

PRODUCT NAME MEDICAL EQUANOX

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Supplier Name COREGAS PTY LTD
Address 66 Loftus Rd, Yennora, NSW, AUSTRALIA, 2161
Telephone (02) 9794 2223
Fax (02) 9794 2221
Emergency 1300 657 070
Email info@coregas.com
Web Site http://www.coregas.com/
Synonym(s) 50822002 - MSDS NUMBER
Use(s) MEDICAL APPLICATIONS
MSDS Date 08 August 2008

2. HAZARDS IDENTIFICATION

NOT CLASSIFIED AS HAZARDOUS ACCORDING TO NOHSC CRITERIA

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

UN No.	3156	DG Class	2.2	Subsidiary Risk(s)	5.1
Pkg Group	None Allocated	Hazchem Code	2S	EPG	2B1

3. COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient	Formula	CAS No.	Content
NITROUS OXIDE	N2O	10024-97-2	50%
OXYGEN	O2	7782-44-7	50%

4. FIRST AID MEASURES

Eye Exposure is considered unlikely.
Inhalation If inhaled, remove from contaminated area. Apply artificial respiration if not breathing.
Skin Exposure is considered unlikely. Skin irritation is not anticipated.
Ingestion For advice, contact a Poison Information Centre on 13 11 26 (Australia Wide) or a doctor (at once). Due to product form and application, ingestion is considered unlikely.
Advice to Doctor Treat symptomatically

5. FIRE FIGHTING MEASURES

Flammability Non flammable - oxidising agent. Oil/grease can spontaneously ignite at low temperatures in oxygen enriched atmospheres. Many other materials, which do not burn in air, will vigorously burn in pure oxygen.
Fire and Explosion Non flammable gas. Temperatures in a fire may cause cylinders to rupture and internal pressure relief devices to be activated. Call fire brigade. This product will vigorously support combustion. Do not approach cylinders suspected to be hot. Remove cool cylinders from the path of the fire if safe to do so. Ensure working area is well ventilated before re-use Notify the nearest BOC centre that you will be returning a faulty cylinder. Residual product

PRODUCT NAME **MEDICAL EQUANOX**

will be disposed of when the cylinder is returned.

Extinguishing Non flammable. Use water fog to cool containers from protected area.

Hazchem Code 2S

6. ACCIDENTAL RELEASE MEASURES

Spillage If the cylinder is leaking, eliminate all potential ignition sources and evacuate area of personnel. Inform manufacturer/supplier of leak. Wear appropriate PPE and carefully move it to a well ventilated remote area, then allow to discharge. Do not attempt to repair leaking valve or cylinder safety devices.

7. STORAGE AND HANDLING

Storage Do not store near sources of ignition or 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.

Handling Before use carefully read the product label. Use of safe work practices are recommended to avoid eye or skin contact and inhalation. Observe good personal hygiene, including washing hands before eating. Prohibit eating, drinking and smoking in contaminated areas.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Stds	Ingredient	Reference	TWA		STEL	
			ppm	mg/m3	ppm	mg/m3
	Nitrous oxide	NOHSC (AUS)	25.0	45.0	--	--

Biological Limits No biological limit allocated.

Engineering Controls Do not inhale gas. Use in well ventilated areas. In poorly ventilated areas, mechanical extraction ventilation is recommended. Maintain vapour levels below the recommended exposure standard.

PPE Wear leather gloves and safety glasses. Where an inhalation risk exists, wear self Contained Breathing Apparatus (SCBA) Respirator and an Air-line respirator.



9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	COLOURLESS GAS	Solubility (water)	NOT AVAILABLE
Odour	ODOURLESS	Specific Gravity	NOT AVAILABLE
pH	NOT AVAILABLE	% Volatiles	NOT AVAILABLE
Vapour Pressure	NOT AVAILABLE	Flammability	NON FLAMMABLE
Vapour Density	NOT AVAILABLE	Flash Point	NOT RELEVANT
Boiling Point	NOT AVAILABLE	Upper Explosion Limit	NOT RELEVANT
Melting Point	NOT AVAILABLE	Lower Explosion Limit	NOT RELEVANT
Evaporation Rate	NOT AVAILABLE	Autoignition Temperature	NOT AVAILABLE

10. STABILITY AND REACTIVITY

Material to Avoid Oil and grease can spontaneously ignite at low temperatures in oxygen enriched atmospheres. Many other materials, which do not burn in air, will vigorously burn in pure oxygen. Nitrous oxide will react with powerful reducing agents such as phosphine, stannous chloride and hydrogen. Ensure that all materials and lubricants in contact with this product are oxygen compatible.

