

**Product Name**      **COREGAS 16/3**

**1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER**

**Supplier name**                      **COREGAS PTY LTD**  
**Address**                                66 Loftus Rd, Yennora, NSW, 2161, AUSTRALIA  
**Telephone**                            1800807203  
**Emergency**                          1800807203, After Hours 1300657070  
**Email**                                    [info@coregas.com](mailto:info@coregas.com)  
**Web site**                                <http://www.coregas.com/>  
**Synonym(s)**                            10823001 - SDS NUMBER  
**Use(s)**                                    INDUSTRIAL APPLICATIONS  
**SDS date**                                21 July 2014

**2. HAZARDS IDENTIFICATION**

**NOT CLASSIFIED AS HAZARDOUS 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**

<b>UN Number</b>	1956	<b>Transport Hazard Class</b>	2.2
<b>Packing Group</b>	None Allocated	<b>Hazchem Code</b>	2TE

**3. COMPOSITION/ INFORMATION ON INGREDIENTS**

Ingredient	Identification	Classification	Content
OXYGEN	CAS: 7782-44-7 EC: 231-956-9	O;R8	3%
ARGON	CAS: 7440-37-1 EC: 231-147-0	Not Available	81%
CARBON DIOXIDE	CAS: 124-38-9 EC: 204-696-9	Not Available	16%

**4. FIRST AID MEASURES**

**Eye**                                        None required.  
**Inhalation**                                If inhaled, remove from contaminated area. To protect rescuer, use an Air-line respirator or Self Contained Breathing Apparatus (SCBA). Apply artificial respiration if not breathing. Give oxygen if available.  
**Skin**                                        None required.  
**Ingestion**                                Ingestion is not considered a potential route of exposure.  
**Advice to doctor**                        Treat symptomatically.

## 5. FIRE FIGHTING MEASURES

<b>Flammability</b>	Non flammable.
<b>Fire and explosion</b>	Temperatures in a fire may cause cylinders to rupture. Cool cylinders or containers exposed to fire by applying water from a protected location. Remove cool cylinders from the path of the fire. Evacuate the area if unable to keep cylinders cool. Do not approach cylinders or containers suspected of being hot.
<b>Extinguishing</b>	Use water fog to cool containers from protected area.
<b>Hazchem code</b>	2TE 2 Water Fog (or fine water spray if fog unavailable) T Self Contained Breathing apparatus and protective gloves. 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.
<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 incompatible materials. 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			
Carbon dioxide	SWA (AUS)	5000	9000	30000	54000
Carbon dioxide in coal mines	SWA (AUS)	12500	22500	30000	54000

<b>Biological limits</b>	No biological limit allocated.
<b>Engineering controls</b>	Avoid inhalation. Use in well ventilated areas. Where an inhalation risk exists, mechanical extraction ventilation is recommended. Maintain vapour levels below the recommended exposure standard.

**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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<b>Appearance</b>	COLOURLESS GAS
<b>Odour</b>	ODOURLESS
<b>Flammability</b>	NON FLAMMABLE
<b>Flash point</b>	NOT RELEVANT
<b>Boiling point</b>	NOT AVAILABLE
<b>Melting point</b>	NOT AVAILABLE
<b>Evaporation rate</b>	NOT AVAILABLE
<b>pH</b>	NOT AVAILABLE
<b>Vapour density</b>	NOT AVAILABLE
<b>Specific gravity</b>	NOT AVAILABLE
<b>Solubility (water)</b>	INSOLUBLE
<b>Vapour pressure</b>	NOT AVAILABLE
<b>Upper explosion limit</b>	NOT RELEVANT
<b>Lower explosion limit</b>	NOT RELEVANT
<b>Explosive properties</b>	NOT AVAILABLE
<b>Oxidising properties</b>	NOT AVAILABLE
<b>% Volatiles</b>	NOT AVAILABLE

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## 10. STABILITY AND REACTIVITY

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<b>Chemical stability</b>	Stable under recommended conditions of storage.
<b>Conditions to avoid</b>	Avoid contact with incompatible substances.
<b>Material to avoid</b>	Moist carbon dioxide is corrosive, hence acid resistant materials are required (stainless steel). Certain properties of some plastics and rubbers may be affected by carbon dioxide, ie. embrittlement, leaching of plasticisers, etc.
<b>Hazardous Decomposition Products</b>	This material will not decompose to form hazardous products other than that already present.
<b>Hazardous Reactions</b>	Polymerization will not occur.

