

# Material Safety Data Sheet



## Hazardous Substance, Dangerous Goods

### 1. MATERIAL AND SUPPLY COMPANY IDENTIFICATION

Product name: **Bostik Acetone**

**Synonyms:**

Bostik Acetone, 20 Litres  
Bostik Acetone, 200 Litres

**Mancode**

234478  
290033

**Recommended use:** A solvent for cleaning or diluting.

**Supplier:** Bostik Australia Pty Ltd  
**ABN:** 79 003 893 838  
**Street Address:** 51-71 High Street  
Thomastown VIC 3074  
Australia  
**Telephone:** +613 9279-9333  
**Facsimile:** +613 9279-9342

**Emergency telephone number:** 1800 033 111

### 2. HAZARDS IDENTIFICATION

This material is hazardous according to health criteria of NOHSC Australia.

**Hazard Category:**

Xi Irritant

**Risk Phrase(s):**

R36/38: Irritating to eyes and skin.  
R66: Repeated exposure may cause skin dryness or cracking.  
R67: Vapours may cause drowsiness and dizziness.

**Safety Phrase(s):**

S23: Do not breathe vapour.  
S24/25: Avoid contact with skin and eyes.  
S36/37/39: Wear suitable protective clothing, gloves and eye/face protection.  
S38: In case of insufficient ventilation, wear suitable respiratory equipment.

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

**Class:** 3 Flammable Liquid

**Poisons Schedule (Aust):** S5

This material is a Scheduled Poison S5 and must be stored, maintained and used in accordance with the relevant regulations.



### 3. COMPOSITION INFORMATION

CHEMICAL ENTITY	CAS NO.	PROPORTION
Acetone	67-64-1	>99%
Water	7732-18-5	<0.5%
		100%

### 4. FIRST AID MEASURES

If poisoning occurs, contact a doctor or Poisons Information Centre (Phone Australia 131 126, New Zealand 0800 764 766).

**Inhalation:** Remove victim from 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 breathing laboured and patient cyanotic (blue), ensure airways are clear and have a qualified person give oxygen through a facemask. If breathing has stopped apply artificial respiration at once. In the event of cardiac arrest, apply external cardiac massage. Seek immediate medical advice.

**Skin contact:** For gross contamination, immediately drench with water and remove clothing. Continue to flush skin and hair with plenty of water (and soap if material is insoluble). For skin burns, cover with a clean, dry dressing until medical help is available. If blistering occurs, do NOT break blisters. If swelling, redness, blistering, or irritation occurs seek medical assistance.

**Eye contact:** If in eyes, hold eyelids apart and flush the eyes continuously with running water. Continue flushing until advised to stop by the Poisons Information Centre or a Doctor; or for at least 15 minutes and transport to Doctor or Hospital.

**Ingestion:** Immediately rinse mouth with water. If swallowed, do NOT induce vomiting. Give a glass of water to drink. Never give anything by the mouth to an unconscious patient. If vomiting occurs give further water. Seek medical advice.

**Notes to physician:** Treat symptomatically.

### 5. FIRE-FIGHTING MEASURES

**Specific hazards:** Flammable liquid. May form flammable vapour mixtures with air. Flameproof equipment necessary in area where this chemical is being used. Nearby equipment must be earthed. Electrical requirements for work area should be assessed according to AS3000. Vapour may travel a considerable distance to source of ignition and flash back. 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.

**Fire fighting further advice:** Heating can cause expansion or decomposition leading to violent rupture of containers. If safe to do so, remove containers from path of fire. Keep containers cool with water spray. On burning may 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.

**Hazchem Code:** 2[Y]E.

# Material Safety Data Sheet



**Suitable extinguishing media:** If material is involved in a fire use water fog (or if unavailable fine water spray), foam, dry agent (carbon dioxide, dry chemical powder).

## 6. ACCIDENTAL RELEASE MEASURES

### SMALL SPILLS

Wear protective equipment to prevent skin and eye contamination. Avoid inhalation of vapours. Wipe up with absorbent (clean rag or paper towels). Allow absorbent to dry before disposing with normal household garbage. Collect and seal in properly labelled containers or drums for disposal.

### 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 contamination and the inhalation of 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. Collect and seal in properly labelled containers or drums for disposal. If contamination of sewers or waterways has occurred advise local emergency services.