Decomposition May evolve toxic gases if heated to decomposition.

PRODUCT NAME **MEDICAL EQUANOX**

11. TOXICOLOGICAL INFORMATION

Health Hazard Summary	Anaesthetic - non irritating gas. Nitrous oxide passes into all gas containing spaces in the body faster than nitrogen passes out, thus it should not be used with any condition where its expansion might be dangerous. May induce vomiting in susceptible individuals. Epidemiological studies suggest an increased risk of spontaneous abortion and low birth weight in off-spring in female workers employed in operating theatres and dental surgeries. These findings are controversial.
Eye	Non irritant.
Inhalation	Non irritant - anaesthetic. After prolonged use nitrous oxide may inactivate vitamin B12, resulting in megaloblastic changes in bone marrow. Exceptionally heavy occupational exposure and addiction may result in myeloneuropathy and sub-acute combined degeneration. This would require levels in excess of 5,000ppm to frequent (more than once every two days) exposure to analgesic concentrations.
Skin	Non irritant.
Ingestion	Ingestion is considered unlikely due to product form.
Toxicity Data	NITROUS OXIDE (10024-97-2) LC50 (Inhalation): 1068 mg/m3 (rat)

12. ECOLOGICAL INFORMATION

Environment	Limited ecotoxicity data was available for this product at the time this report was prepared. Ensure appropriate measures are taken to prevent this product from entering the environment.
--------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

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

Transport	Ensure cylinder is separated from driver and that outlet of relief device is not obstructed.
------------------	----------------------------------------------------------------------------------------------



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

Shipping Name	COMPRESSED GAS, OXIDIZING, N.O.S.			
UN No.	3156	DG Class	2.2	Subsidiary Risk(s) 5.1
Pkg Group	None Allocated	Hazchem Code	2S	EPG 2B1
IATA				
Shipping Name	COMPRESSED GAS, OXIDIZING, N.O.S.			
UN No.	3156	DG Class	2.2	Subsidiary Risk(s) 5.1
Pkg Group	None Allocated			
IMDG				
Shipping Name	COMPRESSED GAS, OXIDIZING, N.O.S.			
UN No.	3156	DG Class	2.2	Subsidiary Risk(s) 5.1
Pkg Group	None Allocated			

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 Drugs and Poisons (SUSDP).
AICS	All chemicals listed on the Australian Inventory of Chemical Substances (AICS).

16. OTHER INFORMATION

Additional	APPLICATION METHOD: Gas regulator and demand flow control to mask or mouthpiece.
-------------------	----------------------------------------------------------------------------------

PRODUCT NAME MEDICAL EQUANOX

Information

ABBREVIATIONS:

ADB - Air-Dry Basis.
BEI - Biological Exposure Indice(s)
CAS# - Chemical Abstract Service number - used to uniquely identify chemical compounds.
CNS - Central Nervous System.
EINECS - European INventory of Existing Commercial chemical Substances.
IARC - International Agency for Research on Cancer.
M - moles per litre, a unit of concentration.
mg/m3 - Milligrams per cubic metre.
NOS - Not Otherwise Specified.
NTP - National Toxicology Program.
OSHA - Occupational Safety and Health Administration.
pH - relates to hydrogen ion concentration using a scale of 0 (high acidic) to 14 (highly alkaline).
ppm - Parts Per Million.
RTECS - Registry of Toxic Effects of Chemical Substances.
TWA/ES - Time Weighted Average or Exposure Standard.

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 Chem Alert report which would encompass all possible scenarios, it is anticipated that users will assess the risks and apply control methods where appropriate.

PERSONAL PROTECTIVE EQUIPMENT GUIDELINES:

The recommendation for protective equipment contained within this Chem Alert 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.

Report Status

This document has been compiled by RMT on behalf of the manufacturer of the product and serves as the manufacturer's Material Safety Data Sheet ('MSDS').

It is based on information concerning the product which has been provided to RMT by the manufacturer 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.

While RMT has taken all due care to include accurate and up-to-date information in this MSDS, 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 MSDS.

Prepared By

Risk Management Technologies
5 Ventnor Ave, West Perth
Western Australia 6005
Phone: +61 8 9322 1711
Fax: +61 8 9322 1794
Email: info@rmt.com.au
Web: www.rmt.com.au

MSDS Date: 08 August 2008

End of Report