

Material Safety Data Sheet



1. Identification of the material and supplier

Names

Product name : Sarnacol 2170
ADG : Adhesives

Supplier

Supplier/Manufacturer : Sika Australia Pty. Ltd.
55 Elizabeth Street
(Locked Bag 482 BDC)
Wetherill Park, NSW 2164
Australia

Telephone no. : +61 2 9725 11 45

Fax no. : +61 2 9725 33 30

Emergency telephone number : +61 1800 033 111

Use of the substance/preparation : Chemical product for construction and industry

2. Hazards identification

Classification : F; R11
Xi; R36
R66, R67

Risk phrases : R11- Highly flammable.
R36- Irritating to eyes.
R66- Repeated exposure may cause skin dryness or cracking.
R67- Vapours may cause drowsiness and dizziness.

Statement of hazardous/dangerous nature : HAZARDOUS SUBSTANCE. DANGEROUS GOODS.

3. Composition/information on ingredients

Mixture : Yes.

ethyl acetate	141-78-6	30 - <60
butanone	78-93-3	30 - <60
toluene	108-88-3	0.1 - <1

Other ingredients, determined not to be hazardous according to NOHSC criteria, and not dangerous according to the ADG Code, make up the product concentration to 100%.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

4. First-aid measures

First-aid measures

Inhalation : Move exposed person to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Ingestion : Wash out mouth with water. Remove dentures if any. Move exposed person to fresh air. Keep person warm and at rest. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt

4 . First-aid measures

- or waistband.
- Skin contact** : Wash skin thoroughly with soap and water or use recognised skin cleanser. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.
- Notes to physician** : No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

5 . Fire-fighting measures

Extinguishing media

- Suitable** : Use dry chemical, CO₂, water spray (fog) or foam.
- Not suitable** : Do not use water jet.
- Special exposure hazards** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
- Highly flammable liquid. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Runoff to sewer may create fire or explosion hazard.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
- Hazardous combustion products** : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
halogenated compounds
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
- Hazchem code** : 3Y

6 . Accidental release measures

- Personal precautions** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see section 8).
- Environmental precautions** : Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
- Large spill** : Stop leak if without risk. Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product. Note: see section 1 for emergency contact information and section 13 for waste disposal.
- Small spill** : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor.

7. Handling and storage

- Handling** : Put on appropriate personal protective equipment (see section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapour or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use non-sparking tools. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by earthing and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Storage** : Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

8. Exposure controls/personal protection

Occupational exposure limits

Ingredient name

ethyl acetate

Exposure limits

Safe Work Australia (Australia, 8/2005).

STEL: 1440 mg/m³ 15 minute(s).

STEL: 400 ppm 15 minute(s).

TWA: 720 mg/m³ 8 hour(s).

TWA: 200 ppm 8 hour(s).

butanone

Safe Work Australia (Australia, 8/2005).

STEL: 890 mg/m³ 15 minute(s).

STEL: 300 ppm 15 minute(s).

TWA: 445 mg/m³ 8 hour(s).

TWA: 150 ppm 8 hour(s).

toluene

Safe Work Australia (Australia, 8/2005). Absorbed through skin.

STEL: 574 mg/m³ 15 minute(s).

STEL: 150 ppm 15 minute(s).

TWA: 191 mg/m³ 8 hour(s).

TWA: 50 ppm 8 hour(s).

- Recommended monitoring procedures** : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.

Exposure controls

Engineering measures

- : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapour or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Hygiene measures

- : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eyes

- : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts.

Hands

- : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

8 . Exposure controls/personal protection

- Respiratory** : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
- Skin** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

9 . Physical and chemical properties

- Physical state** : Liquid. [Fluid.]
- Colour** : Red.
- Odour** : Characteristic.
- Density** : 0.9 g/cm³ [20°C (68°F)]
- Flash point** : Closed cup: -4°C (24.8°F)
- Viscosity** : Dynamic: 1600 mPa·s (1600 cP)

10 . Stability and reactivity

- Stability** : The product is stable.
- Conditions to avoid** : Avoid all possible sources of ignition (spark or flame). Do not pressurise, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.
- Materials to avoid** : oxidizing materials
- Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11 . Toxicological information

Potential acute health effects

- Inhalation** : Vapours may cause drowsiness and dizziness.
- Ingestion** : No known significant effects or critical hazards.
- Skin contact** : Defatting to the skin. May cause skin dryness and irritation.
- Eye contact** : Irritating to eyes.