**Dangerous Goods – Initial Emergency Response Guide No: 14**

## 7. HANDLING AND STORAGE

**Handling:** Avoid skin and eye contact and inhalation of vapour, mist or aerosols.

**Storage:** Store in a cool, dry, well-ventilated place and out of direct sunlight. Store away from incompatible materials described in Section 10. Store away from sources of heat or ignition. Keep containers closed when not in use - check regularly for leaks.

This material is classified as a Dangerous Good Class 3 Flammable Liquid as per the criteria of the Australian Dangerous Goods Code and must be stored in accordance with the relevant regulations.

This material is a Scheduled Poison S5 and must be stored, maintained and used in accordance with the relevant regulations.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### National occupational exposure limits:

No value assigned for this specific material by the National Occupational Health and Safety Commission (NOHSC Australia).

However for:

	TWA		STEL		CARCINOGEN CATEGORY	NOTICES
	ppm	mg/m3	ppm	mg/m3		
Acetone	500	1,190	1,000	2,380	-	-

As published by the National Occupational Health & Safety Commission (NOHSC Australia).

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

# Material Safety Data Sheet



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 workday.

These Exposure Standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept too 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.

If the directions for use on the product label are followed, exposure of individuals using the product should not exceed the above standard. The standard was created for workers who are routinely, potentially exposed during product manufacture.

**Biological Limit Values:** As per the "National Model Regulations for the Control of Workplace Hazardous Substances [NOHSC: 1005 (1994)]" the ingredients in this material do not have a Biological Limit Allocated.

**Engineering measures:** Ensure ventilation is adequate to maintain air concentrations below Exposure Standards. Use with local exhaust ventilation or while wearing appropriate respirator. Vapour heavier than air - prevent concentration in hollows or sumps. DO NOT enter confined spaces where vapour may have collected. Keep containers closed when not in use.

**Personal protection equipment:** OVERALLS, SAFETY SHOES, CHEMICAL GOGGLES, GLOVES, RESPIRATOR.

Wear overalls, chemical goggles and impervious gloves. Use with adequate ventilation. If inhalation risk exists wear organic vapour/particulate respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716. Available information suggests that gloves made from neoprene should be suitable for intermittent contact. However, due to variations in glove construction and local conditions, the user should make a final assessment. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Form / Colour / Odour:** Colourless liquid with characteristic odour.

<b>Solubility:</b>	Miscible with water.
<b>Specific Gravity (20 °C):</b>	0.791
<b>Relative Vapour Density (air=1):</b>	2.0
<b>Vapour Pressure (20 °C):</b>	24 kPa
<b>Flash Point (°C):</b>	-17
<b>Odour Threshold:</b>	100-140 ppm
<b>Flammability Limits (%):</b>	LEL – 2.15; UEL – 13
<b>Autoignition Temperature (°C):</b>	465
<b>Melting Point/Range (°C):</b>	-94
<b>Boiling Point/Range (°C):</b>	56
<b>Decomposition Point (°C):</b>	N Av
<b>pH:</b>	N App
<b>Viscosity (25 °C):</b>	0.303 cP
<b>Evaporation Rate (n-Butyl acetate=1):</b>	6

(Typical values only - consult specification sheet)

N Av = Not available

N App = Not applicable

## 10. STABILITY AND REACTIVITY

**Chemical stability:** This material is thermally stable when stored and used as directed.

**Conditions to avoid:** Elevated temperatures and sources of ignition.

**Incompatible Materials:** Oxidising agents, organic acids, mineral acids, alkalis, chloroform and activated carbon. Can react violently if in contact with bromoform, chloroform in the presence of base or sulphur dichloride.

**Hazardous decomposition products:** Oxides of carbon and nitrogen, smoke and other toxic fumes.

**Hazardous reactions:** Will not react.

## 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:

### Acute Effects

**Inhalation:** Vapour concentrations above about 500 ppm are irritating to the nose and throat. Three out of four females exposed to 1000 ppm, 7.5 hours/day for 4 days were reported to suffer menstrual irregularities. Inhalation of vapour can result in headaches, dizziness and possible nausea. Inhalation of high concentrations can produce central nervous system depression, which can lead to loss of co-ordination, impaired judgment and, if exposure is prolonged, unconsciousness. The consumption of alcohol increases the toxic effect.

**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.

**Eye contact:** Liquid is a moderate to severe eye irritant. High concentrations of 500-1000 ppm vapour are irritating to the eyes.

