMDG**

IMDG Class 3  
IMDG Subrisk  
UN Number 1263  
UN Packing Group II  
EmS Number F-E S-E  
Special provisions 163 367  
Limited quantities 5L  
Marine pollutant No  
Shipping Name Paint Related Material

**15. Regulatory Information**

**15.1 HSNO approval number and Group Standard:**

HSR002662 Surface Coatings and Colourants (Flammable)

**15.2 Group Standard conditions and other regulations:**

Condition	Requirement
<b>SDS</b>	Safety data sheet must be available to a person handling the substance within 10 minutes.
<b>Emergency plan</b>	Required when present in quantities >1,000 L.
<b>Approved handler</b>	<b>Class 3.1B</b> when quantities exceed 250Lt in containers of greater than 5Lt capacity else greater than 500Lt in containers of less than 5Lt capacity.
<b>Tracking</b>	Not applicable
<b>Bunding and secondary containment</b>	Needs to meet the requirements based on total liquid holding
<b>Signage</b>	Required when present in quantities >1,000 L.
<b>Test certificate</b>	<b>Class 3.1B</b> when quantities exceed 100Lt in closed containers of capacity greater than 5Lt, else greater than 250Lt in closed containers of capacity



	less than 5Lt else greater than 50Lt in open containers
<b>Flammable zone</b>	Not required
<b>Fire extinguisher</b>	Not required

#### National Inventories

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

Y = All ingredients are on the inventory

## 16. Other Information

### 16.1 Revision summary:

March 2017

Initial preparation

### 16.2 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)
LC50	Lethal concentration 50% - concentration fatal to 50% of the tested population
LD50	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

### 16.3 References

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

Workplace exposure limits derived from Workplace Exposure Standards and Biological Exposure Indices 7th Edition. [www.mbie.govt.nz](http://www.mbie.govt.nz).

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

This SDS was prepared by Collievale Enterprises in accord with the EPA "Code of Practice for the Preparation of Safety Data Sheets" [HSNOCOP 8-1 (2006)]  
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End of MSDS