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Ethyl acetate	LD50 Dermal	Rabbit	>20 mL/kg	-
	LD50	Mouse	709 mg/kg	-
	Intraperitoneal			
	LD50 Oral	Mouse	4.1 g/kg	-
	LD50 Oral	Rat	5620 mg/kg	-
	LD50 Oral	Rabbit	4935 mg/kg	-
	LD50 Oral	Mouse	4100 mg/kg	-
butanone	LDLo	Rat	5 g/kg	-
	Subcutaneous			
	LD50 Dermal	Rabbit	6480 mg/kg	-
	LD50	Mouse	616 mg/kg	-
	Intraperitoneal			
	LD50	Rat	607 mg/kg	-
	Intraperitoneal			
Toluene	LD50 Oral	Mouse	3000 mg/kg	-
	LD50 Oral	Rat	2737 mg/kg	-
	LD50 Dermal	Rabbit	14100 uL/kg	-
	LD50	Rat	1332 mg/kg	-
	Intraperitoneal			
	LD50	Mouse	59 mg/kg	-
	Intraperitoneal			
	LD50	Rat	1960 mg/kg	-
	Intravenous			
	LD50 Oral	Rat	636 mg/kg	-

11 . Toxicological information

LD50	Mouse	2250 mg/kg	-
Subcutaneous			
LD50 Unreported	Mouse	2 g/kg	-
LD50 Unreported	Rat	6900 mg/kg	-
LDLo	Rat	2.5 mL/kg	-
Intraperitoneal			
LDLo	Rabbit	130 mg/kg	-
Intravenous			
TDLo	Rat	1 g/kg	-
Intraperitoneal			
TDLo	Rat	900 mg/kg	-
Intraperitoneal			
TDLo	Rat	750 mg/kg	-
Intraperitoneal			
TDLo	Rat	600 mg/kg	-
Intraperitoneal			
TDLo	Mouse	250 mg/kg	-
Intraperitoneal			
TDLo Oral	Mouse	2000 mg/kg	-
TDLo Oral	Rat	800 mg/kg	-
TDLo Oral	Rabbit	500 mg/kg	-
TDLo Oral	Rat	400 mg/kg	-

Conclusion/Summary : Not available.

Potential chronic health effects

Chronic toxicity

Conclusion/Summary : Not available.

Carcinogenicity

Conclusion/Summary : Not available.

Mutagenicity

Conclusion/Summary : Not available.

Teratogenicity

Conclusion/Summary : Not available.

Reproductive toxicity

Conclusion/Summary : Not available.

Chronic effects

: Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.

Carcinogenicity

: No known significant effects or critical hazards.

Mutagenicity

: No known significant effects or critical hazards.

Teratogenicity

: No known significant effects or critical hazards.

Developmental effects

: No known significant effects or critical hazards.

Fertility effects

: No known significant effects or critical hazards.

Over-exposure signs/symptoms

Inhalation

: Adverse symptoms may include the following:
nausea or vomiting
headache
drowsiness/fatigue
dizziness/vertigo

Ingestion

: No specific data.

Skin

: Adverse symptoms may include the following:
irritation
dryness
cracking

Eyes

: Adverse symptoms may include the following:
irritation
watering
redness

Target organs

: Contains material which may cause damage to the following organs: kidneys, lungs, liver, peripheral nervous system, upper respiratory tract, skin, eyes, central nervous system (CNS).

12 . Ecological information

Environmental effects : No known significant effects or critical hazards.

