



Material Safety Data Sheet

This material is hazardous according to criteria of NOHSC.

Classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for Transport by Road and Rail.

1. Identification of the substance/preparation and of the company/undertaking

Product Name: BLOCKADE

Packaging Type: 360 g cartridge

Supplier: Selleys Pty Ltd

ABN: 67 000 049 427

Street Address: 1 Gow Street

Padstow 2211

Australia

Telephone Number: +61 2 9781 8777

Facsimile: +61 2 9781 8825

Emergency Telephone: 1 800 033 111 (ALL HOURS)

2. Composition/information on ingredients

Product Description: Sealant that can be used on most building materials such as roofs, gutters, bricks and shower screens. Grey or white paste with a toluene odour.

Methyl ethyl ketone 78-93-3	1-9%	R36/37
Toluene 108-88-3	10-29%	R11, R20
Calcium carbonate 471-34-1	30-60%	-
Hydrocarbon resin 69430-35-9	10-29%	-
Naphtha (petroleum), hydrotreated heavy 64742-48-9	1-9%	R65
Polybutene 9003-29-6	10-29%	-
Styrene/ethylene/butylene coploymer 66070-58-4	1-9%	-
Pigments, thickeners	1-9%	-

3. Hazards identification

Risk Phrases: Harmful by inhalation. Highly Flammable.

Product Name: BLOCKADE
Substance No: 000704117601

Issued: 01/07/2002

Version: 3



Material Safety Data Sheet

Poisons Schedule: None allocated.

4. First-aid measures

For advice, contact a Poisons Information Centre (Phone eg. Australia 131 126; New Zealand 03 474 7000) or a doctor.

- Inhalation:** Remove victim from area of exposure - avoid becoming a casualty. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume most comfortable position and keep warm. Keep at rest until fully recovered. If patient finds breathing difficult and develops a bluish discoloration of the skin (which suggests a lack of oxygen in the blood - cyanosis), ensure airways are clear of any obstruction and have a qualified person give oxygen through a face mask. Apply artificial respiration if patient is not breathing. Seek immediate medical advice.
- Skin Contact:** Wipe excess material from skin with a clean rag or paper towel (do NOT use solvent to clean skin). Remove contaminated clothing and wash skin with running water. If irritation occurs seek medical advice.
- Eye Contact:** If in eyes, wash out immediately with water. In all cases of eye contamination it is a sensible precaution to seek medical advice.
- Ingestion:** Rinse mouth with water. If swallowed, do NOT induce vomiting. Give a glass of water. Never give anything by the mouth to an unconscious patient. Seek medical advice. Get to a doctor or hospital quickly.
- Notes to physician:** Treat symptomatically and as for exposure to hydrocarbon solvents.

5. Fire-fighting measures

- Specific Hazards:** Flammable paste. Avoid all ignition sources. All potential sources of ignition (open flames, pilot lights, furnaces, spark producing switches and electrical equipment etc) must be eliminated both in and near the work area. Do NOT smoke. Vapour may travel a considerable distance to source of ignition and flash back.
- Fire-fighting advice:** On burning will emit toxic fumes. Fire fighters to wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to vapour or products of combustion.
- Suitable Extinguishing Media:** Foam, dry agent (carbon dioxide, dry chemical powder).

6. Accidental release measures

SMALL SPILLS: Slippery when spilt. Avoid accidents, clean up immediately. Wipe up with absorbent (clean rag or paper towels). Allow absorbent to dry before disposing with normal household garbage. Any residual material can be cleaned up with mineral turpentine or similar hydrocarbon solvent, or acetone based nail polish remover. Cured material can be removed by cutting or abrasion.

LARGE SPILLS: Shut off all possible sources of ignition. Clear area of all unprotected personnel. Slippery when spilt. Avoid accidents, clean up immediately. Wear protective equipment to prevent skin and eye contact and breathing in vapours. Work up wind or increase ventilation. Contain - prevent run off into drains and waterways. Use absorbent (soil, sand or other inert material). Use a spark-free shovel. If contamination of sewers or waterways has occurred advise local emergency services. Collect and seal in properly labelled containers or drums for disposal.

Product Name: **BLOCKADE**
Substance No: **000704117601**

Issued: **01/07/2002** Version: **3**



Material Safety Data Sheet

7. Handling and storage

Handling advice: Avoid skin and eye contact and breathing in vapour.

Storage advice: Store in cool place and out of direct sunlight. Store away from sources of heat or ignition. Store away from oxidising agents. Keep containers closed when not in use - check regularly for leaks.

8. Exposure controls/personal protection

Occupational Exposure Limits:

No value assigned for this specific material by the National Occupational Health and Safety Commission. However, Exposure Standard(s) for constituent(s):

Toluene: 8hr TWA = 191 mg/m³ (50 ppm), 15 min STEL = 574 mg/m³ (150 ppm)

Methyl ethyl ketone (MEK): 8hr TWA = 445 mg/m³ (150 ppm), 15 min STEL = 890 mg/m³ (300 ppm)

Calcium carbonate: 8hr TWA = 10 mg/m³

As published by the National Occupational Health and Safety Commission.

TWA - The time-weighted average airborne concentration over an eight-hour working day, for a five-day working week over an entire working life.

STEL (Short Term Exposure Limit) – the average airborne concentration over a 15 minute period which should not be exceeded at any time during a normal eight hour work day. According to current knowledge this concentration should neither impair the health or, not cause undue discomfort to, nearly all workers.

These Exposure Standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept to as low a level as is workable. These exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.

Engineering Control Measures:

Ensure ventilation is adequate and that air concentrations of components are controlled below quoted Exposure Standards. Use with local exhaust ventilation or while wearing organic vapour respirator. Keep containers closed when not in use.

