



NEW ZEALAND MADE FOR THE TRADE

# SAFETY DATA SHEET

## 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

**Product Name:** Circuit Reviver Aerosol 400ml  
**Product Code:** 7174  
**Recommended Use:** Oil Based Cleaner for Electrical Contact & Metallic Surfaces.  
**Supplier:** Chemz Ltd  
PO Box 113  
Whakatu  
Hastings 4180  
New Zealand  
**Telephone Number:** +64 6 877 9690  
**Emergency Telephone:** 111  
**New Zealand Poisons Centre:** 0800 764 766 (0800POISON)  
**Australian Poisons Centre:** 13 1126 (from anywhere in Australia)

## 2. HAZARDS IDENTIFICATION

Classified as a Dangerous Good according to NZS 5433:2007 Transport of Dangerous Goods on Land.  
Classified as hazardous according to criteria in the HS (Minimum Degrees of Hazard) Regulations 2017.

**Subclasses:** Subclass 2.1.2 Category A - Flammable Aerosols.  
Subclass 6.1 Category E - Substances which are acutely toxic.  
Subclass 6.3 Category B - Substances that are mildly irritating to the skin.  
Subclass 9.1 Category B - Substances that are ecotoxic in the aquatic environment.

### Hazard and Precautionary Information:

Warning. Flammable aerosol. Causes mild skin irritation. May be harmful if inhaled. Toxic to aquatic life with long lasting effects. Keep out of reach of children. Read label before use. Read Safety Data Sheet before use. Keep away from heat/sparks/open flames/hot surfaces. No smoking. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use. Protect from sunlight. Do not expose to temperatures exceeding 50 °C

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENTS	CAS Number	Proportion, %	WES TWA, mg/m <sup>3</sup>	WES STEL, mg/m <sup>3</sup>
Isohexane	64742-49-0	30 - 60	500	3500
Isopropyl Alcohol	67-63-0	30 - 60	983	1230
Oleic Acid	112-80-1	< 10		
Aromatic Hydrocarbon Solvent	108-88-3	<10	188	Not established
Butane	106-97-8	< 10	1900	Not established
Propane	74-98-6	10 - 30	Simple Asphyxiant	Not established
Non hazardous ingredients		to 100		



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### 4. FIRST AID MEASURES

For advice, contact a Poisons Information Centre (Phone New Zealand 0 800 764766) 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 discolouration 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:**

If skin contact occurs, 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. Seek medical advice.

**Medical attention and special treatment:**

Treat symptomatically.

### 5. FIRE FIGHTING MEASURES

**Hazards from combustion products:**

Flammable gas. On burning will emit toxic fumes, including those of oxides of carbon .

**Precautions for fire fighters and special protective equipment:**

Heating can cause expansion or decomposition of the material, which can lead to the containers exploding. If safe to do so, remove containers from the path of fire. Keep containers cool with water spray. 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:**

Fine water spray, normal foam, dry agent (carbon dioxide, dry chemical powder).

**Hazchem Code:** 2YE

### 6. ACCIDENTAL RELEASE MEASURES

**Emergency procedures:**

Shut off all possible sources of ignition. Clear area of all unprotected personnel.

**Methods and materials for containment and clean up:**

In the event of an aerosol can developing a leak, allow to fully discharge in the open air before disposal.



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### 7. HANDLING AND STORAGE

**Precautions for safe handling:** Avoid skin and eye contact and breathing in vapour, mists and aerosols. Ensure spray nozzle is always directed away from the user. May form flammable vapour mixtures with air. 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.

**Conditions for safe storage:** 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 New Zealand Occupational Safety and Health Service (OSH).

However, Workplace Exposure Standard(s) for constituent(s):

Butane: WES-TWA 800 ppm, 1,900 mg/m<sup>3</sup>

Propane: Simple asphyxiant-may present an explosion hazard

As published by the New Zealand Occupational Safety and Health Service (OSH).  
No Exposure Standards assigned to other constituents.