Aquatic ecotoxicity

Product/ingredient name	Test	Result	Species	Exposure
Ethyl acetate	-	Acute LC50 1600000 ug/L Fresh water	Crustaceans - Aquatic sowbug - Asellus aquaticus	48 hours
	-	Acute LC50 819000 ug/L Fresh water	Daphnia - Water flea - Daphnia magna	48 hours
	-	Acute LC50 786000 ug/L Fresh water	Daphnia - Water flea - Daphnia magna	48 hours
	-	Acute LC50 778000 ug/L Fresh water	Daphnia - Water flea - Daphnia magna	48 hours
	-	Acute LC50 698000 ug/L Fresh water	Daphnia - Water flea - Daphnia magna	48 hours
	-	Acute LC50 660000 ug/L Fresh water	Daphnia - Water flea - Daphnia magna	48 hours
	-	Acute LC50 560000 ug/L Fresh water	Daphnia - Water flea - Daphnia magna	48 hours
	-	Acute LC50 484000 to 602000 ug/L Fresh water	Fish - Rainbow trout,donaldson trout - Oncorhynchus mykiss - Juvenile (Fledgling, Hatchling, Weanling)	96 hours
	-	Acute LC50 425300 to 500000 ug/L Fresh water	Fish - Rainbow trout,donaldson trout - Oncorhynchus mykiss - Juvenile (Fledgling, Hatchling, Weanling)	96 hours
	-	Acute LC50 295000 ug/L Fresh water	Daphnia - Water flea - Daphnia pulex	48 hours
	-	Acute LC50 230000 ug/L Fresh water	Daphnia - Water flea - Daphnia pulex	48 hours
	-	Acute LC50 230000 to 250000 ug/L Fresh water	Fish - Fathead minnow - Pimephales promelas - 29 to 30 days - 18.2 mm - 0.106 g	96 hours
	-	Acute LC50 212500 to 225420 ug/L Fresh water	Fish - Indian catfish - Heteropneustes fossilis - 14.16 cm - 25.54 g	96 hours
	-	Acute LC50 175000 ug/L Fresh water	Daphnia - Water flea - Daphnia cucullata - 11 days	48 hours
	-	Acute LC50 154000 ug/L Fresh water	Daphnia - Water flea - Daphnia cucullata - 11 days	48 hours
butanone	-	Acute EC50	Daphnia - Water	48 hours

12 . Ecological information

	-	5091000 to 6440000 ug/L Fresh water Acute LC50 >400 ppm Marine water	flea - Daphnia magna - LARVAE Fish - Sheepshead minnow - Cyprinodon variegatus - Juvenile (Fledgling, Hatchling, Weanling) - 8 to 15 mm	96 hours
	-	Acute LC50 5600000 ug/L Fresh water	Fish - Western mosquitofish - Gambusia affinis - Adult	96 hours
	-	Acute LC50 3220000 to 3320000 ug/L Fresh water	Fish - Fathead minnow - Pimephales promelas - 31 days - 22 mm - 0.167 g	96 hours
	-	Acute LC50 >520000 ug/L Fresh water	Daphnia - Water flea - Daphnia magna	48 hours
	-	Chronic NOEC 400 ppm Marine water	Fish - Sheepshead minnow - Cyprinodon variegatus - Juvenile (Fledgling, Hatchling, Weanling) - 8 to 15 mm	96 hours
Toluene	-	Acute EC50 19600 ug/L Fresh water	Daphnia - Water flea - Daphnia magna - LARVAE	48 hours
	-	Acute EC50 6880 to 9830 ug/L Fresh water	Daphnia - Water flea - Daphnia magna - Neonate	48 hours
	-	Acute EC50 6000 ug/L Fresh water	Daphnia - Water flea - Daphnia magna - Juvenile (Fledgling, Hatchling, Weanling)	48 hours
	-	Acute LC50 36.2 to 44.6 mg/L Fresh water	Fish - Fathead minnow - Pimephales promelas - Juvenile (Fledgling, Hatchling, Weanling) - 28 to 33 days	96 hours
	-	Acute LC50 17.03 to 19.05 mg/L Fresh water	Fish - Fathead minnow - Pimephales promelas - LARVAE	96 hours
	-	Acute LC50 15.53 to 17.16 mg/L Fresh water	Fish - Rainbow trout,donaldson trout - Oncorhynchus mykiss - 39.2 mm	96 hours