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## 11. TOXICOLOGICAL INFORMATION

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<b>Health Hazard Summary</b>	Asphyxiant gas - non irritant. When released into air the concentration of carbon dioxide is diluted. Carbon dioxide concentrations of 3-5 % in air cause increased respiration and headache. Concentrations of 8-15% cause headache, nausea and vomiting which may lead to unconsciousness if not moved to open air and given oxygen. Inhalation of a mixture containing no oxygen may result in unconsciousness from the first breath and death may follow in minutes. Adverse health affects to long term exposure to carbon dioxide have not been reported. However, in environments such as submarines where exposure to levels of 0.5-1.0% may occur, specialist medical opinion should be sought on the effects of long term exposure.
<b>Eye</b>	Non irritant.
<b>Inhalation</b>	Asphyxiant. Effects are proportional to oxygen displacement. Acts as a simple asphyxiant by displacing oxygen in the lungs thereby diminishing the supply of oxygen to the blood and tissues.
<b>Skin</b>	Non irritant.
<b>Ingestion</b>	Ingestion is considered unlikely due to product form.
<b>Toxicity data</b>	CARBON DIOXIDE (124-38-9)

CARBON DIOXIDE (124-38-9)  
 LC50 (inhalation) 470000 ppm/30M (rat)  
 LCLo (inhalation) 9 pph/5M (human)

## 12. ECOLOGICAL INFORMATION

**Toxicity** No information provided.  
**Persistence and degradability** No information provided.  
**Bioaccumulative potential** No information provided.  
**Mobility in soil** No information provided.  
**Other adverse effects** When discharged to the atmosphere, carbon dioxide may contribute to the greenhouse effect.

## 13. DISPOSAL CONSIDERATIONS

**Waste disposal** Cylinders should be returned to the manufacturer or supplier for disposal of contents.  
**Legislation** Dispose of in accordance with relevant local legislation.

## 14. TRANSPORT INFORMATION

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



	LAND TRANSPORT (ADG)	SEA TRANSPORT (IMDG / IMO)	AIR TRANSPORT (IATA / ICAO)
<b>UN Number</b>	1956	1956	1956
<b>Proper Shipping Name</b>	COMPRESSED GAS, N.O.S.	COMPRESSED GAS, N.O.S.	COMPRESSED GAS, N.O.S.
<b>Transport Hazard Class</b>	2.2	2.2	2.2
<b>Packing Group</b>	None Allocated	None Allocated	None Allocated

**Environmental hazards** No information provided  
**Special precautions for user**  
     **Hazchem code** 2TE  
     **GTEPG** 2C1  
     **EMS** F-C, S-V  
**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)** **AUSTRALIA: AICS (Australian Inventory of Chemical Substances)**  
 All components are listed on AICS, or are exempt.

## 16. OTHER INFORMATION

Additional information

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.

**Abbreviations**

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
LC50	Lethal Concentration, 50% / Median Lethal Concentration
LD50	Lethal Dose, 50% / Median Lethal Dose
mg/m <sup>3</sup>	Milligrams per Cubic Metre
OEL	Occupational Exposure Limit
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
STEL	Short-Term Exposure Limit
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
SWA	Safe Work Australia
TLV	Threshold Limit Value
TWA	Time Weighted Average

**Revision history**

Revision	Description
2.3	Standard SDS Review
2.2	Standard SDS Review
2.1	Standard SDS Review
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.

**Product Name**      **COREGAS 16/3**

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**End of SDS**