Personal Protective Equipment:

Selleys Safe Handling Code: Yellow

Yellow - Wear clean overalls, safety boots, general purpose gloves, full face visor and respirator with remote canister meeting the requirements of AS/NZS 1715 and AS/NZS 1716. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use.

9. Physical and chemical properties

Physical state:	Paste
Colour:	Grey or White
Odour:	Toluene
Solubility:	Insoluble in water.

Product Name: BLOCKADE
Substance No: 000704117601

Issued: 01/07/2002 **Version:** 3



Material Safety Data Sheet

Specific Gravity:	1.26 @ 20°C
Relative Vapour Density (air=1):	N Av
Vapour Pressure (20 °C):	N Av
Flash Point (°C):	4.4°C (toluene)
Flammability Limits (%):	N Av
Autoignition Temperature (°C):	N Av
% Volatile by Weight:	19
Solubility in water (g/L):	N Av
Melting Point/Range (°C):	N App
Boiling Point/Range (°C):	105 approx
Decomposition Point (°C):	N Av
Sublimation Point (°C):	N App
pH:	N App
Viscosity:	1500 Pa.s (25°C)
Evaporation Rate:	N Av

10. Stability and reactivity

Stability: Reacts with oxidising agents .

11. Toxicological information

No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label. Symptoms or effects that may arise if the product is mishandled and overexposure occurs are:

- Ingestion:** Swallowing can result in nausea, vomiting and central nervous system depression. If the victim is showing signs of central system depression (like those of drunkenness) there is greater likelihood of the patient breathing in vomit and causing damage to the lungs. No adverse effects expected after swallowing the fully cured material.
- Eye contact:** May be an eye irritant.
- Skin contact:** Contact with skin may result in irritation. Will have a degreasing action on the skin. Repeated or prolonged skin contact may lead to irritant contact dermatitis. Cured sealant (solvent free) is not expected to be a skin irritant.
- Inhalation:** Material may be irritant to the mucous membranes of the respiratory tract (airways). Breathing in vapour can result in headaches, dizziness and possible nausea. Breathing in high concentrations can produce central nervous system depression, which can lead to loss of co-ordination, impaired judgement and if exposure is prolonged, unconsciousness.

Long Term Effects:

For the solvent component (toluene) (1): Available evidence from animal studies indicate that repeated or prolonged exposure to a component of this material could result in effects on the liver, kidneys, and central nervous system.

Toxicological Data:

No LD50 data available for the product. For the constituent Toluene (1):

Oral LD50 (rat):	636 mg/kg
Dermal LD50 (rabbit):	14100 uL/kg
SKIN:	Mild to moderate irritant
EYES:	Mild to moderate irritant.

The toxicity of the product may be attributed to the solvents it contains which may cause central nervous system depression. Additive effects may occur with mixtures of solvents. Similar effects can occur where the consumption of

Product Name: BLOCKADE
Substance No: 000704117601

Issued: 01/07/2002 **Version:** 3



Material Safety Data Sheet

alcohol is also involved. Under controlled conditions, inhalation of 50, 75 or 100 ppm of toluene for 4 to 6 hours was associated with headache and irritation. (1) Both bioassay tests and other available data (including two human studies) indicate that toluene is not carcinogenic. (1)

12. Ecotoxicological information

Avoid contaminating waterways.

13. Disposal considerations

Refer to Waste Management Authority. Dispose of material through a licensed waste contractor. Advise flammable nature. Solvent free solids (cured sealant) are not flammable. Normally suitable for disposal at approved land waste site.

14. Transport information

Road and Rail Transport

Classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for Transport by Road and Rail.

UN No: 1133
Class-primary: 3 Flammable Liquid
Packing Group: III
Proper Shipping Name: ADHESIVES

Hazchem Code: 3[Y]

Marine Transport

Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

UN No: 1133
Class-primary: 3 Flammable Liquid
Packing Group: III
Proper Shipping Name: ADHESIVES

Air Transport

Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.

UN No: 1133
Class-primary: 3 Flammable Liquid
Packing Group: III
Proper Shipping Name: ADHESIVES

Product Name: **BLOCKADE**
Substance No: 000704117601

Issued: 01/07/2002 Version: 3



Material Safety Data Sheet

15. Regulatory information

Classification: This material is hazardous according to criteria of NOHSC.
Xn: Harmful

Risk Phrase(s): R20: Harmful by inhalation.
R11: Highly Flammable.

Safety Phrase(s): S16: Keep away from sources of ignition - No smoking.
S25: Avoid contact with eyes.
S29: Do not empty into drains.
S33: Take precautionary measures against static discharges.

Poisons Schedule: None allocated.

All the constituents of this material are listed on the Australian Inventory of Chemical Substances (AICS).

16. Other information

(1) Material Safety Data Sheet - Orica Australia Pty Ltd; 05/ 2000.

For further copies of this sheet or other product information contact Selley's Proprietary Limited Customer Service.

Phone: 1300 555 205 (Australia wide)

Fax: 1300 555 305 (Australia wide)

Phone: 9 820 4852 (New Zealand)

Fax: 0800 804 583 (New Zealand)

This material safety data sheet has been prepared by SH&E Shared Services, Orica.

Reason(s) for Issue:

5 Yearly Revised Primary MSDS

This MSDS summarises to our best knowledge at the date of issue, the chemical health and safety hazards of the material and general guidance on how to safely handle the material in the workplace. Since Orica Limited cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, assess and control the risks arising from its use of the material.

If clarification or further information is needed, the user should contact their Orica representative or Orica Limited at the contact details on page 1.

Orica Limited's responsibility for the material as sold is subject to the terms and conditions of sale, a copy of which is available upon request.

Product Name: BLOCKADE
Substance No: 000704117601

Issued: 01/07/2002

Version: 3