

## SAFETY DATA SHEET

# 1130

Product Name **18 TO 23% OXYGEN IN ARGON**

### 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

**Supplier name** BOC LIMITED (AUSTRALIA)  
**Address** 10 Julius Avenue, North Ryde, NSW, 2113, AUSTRALIA  
**Telephone** 131 262, (02) 8874 4400  
**Fax** 132 427 (24 hours)  
**Emergency** 1800 653 572 (24/7) (Australia only)  
**Web site** <http://www.boc.com.au/>  
**Synonym(s)** 1130 - MSDS NUMBER • PRODUCT CODES: 288-373, -2992, -3289, -3518 • SPECIAL GAS MIXTURE  
**Use(s)** CALIBRATION • INDUSTRIAL APPLICATIONS  
**SDS date** 01 February 2013

### 2. HAZARDS IDENTIFICATION

CLASSIFIED AS HAZARDOUS (GHS) ACCORDING TO SAFE WORK AUSTRALIA CRITERIA

**RISK PHRASES**

None allocated

**SAFETY PHRASES**

None allocated

CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF THE ADG CODE

**UN number** 1956 **DG division** 2.2  
**Packing group** None Allocated **Subsidiary risk(s)** None Allocated  
**Hazchem code** 2TE

### 3. COMPOSITION/ INFORMATION ON INGREDIENTS

| Ingredient | Identification                  | Classification | Content   |
|------------|---------------------------------|----------------|-----------|
| OXYGEN     | CAS: 7782-44-7<br>EC: 231-956-9 | O;R8           | 18 to 23% |
| ARGON      | CAS: 7440-37-1<br>EC: 231-147-0 | Not Available  | Remainder |

### 4. FIRST AID MEASURES

**Eye** None required.  
**Inhalation** Material is not harmful.  
**Skin** None required.  
**Ingestion** Due to product form and application, ingestion is considered unlikely.  
**Advice to doctor** None applicable.

## 5. FIRE FIGHTING MEASURES

|                           |  |
|---------------------------|--|
| <b>Flammability</b>       | Non flammable. Product contains adequate oxygen to support combustion.   |
| <b>Fire and explosion</b> | Temperatures in a fire may cause cylinders to rupture. Cool cylinders exposed to fire by applying water from a protected location. Do not approach cylinders suspected of being hot.                       |
| <b>Extinguishing</b>      | Use water spray to cool containers from protected area.  |
| <b>Hazchem code</b>       | 2TE<br>2 Water Fog (or fine water spray if fog unavailable)<br>T Self Contained Breathing apparatus and protective gloves.<br>E Evacuation of people in the vicinity of the incident should be considered. |

## 6. ACCIDENTAL RELEASE MEASURES

|                                  |  |
|----------------------------------|--|
| <b>Personal precautions</b>      | If the cylinder is leaking, evacuate area of personnel. Inform manufacturer/supplier of leak. Use personal protective equipment as detailed in Section 8 of this SDS.  |
| <b>Environmental precautions</b> | Prevent from entering sewers, basements and workpits, or any place where its accumulation can be dangerous.  |
| <b>Methods of cleaning up</b>    | Carefully move material to a well ventilated remote area, then allow to discharge if safe to do so. Do not attempt to repair leaking valve or cylinder safety devices. |
| <b>References</b>                | See Sections 8 and 13 for exposure controls and disposal.  |

## 7. STORAGE AND HANDLING

|                 |  |
|-----------------|--|
| <b>Storage</b>  | Do not store near sources of ignition. Cylinders should be stored below 45°C in a secure area, upright and restrained to prevent cylinders from falling. Cylinders should also be stored in a dry, well ventilated area constructed of non-combustible material with firm level floor (preferably concrete), away from areas of heavy traffic and emergency exits. |
| <b>Handling</b> | Use of safe work practices are recommended to avoid inhalation. Do not drag, drop, slide or roll cylinders. The uncontrolled release of a gas under pressure may cause physical harm. Use a suitable hand truck for cylinder movement.   |

