

## 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

**Product Name:** ADIPIC ACID DIHYDRAZIDE

Adipic dihydrazide; Adipohydrazide; Hexanedioic acid, dihydrazide. Other name(s):

Recommended Use of the Chemical General chemical.

and Restrictions on Use

Supplier: Ixom Operations Pty Ltd

51 600 546 512 ABN:

**Street Address:** Level 8, 1 Nicholson Street

East Melbourne Victoria 3002

Australia

**Telephone Number:** +61 3 9906 3000

**Emergency Telephone:** 1 800 033 111 (ALL HOURS)

Please ensure you refer to the limitations of this Safety Data Sheet as set out in the "Other Information" section at the end of this Data Sheet.

## 2. HAZARDS IDENTIFICATION

Not classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for transport by Road and Rail: NON-DANGEROUS GOODS.

This material is hazardous according to Safe Work Australia; HAZARDOUS CHEMICAL.

#### Classification of the chemical:

Skin Sensitisation - Category 1

**SIGNAL WORD: WARNING** 



#### Hazard Statement(s):

H317 May cause an allergic skin reaction.

### Precautionary Statement(s):

#### Prevention:

P261 Avoid breathing dust.

P272 Contaminated work clothing should not be allowed out of the workplace.

P280 Wear protective gloves, protective clothing.

### Response:

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

P321 Specific treatment (see First Aid Measures on Safety Data Sheet).

P363 Wash contaminated clothing before re-use.

### Storage:

No storage statements.

#### Disposal:

P501 Dispose of contents and container in accordance with local, regional, national, international regulations.

Product Name: ADIPIC ACID DIHYDRAZIDE

Issued: 20/04/2015 Substance No: 000000019103 Version: 3



Poisons Schedule (SUSMP): None allocated.

## 3. COMPOSITION AND INFORMATION ON INGREDIENTS

Components	CAS Number	Proportion	Hazard Codes
Adipic acid dihydrazide	1071-93-8	>=97%	H317

# 4. FIRST AID MEASURES

For advice, contact a Poisons Information Centre (e.g. phone Australia 131 126; New Zealand 0800 764 766) 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. Seek immediate medical advice.

#### **Skin Contact:**

If skin or hair contact occurs, immediately remove any contaminated clothing and wash skin and hair thoroughly with running water. If swelling, redness, blistering or irritation occurs seek medical assistance.

## **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, give a glass of water to drink. If vomiting occurs give further water. Seek medical advice.

#### Indication of immediate medical attention and special treatment needed:

Treat symptomatically.

## 5. FIRE FIGHTING MEASURES

# Suitable Extinguishing Media:

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

### Specific hazards arising from the chemical:

Combustible solid.

## Special protective equipment and precautions for fire-fighters:

On burning will emit toxic fumes, including those of oxides of carbon, and oxides of nitrogen. Fire fighters to wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to vapour or products of combustion. Keep containers cool with water spray. If safe to do so, remove containers from path of fire.

# 6. ACCIDENTAL RELEASE MEASURES

## **Emergency procedures/Environmental precautions:**

Clear area of all unprotected personnel. Shut off all possible sources of ignition. If contamination of sewers or waterways has occurred advise local emergency services.

Product Name: ADIPIC ACID DIHYDRAZIDE Issued: 20/04/2015

Substance No: 000000019103 Version: 3



Personal precautions/Protective equipment/Methods and materials for containment and cleaning up: Wear protective equipment to prevent skin and eye contact and breathing in dust. Work up wind or increase ventilation. Cover with damp absorbent (inert material, sand or soil). Sweep or vacuum up, but avoid generating dust. Collect and seal in properly labelled containers or drums for disposal.

## 7. HANDLING AND STORAGE

## Precautions for safe handling:

Avoid skin and eye contact and breathing in dust. Avoid handling which leads to dust formation. May form flammable dust clouds in air. For precautions necessary refer to Safety Data Sheet "Dust Explosion Hazards".

## Conditions for safe storage, including any incompatibilities:

Store in a cool, dry, well ventilated place. Store away from incompatible materials described in Section 10. Keep containers closed when not in use - check regularly for spills.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Control Parameters:** No value assigned for this specific material by Safe Work Australia. However, Workplace Exposure Standard(s) for particulates:

Dusts not otherwise classified: 8hr TWA = 10 mg/m<sup>3</sup>

As published by Safe Work Australia Workplace Exposure Standards for Airborne Contaminants.

TWA - The time-weighted average airborne concentration of a particular substance when calculated over an eight-hour working day, for a five-day working week.

These Workplace 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 workplace 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.

## Appropriate engineering controls:

Ensure ventilation is adequate to maintain air concentrations below Workplace Exposure Standards. Keep containers closed when not in use.