**Ingestion:** Swallowing may result in irritation of the gastrointestinal tract, nausea, headache and vomiting. Swallowing large amounts may result in symptoms similar to those described in 'Inhalation'.

**Long Term Effects:** A study of 800 workers exposed occupationally to acetone vapours, 600-2150 ppm, over an 18 year period revealed no significant adverse effects in exposed workers compared with unexposed workers. Poorly controlled diabetes and starvation during pregnancy can result in metabolic ketosis (a condition characterised by elevated ketone levels in the body tissues and fluids), which can have a harmful effect on the foetus and mother.

### Acute toxicity / Chronic toxicity

No LD50 data available for the product.

#### Acetone

Oral LD50 (rat):	5,800-8,393 mg/kg
Dermal LD50 (rabbit):	>15,688 (no deaths recorded)
Inhalation LC50 (rat):	50.1 mg/l/8 hr
Inhalation LC50 (rat):	76.0 mg/l/4 hr
EYES (rabbit):	Redness of conjunctiva - 2.3

# Material Safety Data Sheet



100uL of acetone was applied to six New Zealand white albino rabbits according to a modified draize test. Overall the results show that acetone is a mild eye irritant.

Subjects exposed to vapour concentrations of 500-1000 ppm experienced irritation to the eyes.

Vapour concentrations above 500 ppm are irritating to the nose and throat. Higher concentrations above 1000 ppm have resulted in narcotic effects.

## 12. ECOLOGICAL INFORMATION

Avoid contaminating waterways.

### Acetone

Avoid contaminating waterways.

LC50 (bluegill sunfish):	8300 mg/L
24 hr LC50 (rainbow trout):	6,100 mg/L (flow through)
96 hr LC50 (Daphnia magna):	>10,000 mg/L
24 Hr LC50 (fingerling trout):	6,100 mg/L (flow through)
14 d LC50 guppy (Poecilia reticular):	7,032 ppm
24 hr EC50 (Daphnia Magna):	>10,000 mg/L
48 hr EC50 (Daphnia magna):	13,500 mg/L
IC0 (Pseudomonas putida):	1,700 mg/L
7-8 Day Toxicity Threshold (Blue-green algae):	530 mg/L
7-8 Day Toxicity Threshold (Green algae):	7,500 mg/L

### Persistence & Biodegradability

Acetone has negligible potential to bioaccumulate.

Octanol/ water Partition Coefficient Log Kow: -0.24

## 13. DISPOSAL CONSIDERATIONS

Refer to State/Territory Land Waste Management Authority.

## 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.

<b>UN No:</b>	1090
<b>Dangerous Goods Class:</b>	3
<b>Packing Group:</b>	II
<b>Hazchem Code:</b>	2[Y]E
<b>Emergency Response Guide No:</b>	14

**Proper Shipping Name:** ACETONE

**Segregation Dangerous Goods:** Not to be loaded with explosives (Class 1), flammable gases (Class 2.1), if both are in bulk, toxic gases (Class 2.3), spontaneously combustible substances (Class 4.2), oxidising agents (Class 5.1), organic peroxides (Class 5.2) or radioactive substances (Class 7), however exemptions may apply.

# Material Safety Data Sheet



## MARINE TRANSPORT

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

**UN No:** 1090  
**Dangerous Goods Class:** 3  
**Packing Group:** II

**Proper Shipping Name:** ACETONE

## 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:** 1090  
**Dangerous Goods Class:** 3  
**Packing Group:** II

**Proper Shipping Name:** ACETONE

## 15. REGULATORY INFORMATION

**Poisons Schedule (Aust):** S5

This material is listed on the Australian Inventory of Chemical Substances (AICS).

## 16. OTHER INFORMATION

### Literary reference

This Material Safety Data Sheet has been prepared by Chemical Data Services Pty Ltd on behalf of its client.

Reason(s) For Issue: First Issue

Material Safety Data Sheets are updated frequently. Please ensure that you have a current copy.

This MSDS summarises at the date of issue our best knowledge of the health and safety hazard information of the product, and in particular how to safely handle and use the product in the workplace. Since Bostik Australia Pty Ltd cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, review this MSDS in the context of how the user intends to handle and use the product in the workplace.

If clarification or further information is needed to ensure that an appropriate assessment can be made, the user should contact this company.

Our responsibility for product as sold is subject to our standard terms and conditions, a copy of which is sent to our customers and is also available upon request.