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### Exposure standards

| Ingredient | Reference | TWA        |                   | STEL |                   |
|------------|-----------|------------|-------------------|------|-------------------|
|            |           | ppm        | mg/m <sup>3</sup> | ppm  | mg/m <sup>3</sup> |
| Argon      | SWA (AUS) | Asphyxiant |                   |      |                   |

|                             |   |
|-----------------------------|---|
| <b>Biological limits</b>    | No biological limit allocated.  |
| <b>Engineering controls</b> | Provide suitable ventilation to minimise or eliminate exposure. Confined areas (eg. tanks) should be adequately ventilated or gas tested. |

### PPE

|                    |  |
|--------------------|--|
| <b>Eye / Face</b>  | Wear safety glasses.   |
| <b>Hands</b>       | Wear leather gloves.   |
| <b>Body</b>        | Wear safety boots.   |
| <b>Respiratory</b> | Where an inhalation risk exists, wear Self Contained Breathing Apparatus (SCBA) or an Air-line respirator. |



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## 9. PHYSICAL AND CHEMICAL PROPERTIES

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|                               |                   |
|-------------------------------|-------------------|
| Appearance                    | COLOURLESS GAS    |
| Odour                         | ODOURLESS         |
| Flammability                  | NON FLAMMABLE     |
| Flash point                   | NOT RELEVANT      |
| Boiling point                 | NOT AVAILABLE     |
| Melting point                 | NOT AVAILABLE     |
| Evaporation rate              | NOT APPLICABLE    |
| pH                            | NOT APPLICABLE    |
| Vapour density                | 1.3 (Air = 1)     |
| Specific gravity              | NOT APPLICABLE    |
| Solubility (water)            | INSOLUBLE         |
| Vapour pressure               | NOT APPLICABLE    |
| Upper explosion limit         | NOT APPLICABLE    |
| Lower explosion limit         | NOT APPLICABLE    |
| Autoignition temperature      | NOT APPLICABLE    |
| Cylinder pressure (when full) | 13,000 kPa @ 15°C |
| % Volatiles                   | 100 %             |

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## 10. STABILITY AND REACTIVITY

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|                                  |  |
|----------------------------------|--|
| Chemical stability               | Stable under recommended conditions of storage.  |
| Conditions to avoid              | Avoid shock, friction, heavy impact, heat, sparks, open flames and other ignition sources. |
| Material to avoid                | Compatible with all commonly used materials.   |
| Hazardous Decomposition Products | This material will not decompose to form hazardous products.                               |
| Hazardous Reactions              | Polymerization will not occur.   |

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## 11. TOXICOLOGICAL INFORMATION

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|                       |   |
|-----------------------|---|
| Health Hazard Summary | Non toxic gas. Product contains adequate oxygen to support life.                                    |
| Eye                   | Not harmful.  |
| Inhalation            | Narcotic. Effects include dilation and immobility of eye pupils, euphoria and breathing difficulty. |
| Skin                  | Not harmful.  |
| Ingestion             | Ingestion is considered unlikely due to product form.   |
| Toxicity data         | No LD50 data available for this product.  |

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## 12. ECOLOGICAL INFORMATION

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|                               |  |
|-------------------------------|--|
| Toxicity                      | No information provided.                   |
| Persistence and degradability | No information provided.                   |
| Bioaccumulative potential     | No information provided.                   |
| Mobility in soil              | No information provided.                   |
| Other adverse effects         | Product is not harmful to the environment. |

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## 13. DISPOSAL CONSIDERATIONS

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|                |   |
|----------------|---|
| Waste disposal | Cylinders should be returned to the manufacturer or supplier for disposal of contents. No legislation is applicable. This product can safely be released to the atmosphere. |
| Legislation    | Dispose of in accordance with relevant local legislation.   |

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## 14. TRANSPORT INFORMATION

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CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF THE ADG CODE



|                      | LAND TRANSPORT<br>(ADG)  | SEA TRANSPORT<br>(IMDG / IMO) | AIR TRANSPORT<br>(IATA / ICAO) |
|----------------------|--|-------------------------------|--------------------------------|
| UN number            | 1956   | -                             | -                              |
| Proper shipping name | COMPRESSED GAS, N.O.S.   | -                             | -                              |
| DG class/ Division   | 2.2  | -                             | -                              |
| Subsidiary risk(s)   | None Allocated   | -                             | -                              |
| Packing group        | None Allocated   | -                             | -                              |
| GTEPG                | 2C1  |                               |                                |
| Hazchem code         | 2TE  |                               |                                |
| Other information    | Ensure cylinder is separated from driver and that outlet of relief device is not obstructed. |                               |                                |

