Safety Data Sheet

Part Number 325364

Section 1. Substance Identity and Company Contact Information

Product Name	Air, Compressed	**Product Part Number(s)**	01-ZEROGAS Calibration Kit 01-R22KIT
Trade Name	Air, Compressed	**Unit Size**	103 liters/3.6 cubic ft @ 1,000 psig

Company OI Analytical, P.O. Box 9010, College Station, TX 77842-9010, Phone: (979) 690-1711, Fax: (979) 690-0440

Emergency No. 1-800-424-9300 (Chemtrec). Use only in the event of chemical emergencies involving spills, leaks, fire, exposure, or accidents involving chemicals.

Section 2. Hazards Identification

Pictogram(s)

Signal Word	Warning	
Precautionary Statement(s)	Contains gas under pressure; may explode if heated. May support combustion. Read and follow all Safety Data Sheets (SDS'S) before use. Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand. Close valve after each use and when empty. Use equipment rated for cylinder pressure. Do not open valve until connected to equipment prepared for use. Use a back flow preventative device in the piping. Use only equipment of compatible materials of construction.	
Target Organ(s)	No data available	
Potential Health Effects	Eye:	Contact with rapidly expanding gas near the point of release may cause frostbite.
	Skin:	Contact with rapidly expanding gas near the point of release may cause frostbite with redness, skin color change to gray or white, and blistering.
	Ingestion:	Ingestion is unlikely. Product is a gas at room temperature.
	Inhalation:	None expected. This product contains sufficient oxygen to sustain life. This product is not intended for use as breathing air unless labeled as CGA Grade D, CGA Grade E or U.S.P. Medical Air.
Chronic Effects/ Carcinogenicity	IARC:	No
	NTP:	No
	OSHA:	No
Teratology (Birth Defects) Information	Mutation data cited in the "Registry of Toxic Effects of Chemical Substances" or other information sources.	
Reproductive Information	No information found in the "Registry of Toxic Effects of Chemical Substances" or other information sources.	

NFPA Ratings	Health:	0
	Flammability:	0
	Reactivity:	0
HMIS Rating	Health:	0
	Flammability:	0
	Reactivity:	0
	Protective Equipment:	None

Section 3. Chemical Composition and Data on Components

Ingredient	CAS No.	Percent	Hazard Data	
			ACGIH TLV	OSHA PEL
Oxygen	7782-44-7	19.5-23.5	No data available	No data available
Nitrogen	7727-37-9	76.5-80.5	simple asphyxiant	None established

Section 4. First Aid Measures

General Advice	No data available
If Inhaled	None required
In Case of Skin Contact	None required for gas. For frostbite, immerse skin in lukewarm water. DO NOT USE HOT WATER. Obtain medical attention.
In Case of Eye Contact	None required for gas. If frostbite is suspected, flush eyes with cool water for 15 minutes and obtain immediate medical attention.
If Swallowed	Not anticipated; product is a gas.
Indication of Any Immediate Medical Attention and Special Treatment Needed	No data available.

Section 5. Fire-fighting Measures

General Information	Use water spray to cool surrounding containers. Continue to cool surrounding containers until well after flames are extinguished. Firefighters should wear a full-face piece, NIOSH/MSHA-approved self-contained breathing apparatus (SCBA) operated in positive pressure mode and full turnout gear.
Suitable Extinguishing Media	Use media suitable for surrounding combustible or flammable materials.
Special Hazards Arising from the Substance or mixture	Contains gas under pressure. In a fire or if heated, a pressure increase will occur and the container may burst or explode.
Advice for Firefighters	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Contact supplier immediately for specialist advice. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
Flash Point	None
Autoignition Temperature	No data available
Further Information	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental Release Measures

Personal Precautions, Protective Equipment, and Emergency Procedures	If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For nonemergency personnel".
Environmental Precautions	Ensure emergency procedures to deal with accidental gas releases are in place to avoid contamination of the environment. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
Methods and Materials for Containment and Cleaning	If a leak is in user's equipment, be certain to purge piping with an inert gas prior to attempting repairs. If leak is in container valve, contact the appropriate emergency telephone number listed in Section 1 or call your closest Norco/NorLab location.
Reference to Other Sections	For disposal, see Section 13.

