# Safety Data Sheet
**according to WHS Regulations**

Printing date 20.01.2022 Revision: 20.01.2022

## 1 Identification

**Product Name: IDRAZOTO H 1 ÷ 5**

**Other Means of Identification:** Mixture

**Recommended Use of the Chemical and Restriction on Use:**
Industrial and professional use only. Not intended for consumer use.

**Details of Manufacturer or Importer:**
Tesuco Pty Limited
Unit 12, 110-120 Silverwater Road,
Silverwater NSW 2128

**Phone Number:** +61 2 9737 9937

**Emergency telephone number:** +61 2 9737 9937

## 2 Hazard(s) Identification

**Hazardous Nature:**
Classified as Hazardous according to the Globally Harmonised System of Classification and Labelling of Chemicals (GHS) and Safe Work Australia criteria.
Classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail (7th edition).


gas cylinder

Gases Under Pressure (Compressed gas) H280 Contains gas under pressure; may explode if heated.

**Signal Word** Warning

**Hazard Statements**
H280 Contains gas under pressure; may explode if heated.

**Precautionary Statements**
P410+P403 Protect from sunlight. Store in a well-ventilated place.

## 3 Composition and Information on Ingredients

**Chemical Characterization: Mixtures**
**Description:** Mixture of substances listed below with nonhazardous additions.

| **Hazardous Components:** | | |
|---|---|---|
| 7727-37-9 | Nitrogen<br>Gases Under Pressure (Compressed gas), H280 | >90% |
| 1333-74-0 | Hydrogen<br>Flammable Gases 1, H220; Gases Under Pressure (Compressed gas), H280 | ≤5.5% |

## 4 First Aid Measures

**Inhalation:**
If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek medical attention if breathing problems develop.

**Skin Contact:**
In case of skin contact, wash affected areas with water and soap. Seek medical attention if symptoms occur.

**Eye Contact:**
In case of eye contact, hold eyelids open and rinse with water. Seek medical attention if symptoms occur.

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**Ingestion:**
If swallowed, do not induce vomiting. Never give anything by mouth to an unconscious person. Seek medical attention if symptoms occur.

**Symptoms Caused by Exposure:**
Inhalation: High concentrations may cause asphyxiation. Symptoms include loss of mobility and unconsciousness. Victim may not be aware of asphyxiation.

## 5 Fire Fighting Measures

**Suitable Extinguishing Media:** Water spray or fog. Do not use full water jet.

**Specific Hazards Arising from the Chemical:**
Product is not flammable, but containers may explode when exposed to extreme heat. Containers close to fire should be removed if safe to do so. Use water spray to cool fire exposed containers.

**Special Protective Equipment and Precautions for Fire Fighters:**
When fighting a major fire wear self-contained breathing apparatus and protective equipment.

## 6 Accidental Release Measures

**Personal Precautions, Protective Equipment and Emergency Procedures:**
Wear approved self-contained breathing apparatus or a air-supplied respirator, solvent resistant gloves, protective clothing, apron and boots. Evacuate all non-essential personnel from affected area. Do not breathe vapours. Ensure adequate ventilation. Stay upwind if possible. Monitor atmosphere for concentration of released product.

**Environmental Precautions:**
In the event of a major spill, prevent spillage from entering drains or water courses.

**Methods and Materials for Containment and Cleaning Up:** Stop leak if safe to do so and ventilate the area.

## 7 Handling and Storage

**Precautions for Safe Handling:**
Only use equipment which is suitable for this product and its supply pressure and temperature. Avoid release of product into atmosphere. Do not allow backfeed into the container. Protect containers from physical damage. Do not drag, roll, slide or drop containers. When moving containers, even for short distances, use a trolley or cart designed to transport gas cylinders. Leave valve protection caps in place until the container has been secured and is ready for use. Containers are fitted with a protective guard to prevent regulator damage. Do not modify this device. If user experiences difficulty operating the valve, discontinue use and contact the supplier. Do not attempt to repair valves or safety relief devices. Keep valves clean and free from contaminants, particularly water and oil. replace valve caps or plugs as soon as container is separated from equipment. Close valves after each use and when empty, even if still connected to equipment. Never transfer gas from one container to another. Never attempt to raise the pressure of the container by heating. Do not remove or deface labels.
Use of safe work practices are recommended to avoid eye or skin contact and inhalation of vapours. Use only in a well-ventilated area.
Food, beverages and tobacco products should not be stored or consumed where this material is in use. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use. Provide eyewash fountains and safety showers in close proximity to points of potential exposure.

**Conditions for Safe Storage:**

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Store in a cool, dry and well ventilated area. Do not expose to temperatures above 50 °C. Protect from extreme temperatures. Avoid overheating. Protect containers from physical damage. Containers should be checked periodically for general condition and leakage. Containers should be stored upright and properly secured to prevent them from falling over. Container valve guards or caps should be in place. Keep away from combustible materials. Do not store in conditions likely to cause corrosion.

## 8 Exposure controls and personal protection

| **Exposure Standards:** | |
|---|---|
| **7727-37-9 Nitrogen** | |
| WES | Asphyxiant |
| **1333-74-0 Hydrogen** | |
| WES | Asphyxiant |

**Engineering Controls:**
Maintain air concentration below occupational exposure standards, providing adequate ventilation. Oxygen detectors should be used when asphyxiating gases may be released.

**Respiratory Protection:**
A self contained breathing apparatus or positive pressure air-line should be used in oxygen-deficient atmospheres. See Australian Standards AS/NZS 1715 and 1716 for more information.