WES - TWA (Workplace Exposure Standard - Time Weighted Average) - The eight-hour, time-weighted average exposure standard is designed to protect the worker from the effects of long-term exposure. Asphyxiant - gases which can lead to reduction of oxygen concentration by displacement or dilution. The minimum oxygen content in air should be 18% by volume under normal atmospheric pressure.

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 controls:**

Ensure ventilation is adequate and that air concentrations of components are controlled below quoted Exposure Standards. Use in well ventilated areas. Keep containers closed when not in use. An asphyxiant gas which can lead to the displacement or dilution of oxygen. The minimum oxygen content in air should be 18% by volume under normal atmospheric pressure.

#### **Personal Protective Equipment:**

The selection of PPE is dependant on a detailed risk assessment. The risk assessment should consider the work situation, the physical form of the chemical, the handling methods, and environmental factors. Wear clean overalls, safety boots, general purpose gloves (PVC) and safety spectacles. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use. For leaking aerosol cans: Wear clean overalls, safety boots, general purpose gloves (PVC) and full face visor. If risk of inhalation exists, wear organic vapour/particulate respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716.

FOR CONSUMER USE: Wear rubber gloves and eye protection while handling the product. Wash hands after use.



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### 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance:</b>	Clear red liquid spray.
<b>Boiling Point:</b>	No specific data. Liquid at normal temperature.
<b>Can Pressure, kPa:</b>	300 – 600
<b>Vapour Density, (Air = 1):</b>	> 1
<b>Flashpoint, C:</b>	< 0 (Hydrocarbon propellant)
<b>Solubility in Water:</b>	Insoluble

### 10. STABILITY AND REACTIVITY

**Chemical stability:** Stable under normal conditions of use.

**Conditions to avoid:** Avoid exposure to heat, sources of ignition, and open flame.

**Incompatible materials:** Incompatible with oxidising agents.

**Hazardous decomposition products:** Oxides of carbon.

**Hazardous reactions:** Hazardous polymerisation will not occur.

### 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. Breathing in vomit may lead to aspiration pneumonia (inflammation of the lung).

**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.

**Inhalation:** Breathing in vapour can result in headaches, dizziness, drowsiness, 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. Intentional misuse by deliberately concentrating and breathing the contents can be harmful or fatal.

**Long Term Effects:** No information available for the product.

**Toxicological Data:** No LD50 data available for the product.

### 12. ECOLOGICAL INFORMATION

**Ecotoxicity** Avoid contaminating waterways.

### 13. DISPOSAL CONSIDERATIONS

**Disposal methods:** Refer to Waste Management Authority. Advise flammable nature. Do not puncture or burn can when empty; contents are under pressure. If aerosol can develops a leak, allow to fully discharge before disposal. Normally suitable for disposal at approved land waste site.



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### 14. TRANSPORT INFORMATION

#### Road and Rail Transport:

Classified as a Dangerous Good according to NZS 5433:2007 Transport of Dangerous Goods on Land.

**UN No:** 1950

**Class-primary:** 2.1 Flammable Gas

**Proper Shipping Name:** AEROSOLS

**Hazchem Code:** 2YE

#### Marine Transport:

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

**UN No:** 1950

**Class-primary** 2.1 Flammable Gas

**Proper Shipping Name:** AEROSOLS

#### Air Transport:

Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods

Regulations for transport by air; DANGEROUS GOODS.

**UN No:** 1950

**Class-primary:** 2.1 Flammable Gas

**Proper Shipping Name:** AEROSOLS, FLAMMABLE

### 15. REGULATORY INFORMATION

#### Regulatory information specific for the substance or mixture

This substance is to be managed using the conditions specified in an applicable Group Standard

**HSR Number:** HSR002515 Aerosols (Flammable) Group Standard 2017

### 16. OTHER INFORMATION

For further copies of this sheet or other product information contact Chemz LTD.

#### Reason(s) for Issue:

Revised Primary MSDS

Change to Poisons Requirements

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 Chemz 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 Chemz representative or Chemz Limited at the contact details on page 1. Chemz Limited's responsibility for the material as sold is subject to the terms and conditions of sale.