If in the handling and application of this material, safe exposure levels could be exceeded, the use of engineering controls such as local exhaust ventilation must be considered and the results documented. If achieving safe exposure levels does not require engineering controls, then a detailed and documented risk assessment using the relevant Personal Protective Equipment (PPE) (refer to PPE section below) as a basis must be carried out to determine the minimum PPE requirements.

## Individual protection measures, such as Personal Protective Equipment (PPE):

The selection of PPE is dependent 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.

OVERALLS, SAFETY SHOES, SAFETY GLASSES, GLOVES, DUST MASK.









Product Name: ADIPIC ACID DIHYDRAZIDE

Substance No: 000000019103

Issued: 20/04/2015 Version: 3

Page 3 of 6



Wear overalls, safety glasses and impervious gloves. Avoid generating and inhaling dusts. If determined by a risk assessment an inhalation risk exists, wear a dust mask/respirator 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: Powder or Crystals

Colour: White Odour: Odourless **Molecular Formula:** C6 H14 N4 O2 Not available **Specific Gravity:** Relative Vapour Density (air=1): Not available Vapour Pressure (20 °C): Not available Flash Point (°C): Not available Flammability Limits (%): Not available **Autoignition Temperature (°C):** Not available 125.4 @30°C Solubility in water (g/L): Melting Point/Range (°C): 177-183

**Decomposition Point (°C):** >183

pH: 6-8 (1% water solution)

## 10. STABILITY AND REACTIVITY

**Reactivity:** Reacts with strong oxidising agents and strong alkali chemicals, epoxy,

isocyanate, aldehyde and acid chlorides.

Chemical stability: Stable under normal ambient and anticipated storage and handling conditions of

temperature and pressure.

Possibility of hazardous

reactions:

Dust explosion hazard.

**Conditions to avoid:** Avoid dust generation. Avoid high temperatures.

**Incompatible materials:** Incompatible with strong oxidising agents, strong alkalis.

Hazardous decomposition

Substance No: 000000019103

products:

Oxides of carbon. Oxides of nitrogen.

## 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: No adverse effects expected, however, large amounts may cause nausea and

vomiting.

Eye contact: May be an eye irritant. Exposure to the dust may cause discomfort due to

particulate nature. May cause physical irritation to the eyes.

**Skin contact:** Contact with skin may result in irritation. A skin sensitiser. Repeated or prolonged

skin contact may lead to allergic contact dermatitis.

Product Name: ADIPIC ACID DIHYDRAZIDE Issued: 20/04/2015

Version: 3



**Inhalation:** Material may be irritant to the mucous membranes of the respiratory tract

(airways).

Acute toxicity:

Oral LD50 (mice): >5000 mg/kg

**Skin corrosion/irritation:** Non-irritant (rabbit).

**Respiratory or skin** A skin sensitiser (guinea pig).

sensitisation:

Chronic effects: Not listed as carcinogenic according to the International Agency for Research on Cancer (IARC).

Non-mutagenic in AMES test.

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity** Avoid contaminating waterways.

48hr LC50 (fish): >1000 mg/L (Killifish, carp)

# 13. DISPOSAL CONSIDERATIONS

### **Disposal methods:**

Refer to Waste Management Authority. Dispose of contents and container in accordance with local, regional, national, international regulations.

## 14. TRANSPORT INFORMATION

#### **Road and Rail Transport**

Not classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for transport by Road and Rail; NON-DANGEROUS GOODS.

### **Marine Transport**

Not classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea; NON-DANGEROUS GOODS.

#### **Air Transport**

Not classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air; NON-DANGEROUS GOODS.

# 15. REGULATORY INFORMATION

#### Classification:

This material is hazardous according to Safe Work Australia; HAZARDOUS CHEMICAL.

#### Classification of the chemical:

Skin Sensitisation - Category 1

## **Hazard Statement(s):**

H317 May cause an allergic skin reaction.

Poisons Schedule (SUSMP): None allocated.

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

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Product Name: ADIPIC ACID DIHYDRAZIDE Substance No: 000000019103

Version: 3

Issued: 20/04/2015



# **16. OTHER INFORMATION**

Supplier Safety Data Sheet; 09/2012.

This safety data sheet has been prepared by Ixom Operations Pty Ltd Toxicology & SDS Services.

### Reason(s) for Issue:

Reissue of an obsolete SDS

This SDS 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 Ixom Operations Pty Ltd 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 Ixom representative or Ixom Operations Pty Ltd at the contact details on page 1.

Ixom Operations Pty Ltd'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: ADIPIC ACID DIHYDRAZIDE

Substance No: 000000019103

Issued: 20/04/2015

Version: 3

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