**Skin Protection:**
Protective gloves. See Australian/New Zealand Standard AS/NZS 2161 for more information. When selecting hand protection, the product should comply with relevant performance criteria. For example, gloves should meet a suitable level of resistance to provide protection against the mechanical hazards of a workplace.
Occupational protective clothing (depending on conditions in which it has to be used, in particular as regards the period for which it is worn, which shall be determined on the basis of the seriousness of the risk, the frequency of exposure to the risk, the characteristics of the workstation of each worker and the performance of the protective clothing). See Australian/New Zealand Standard AS/NZS 4501 for more information.

**Eye and Face Protection:**
Eye and face protectors for protection against splashing materials or liquids. See Australian/New Zealand Standard AS/NZS 1337 for more information.

## 9 Physical and Chemical Properties

| | |
|---|---|
| **Appearance:** | |
| **Form:** | Gaseous |
| **Colour:** | Colourless |
| **Odour:** | Odourless |
| **Odour Threshold:** | No information available |
| **pH-Value:** | Not applicable |
| **Melting point/freezing point:** | Not applicable |
| **Initial Boiling Point/Boiling Range:** | Not applicable |
| **Flash Point:** | Not applicable |
| **Flammability:** | Product is not flammable. |
| **Auto-ignition Temperature:** | No information available |
| **Decomposition Temperature:** | No information available |
| **Explosion Limits:** | |
| **Lower:** | Not applicable |
| **Upper:** | Not applicable |
| **Vapour Pressure:** | No information available |
| **Relative Density:** | No information available |
| **Vapour Density:** | Lighter or similar to air. |

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**Evaporation Rate:** Not applicable
**Solubility in Water:** Nitrogen: 20 g/L
Hydrogen: 1.6 g/L
**Partition Coefficient (n-octanol/water):** No information available

## 10 Stability and Reactivity

**Possibility of Hazardous Reactions:** Hazardous polymerisation will not occur.

**Chemical Stability:** Stable at ambient temperature and under normal conditions of use.

**Conditions to Avoid:** Extreme temperatures.

**Incompatible Materials:** No further relevant information available.

**Hazardous Decomposition Products:** None

## 11 Toxicological Information

**Toxicity:**
**$LD_{50}$/$LC_{50}$ Values Relevant for Classification:** No information available

**Acute Health Effects**
**Inhalation:**
High concentrations may cause asphyxiation. Symptoms include loss of mobility and unconsciousness. Victim may not be aware of asphyxiation.
**Skin:** No adverse health effects expected.
**Eye:** No adverse health effects expected.
**Ingestion:** No adverse health effects expected.

**Skin Corrosion / Irritation:** Based on classification principles, the classification criteria are not met.

**Serious Eye Damage / Irritation:** Based on classification principles, the classification criteria are not met.

**Respiratory or Skin Sensitisation:** Based on classification principles, the classification criteria are not met.

**Germ Cell Mutagenicity:** Based on classification principles, the classification criteria are not met.

**Carcinogenicity:** This product does NOT contain any IARC listed chemicals.

**Reproductive Toxicity:** Based on classification principles, the classification criteria are not met.

**Specific Target Organ Toxicity (STOT) - Single Exposure:**
Based on classification principles, the classification criteria are not met.

**Specific Target Organ Toxicity (STOT) - Repeated Exposure:**
Based on classification principles, the classification criteria are not met.

**Aspiration Hazard:** Based on classification principles, the classification criteria are not met.

**Chronic Health Effects:** No information available

**Existing Conditions Aggravated by Exposure:** No information available

**Additional toxicological information:** No information available

## 12 Ecological Information

**Ecotoxicity:** No adverse ecological effects are expected.

**Aquatic toxicity:** No further relevant information available.

**Persistence and Degradability:** No further relevant information available.

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**Bioaccumulative Potential:** No further relevant information available.

**Mobility in Soil:** No further relevant information available.
**Other adverse effects:** No further relevant information available.

## 13 Disposal considerations

**Disposal Methods and Containers:** Dispose according to applicable local and state government regulations.

**Special Precautions for Landfill or Incineration:**
Please consult your state Land Waste Management Authority for more information.

## 14 Transport information

**UN Number**
**ADG, IMDG, IATA** UN1956

**Proper Shipping Name**
**ADG, IMDG, IATA** COMPRESSED GAS, N.O.S. (Nitrogen, hydrogen)

**Dangerous Goods Class**
**ADG Class:** 2.2

**Packing Group:** Not applicable

**EMS Number:** F-C,S-V

**Hazchem Code:** 2TE

**Special Provisions:** 274, 378

**Limited Quantities:** 120 mL

**Packagings & IBCs - Packing Instruction:** P200

## 15 Regulatory information

| **Australian Inventory of Chemical Substances:** | |
|---|---|
| 7727-37-9 | Nitrogen |
| 1333-74-0 | Hydrogen |

**Standard for the Uniform Scheduling of Drugs and Poisons (SUSMP) - Poison Schedule:**
Not Scheduled.

## 16 Other information

**Date of Preparation or Last Revision:** 30.05.2017

**Prepared by:** MSDS.COM.AU Pty Ltd www.msds.com.au

**Abbreviations and acronyms:**
ADG: Australian Dangerous Goods
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
CAS: Chemical Abstracts Service (division of the American Chemical Society)
$LC_{50}$: Lethal concentration, 50 percent
$LD_{50}$: Lethal dose, 50 percent
IARC: International Agency for Research on Cancer
STEL: Short Term Exposure Limit
TWA: Time Weighted Average
NES: National Exposure Standard (Safe Work Australia - Workplace Exposure Standards For Airborne Contaminants)
Flammable Gases 1: Flammable gases – Category 1

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Gases Under Pressure (Compressed gas): Gases under pressure – Compressed gas

**Disclaimer**

This SDS is prepared in accord with the Safe Work Australia document “Code of Practice for the Preparation of Safety Data Sheets for Hazardous Chemicals - February 2016”

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