Section 7. Handling and Storage

Precautions for Safe Handling	Put on appropriate personal protective equipment (see Section 8). Contains gas under pressure. Avoid contact with eyes, skin and clothing. Avoid breathing gas. Empty containers retain product residue and can be hazardous. Do not puncture or incinerate container. Use equipment rated for cylinder pressure. Close valve after each use and when empty. Protect cylinders from physical damage; do not drag, roll, slide, or drop. Use a suitable hand truck for cylinder movement.
Conditions for Safe Storage, Including any Incompatibilities	Store in accordance with local regulations. Store in a segregated and approved area. Store away from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10). Keep container tightly closed and sealed until ready for use. Cylinders should be stored upright, with valve protection cap in place, and firmly secured to prevent falling or being knocked over. Cylinder temperatures should not exceed 52 °C (125 °F).
Specific End Use(s)	Analytical chemistry

Section 8. Exposure Controls and Personal Protection

Components with Workplace Control Parameters	No data available
Appropriate Engineering Controls	Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
Eye/Face Protection	Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with sideshields.
Skin Protection	Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated. Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Body Protection	Personal protective equipment for the body should be selected based on the task beingperformed and the risks involved and should be approved by a specialist before handling this product.
Respiratory Protection	Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
Control of Environmental Exposure	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Section 9. Physical and Chemical Properties

Appearance	Form: Gas; Color: Colorless
Odor	Odorless
Odor Threshold	No data available
pH	No data available
Melting Point/Freezing Point	-216.2 °C (-357.2 °F)
Initial Boiling Point and Boiling Range	-194.3 °C (-317.7 °F)
Flash Point	No data available
Evaporation Rate	No data available
Flammability (solid, gas)	No data available
Upper/Lower Flammability or Explosive Limits	No data available
Vapor Pressure	No data available
Vapor Density	Highest known value: 1.1 (Air = 1) (oxygen). Weighted average: 1 (Air = 1)
Relative Density	No data available
Water Solubility	Slightly soluble
Partition Coefficient : n-octanol/water	No data available
Auto-ignition Temperature	No data available
Decomposition Temperature	No data available
Viscosity	No data available
Explosive Properties	No data available
Oxidizing Properties	No data available
Other Safety Information	No data available

Section 10. Stability and Reactivity

Reactivity	No data available
Chemical Stability	Stable under recommended storage conditions
Possibility of Hazardous Reactions	No data available
Conditions to Avoid	No data available
Incompatible Materials	None

Section 11. Toxicological Information

Routes of Exposure	*On the skin:*	No data available
	On the eye:	No data available
	Inhalation:	No data available
	Ingestion:	No data available
Respiratory or Skin Sensitization	No sensitizing effects known	
Signs and Symptoms of Overexposure	No data available	
Toxicity Data	*Oral rat LD 50*	No data available

Section 12. Ecological Information

General Notes	Product does not contain any Class I or Class II ozone depleting substances. Not toxic. Will not bioconcentrate.

Section 13. Disposal Considerations

Product	The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Empty Airgas-owned pressure vessels should be returned to Airgas. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Do not puncture or incinerate container.
Contaminated Packaging	Dispose of as unused product

Section 14. Transport Information

DOT Shipping Name	Air, Compressed
UN Proper Shipping Name	Air, Compressed
DOT Hazard Class	2.2
Packing Group	No data available
UN Number	UN1002
Hazardous Ingredients	No data available
DOT Label	Non Flammable Gas
DOT Placard	No data available

IMDG Shipping Name	Air, compressed (nitrogen, oxygen)
UN Number	UN1002
Class	2.2
Packing Group	No data available

IATA Shipping Name	Air, compressed (nitrogen, oxygen)
Technical Shipping Name	No data available
IATA Hazard Class	2.2
UN Number	UN1002
Hazardous Ingredients	No data available
IATA Label	No data available
IATA Placard	No data available

Section 15. Regulatory Information

OSHA Status	No data available	
TSCA Status	No data available	
CERCLA Reportable Quantity	No data available	
SARA Title III	This product does not contain toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act (EPCRA) of 1986 and 40 CFR 372.	
RCRA Status	No	
California Proposition 65	This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.	
Chemical Weapons Convention	No	
TSCA 12 (b)	No	
SARA 311/312	Acute:	No
	Chronic:	No
	Fire:	No
	Pressure:	Yes
	Reactivity:	No
Australian Hazchem Code	None allocated	
Poison Schedule	None allocated	
WHMIS	This SDS has been prepared according the hazard criteria of the Controlled Products Regulation (CPR) and the SDS contains all of the information required by the CPR.	

Section 16. Other Information

Date Prepared: July 19, 2008
Revised: May 20, 2015

Compressed gas cylinders must not be refilled without the express written permission of the owner. Shipment of a compressed gas cylinder which has not been filled by the owner or with his/her (written) consent is a violation of transportation regulations.

For R&D use only. Not for drug, household, or other uses.

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