12 . Ecological information

- 1.26 g

-	Acute LC50 13 to 15 mg/L Fresh water	Fish - Bluegill - Lepomis macrochirus - Young of the year - 0.32 to 1.2 g	96 hours
-	Acute LC50 280 to 480 ppm Marine water	Fish - Sheepshead minnow - Cyprinodon variegatus - Juvenile (Fledgling, Hatchling, Weanling) - 8 to 15 mm	96 hours
-	Acute LC50 15.5 ppm Marine water	Crustaceans - Daggerblade grass shrimp - Palaemonetes pugio - Adult	48 hours
-	Acute LC50 310000 to 420000 ug/L Fresh water	Daphnia - Water flea - Daphnia magna	48 hours
-	Acute LC50 170000 ug/L Marine water	Crustaceans - Dungeness or edible crab - Cancer magister - Zoea	48 hours
-	Acute LC50 97700 to 174700 ug/L Fresh water	Daphnia - Water flea - Daphnia magna - Neonate	48 hours
-	Acute LC50 86300 to 174700 ug/L Fresh water	Daphnia - Water flea - Daphnia magna - Neonate	48 hours
-	Acute LC50 15500 ug/L Marine water	Crustaceans - Daggerblade grass shrimp - Palaemonetes pugio	48 hours
-	Acute LC50 6780 to 7810 ug/L Fresh water	Fish - Rainbow trout, donaldson trout - Oncorhynchus mykiss - Juvenile (Fledgling, Hatchling, Weanling) - 54 mm - 2.187 g	96 hours
-	Acute LC50 6410 to 7180 ug/L Marine water	Fish - Pink salmon - Oncorhynchus gorbuscha - FRY - 3.5 cm - 0.35 g	96 hours
-	Acute LC50 5800 ug/L Fresh water	Fish - Rainbow trout, donaldson trout - Oncorhynchus mykiss	96 hours
-	Acute LC50 5500 ug/L Fresh water	Fish - Coho salmon, silver salmon - Oncorhynchus kisutch - FRY - 1	96 hours

12 . Ecological information

- Acute LC50 7.3 g
ul/L Marine water Fish - Striped
bass - Morone
saxatilis -
Juvenile
(Fledgling,
Hatchling,
Weanling) - 6 g

Conclusion/Summary : Not available.

Other ecological information

Biodegradability

Conclusion/Summary : Not available.

Other adverse effects : No known significant effects or critical hazards.

13 . Disposal considerations

Methods of disposal : The generation of waste should be avoided or minimised wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

14 . Transport information

ADG

UN number : UN1133
ADG Class : 3
Packing group : III
Proper shipping name : Adhesives
Label No. : 3
Hazchem code : 3Y

ADR

UN number : UN1133
ADR Class : 3
Classification code : F1
Packing group : III
Proper shipping name : Adhesives
Label No. : 3
Special provisions : 640H

IMDG

UN number : UN1133
IMDG Class : 3
Packing group : III
Proper shipping name : Adhesives
Emergency schedules (EmS) : F-E, S-D
Marine pollutant : No.
Label no. : 3

IATA

UN number : UN1133
IATA Class : 3
Packing group : III

14 . Transport information

Proper shipping name : Adhesives

Label no. : 3

15 . Regulatory information

[Standard for the Uniform Scheduling of Drugs and Poisons](#)

5

[Control of Scheduled Carcinogenic Substances](#)

[Ingredient name](#)

[Schedule](#)

No listed substance

Australia inventory (AICS) : All components are listed or exempted.

EU Classification : F; R11
Xi; R36
R66, R67

16 . Other information

Person who prepared the MSDS : Validated by DeSilva on 24.06.2010.

Date of previous issue : 07.06.2010.

✔ Indicates information that has changed from previously issued version.

Disclaimer

Material Safety Data Sheets are updated frequently. Please ensure that you have a current copy. MSDS may be obtained from the following website: www.sika.com.au

The information contained in this Safety Data Sheet corresponds to our level of knowledge at the time of publication. All warranties are excluded. Our most current General Sales Conditions shall apply. Please consult the product data sheet prior to any use and processing.