



Adrenaline (1:10,000 as hydrochloride)

MATERIAL SAFETY DATA SHEET

Page 1 of 5 - Date of Issue: 9 February 2010

IMPORTANT NOTICE This Material Safety Data Sheet (MSDS) is prepared by CSL Limited in accordance with the Australian National Occupational Health & Safety Commission National Code of Practice for the Preparation of Material Safety Data Sheets [NOHSC:2011(2003)]. The information contained herein must not be altered or deleted. Additional information may be appended to the MSDS, but it must be marked clearly to indicate that it is not part of the original.

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name Adrenaline 1:10,000 (as hydrochloride) 1mg per 10mL

Other Names Epinephrine Injection 1:10,000

Manufacturer's Product Code 0174 2551 1 x 10mL

Use Adjunctive use in the management of cardiac arrest.

Supplier Name CSL Limited (ABN 99 051 588 348)

Address 45 Poplar Road, Parkville, Victoria 3052, Australia

Telephone +61 03 9389 1911

Emergency Telephone 03 9389 1984 (24hr)

2. HAZARDS IDENTIFICATION

Classified as hazardous according to the criteria of NOHSC
Not classified as a dangerous good by the criteria of the ADG Code

3. COMPOSITION/INFORMATION ON INGREDIENTS

<i>Chemical Name:</i>	<i>CAS number:</i>	<i>Proportion:</i>
Adrenaline hydrochloride	51-43-4	0.01% (1:10,000)
Sodium Chloride	7647-14-5	<1%
Citric Acid Monohydrate	5949-29-1	<0.2%
Sodium Bisulfite	7631-90-5	<0.2%
Sodium Citrate	68-04-2	<0.1%
10% w/v Hydrochloric Acid	7647-01-0	*
Water for injection	-	up to 100%

* Negligible % of Hydrochloric Acid to dissolve Adrenaline and adjust pH.

4. FIRST AID MEASURES

Accidental Injection Seek immediate medical attention. Flush wound site with tepid running water. Treat exposed extremities by bathing them in warm water and massage lightly until medical help arrives.

Eye Rinse eye with immediately with water for 15 minutes. Seek medical advice if deemed necessary.

Swallowed Rinse mouth with water. Seek medical advice if deemed necessary.

Skin Wash affected skin surfaces immediately with mild soap and copious amounts of tepid water.

First Aid Facilities Ensure water is available at point of use.

Aggravated Medical Conditions Adrenaline Injection MIN-I-JET contains a sulfite which may cause allergic type reactions in certain susceptible individuals.

Refer to product information leaflet for information regarding pre-existing conditions.

Advice To Doctor *Overdosage:*
Combined alpha and beta adrenergic blocking agents such as labetalol may counteract the effects of adrenaline, or a beta blocking agent may be used to treat supraventricular arrhythmias and phentolamine to control the alpha mediated effects on the peripheral circulation. Rapidly acting vasodilators such as nitrates and sodium nitroprusside may also be helpful.

5. FIRE FIGHTING MEASURES

Fire/Explosion Hazard Non-combustible. Not considered a significant fire risk. Where possible, contain and collect fire-fighting water for later disposal.

Fire Extinguishing Media No restrictions.

Hazchem Code None allocated.

6. ACCIDENTAL RELEASE MEASURES

Minor Spills

- Wear protective gloves and safety glasses.
- Place spilled material in clean, dry, sealed container for disposal.
- Place syringe in a secure sharps container.
- Wash area with copious amounts of water.

Major Spills

- Wear protective gloves and safety glasses.
- Do not allow material to enter sewage system or surface/ground water.
- Place spilled material in clean, dry, sealed container for disposal.
- Place syringes in a secure sharps container.
- Wash area with copious amounts of water.

7. HANDLING AND STORAGE

- Store below 25°C.
- Protect from light.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Standards No exposure limits set by NOHSC or ACGIH

Engineering Controls None under normal operating conditions.

- Personal Protection**
- Wear safety glasses if eye contact is possible.
 - For good infection control, gloves should be worn when administering an injection.

The local concentration of material, quantity and conditions of use determine the type of personal protective equipment required. For further information, consult your Occupational Health and Safety Adviser.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance Clear, colourless to slightly yellow, liquid in a pre-filled MIN-I-JET[®] syringe.

Odour Odourless

pH 2.2-5.0

Boiling Point/Melting Point As for water (approx.)

Vapour Pressure Not determined

Vapour Density Not determined

Specific Gravity As for water (approx.)

Flashpoint Not flammable

Flammability Limits Not flammable

Solubility in Water Aqueous solution.

10. STABILITY AND REACTIVITY

Reactivity Not known to be incompatible with other materials.

Stability Stable under anticipated storage and handling conditions (refer section 7).

Decomposition Products Not determined

11. TOXICOLOGICAL INFORMATION

Accidental Injection Accidental intravenous injection may rarely cause a stroke, lung upsets or severe heartbeat irregularities due to its effect upon blood pressure and cardiac rhythm.

Side effects of adrenaline can include palpitations, tremor, restlessness, anxiety, weakness, dizziness, headache, shortness of breath, cold hands and feet.

Adrenaline accidentally injected into hand, foot or other extremities may cut off blood supply that may result in gangrene. Seek immediate medical attention in the event of accidental injection.

See product information leaflet for information regarding pre-existing conditions.

Eye May cause irritation, blurred vision and photophobia.

Swallowed May cause heart irregularities, palpitations, tremor, restlessness, anxiety, weakness, dizziness, headache, shortness of breath, cold hands and feet.

Skin May cause irritation. If absorbed through the skin, may cause heart irregularities, palpitations, tremor, restlessness, anxiety, weakness, dizziness, headache, shortness of breath, cold hands and feet.

Inhaled Not an expected route of exposure.

Chronic Health Effects No chronic health effects known.

Toxicity Data LD50 oral = 50 mg/kg (Species: Mouse) for Adrenaline hydrochloride
LD50 dermal = 62 mg/kg (Species: rat) for Adrenaline hydrochloride

12. ECOLOGICAL INFORMATION

- No data available.
- For good environmental practice avoid discharge to waterways.

13. DISPOSAL CONSIDERATIONS

- In accordance with state land and waste management authority.
- Disposal of this material should only be undertaken by a licensed chemical disposal company.

14. TRANSPORT INFORMATION

UN Number None allocated

DG Class None allocated

Subsidiary Risk None allocated

Packing Group None allocated

Hazchem Code None allocated

15. REGULATORY INFORMATION

Poisons Schedule Number Schedule 3 (S3) – Pharmacist only medicine

16. OTHER INFORMATION

Last Revised 9 February 2010

Reason for Revision – Reissue of MSDS

Abbreviations

- NOHSC – National Occupational Health and Safety Commission (please note NOHSC information can be sourced from www.ascc.gov.au)
- ACGIH – American Conference of Governmental Industrial Hygienists
- ADG Code – Australian Dangerous Goods Code
- UN Number – United Nations Number
- DG Class – Dangerous Goods Class
- CAS Number – Chemical Abstract Service Number
- LD50 – Calculated dose causing death to 50% of an entire defined population of experimental animals.

Contact Point

Company Contact:	+61 3 9389 1984 (24hr)
Australian Poisons Information Centre, 24 hour service:	13 11 26
Australian Police, Fire Brigade or Ambulance:	000
New Zealand Poisons Information Centre, 24 hour service:	(03) 4747 000
New Zealand Police, Fire Brigade or Ambulance:	111

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