## 15. REGULATORY INFORMATION

|                      |  |
|----------------------|--|
| Poison schedule      | A poison schedule number has not been allocated to this product using the criteria in the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) |
| Inventory Listing(s) | <b>AUSTRALIA: AICS (Australian Inventory of Chemical Substances)</b><br>All components are listed on AICS, or are exempt.                                      |

## 16. OTHER INFORMATION

|                        |  |
|------------------------|--|
| Additional information | The storage of significant quantities of gas cylinders must comply with AS4332 The storage and handling of gases in cylinders. |
|------------------------|--|

APPLICATION METHOD: Gas regulator of suitable pressure and flow rating fitted to cylinder or manifold with low pressure gas distribution to equipment.

### PERSONAL PROTECTIVE EQUIPMENT GUIDELINES:

The recommendation for protective equipment contained within this report is provided as a guide only. Factors such as method of application, working environment, quantity used, product concentration and the availability of engineering controls should be considered before final selection of personal protective equipment is made.

### HEALTH EFFECTS FROM EXPOSURE:

It should be noted that the effects from exposure to this product will depend on several factors including: frequency and duration of use; quantity used; effectiveness of control measures; protective equipment used and method of application. Given that it is impractical to prepare a ChemAlert report which would encompass all possible scenarios, it is anticipated that users will assess the risks and apply control methods where appropriate.

**Product Name** 18 TO 23% OXYGEN IN ARGON

|                      |                   |   |
|----------------------|-------------------|---|
| <b>Abbreviations</b> | ACGIH             | American Conference of Governmental Industrial Hygienists                                       |
|                      | CAS #             | Chemical Abstract Service number - used to uniquely identify chemical compounds                 |
|                      | CNS               | Central Nervous System  |
|                      | EC No.            | EC No - European Community Number   |
|                      | GHS               | Globally Harmonized System  |
|                      | IARC              | International Agency for Research on Cancer   |
|                      | LD50              | Lethal Dose, 50% / Median Lethal Dose   |
|                      | mg/m <sup>3</sup> | Milligrams per Cubic Metre  |
|                      | PEL               | Permissible Exposure Limit  |
|                      | pH                | relates to hydrogen ion concentration using a scale of 0 (high acidic) to 14 (highly alkaline). |
|                      | ppm               | Parts Per Million   |
|                      | REACH             | Regulation on Registration, Evaluation, Authorisation and Restriction of Chemicals              |
|                      | STOT-RE           | Specific target organ toxicity (repeated exposure)  |
|                      | STOT-SE           | Specific target organ toxicity (single exposure)  |
|                      | SUSMP             | Standard for the Uniform Scheduling of Medicines and Poisons                                    |
|                      | TLV               | Threshold Limit Value   |
|                      | TWA/OEL           | Time Weighted Average or Occupational Exposure Limit  |

**Revision history**

| Revision | Description          |
|----------|----------------------|
| 2.0      | Standard SDS Review. |
| 1.0      | Initial SDS creation |

**Report status**

This document has been compiled by RMT on behalf of the manufacturer, importer or supplier of the product and serves as their Safety Data Sheet ('SDS').

It is based on information concerning the product which has been provided to RMT by the manufacturer, importer or supplier or obtained from third party sources and is believed to represent the current state of knowledge as to the appropriate safety and handling precautions for the product at the time of issue. Further clarification regarding any aspect of the product should be obtained directly from the manufacturer, importer or supplier.

While RMT has taken all due care to include accurate and up-to-date information in this SDS, it does not provide any warranty as to accuracy or completeness. As far as lawfully possible, RMT accepts no liability for any loss, injury or damage (including consequential loss) which may be suffered or incurred by any person as a consequence of their reliance on the information contained in this SDS.

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**End of SDS**