

SAFETY DATA SHEET

Inergen®

SECTION 1: IDENTIFICATION OF THE MATERIAL AND SUPPLIER			
Product Name	Inergen	Other Names	IG541
Recommended Use	Fire protection agent for total flooding of rooms containing electrical equipment such as switch rooms and relay rooms as well as flammable liquid storages and Class A risks such as records rooms and libraries.		
Supplier Name	Wormald	Address	Unit 1, 2-8 South Street Rydalmere, NSW 2116 AUSTRALIA
Telephone No.	133 166	Emergency Telephone No.	133 166 or 000
		Date Prepared	February 2013

SECTION 2: HAZARDS IDENTIFICATION			
Hazard Classification	Dangerous Goods. Non Hazardous Substance		
DG Class	2.2	Hazchem Code	2TE

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS			
MIXTURE			
Chemical Identity of Ingredients	Proportion of Ingredients	CAS Number	
Nitrogen	52 %	7727-37-9	
Argon	40 %	7740-37-1	
Carbon Dioxide	8 %	124-38-9	

SECTION 4: FIRST AID MEASURES		
Description of Necessary First Aid Measures	EYE CONTACT	Immediately flush eyes with water for a minimum of 15 minutes. If redness, itching or a burning sensation develops, get medical attention. Treat for frostbite if necessary.
	SKIN CONTACT	If itching, redness or a burning sensation develops, get medical attention. Treat for frostbite if necessary.
	INHALATION	Remove victim to fresh air. If cough or other respiratory symptoms occur, consult medical personnel. If not breathing, give artificial respiration.
	INGESTION	Not considered a potential route of exposure. Due to product form and application, ingestion is considered unlikely.
Medical Attention and Special Treatment	Treat symptomatically	

SECTION 5: FIRE FIGHTING MEASURES			
Suitable Extinguishing Media	This product is non flammable. Use fire-extinguishing media appropriate for surrounding materials.	Hazards From Combustion Products	Not available – gas is non flammable
Special Protective Precautions and Equipment for Fire Fighters	Keep containers cool with water spray. Containers may rupture when heated , fire exposed containers may vent contents through pressure relief devices.	Hazchem Code	2TE

SECTION 6: ACCIDENTAL RELEASE MEASURES	
Emergency Procedures	Avoid direct skin and eye contact with escaping high pressure gas. Evacuate the area and ventilate. Do not enter areas where high concentrations may exist without appropriate protective equipment including a self-contained breathing apparatus.
Methods and Materials for Containment and Clean Up	Ensure that the area is well ventilated this substance will dissipate into the atmosphere.

SECTION 7: HANDLING AND STORAGE	
Precautions for Safe Handling	Protect cylinders from physical damage, do not drag, roll, slide or drop. When moving cylinders use cylinder trolley, cage etc specifically designed to transport cylinders. Do not move cylinders without safety cap in place to prevent damage to valve.
Conditions for Safe Storage, Including any Incompatibilities	Do not store near incompatible materials. Keep cylinders away from combustible materials and sources of heat and ignition Keep cylinders below 50°C in a well ventilated place free from conditions likely to encourage corrosion. Cylinders shall be suitably restrained to prevent falling or toppling.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION					
	Substance	TWA		STEL	
		ppm	mg/m ³	ppm	mg/m ³
National Exposure Standards	Nitrogen	(Asphyxiant)		(Asphyxiant)	
	Argon	(Asphyxiant)		(Asphyxiant)	
	Carbon Dioxide	5000	9000	30000	54000
Engineering Controls	Gas cylinders are equipped with pressure and temperature relief devices	Biological Limit Controls		Not available	
Personal Protection Equipment	Safety boots, safety glasses with side shields and gloves				

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES			
Appearance	Colourless gas	Odour	Odourless
pH	7.0	Vapour Pressure	Not available
Vapour Density (air = 1)	1.22	Boiling Point / Range	- 196°C
Freezing / Melting Point (specify)	Not available, Inergen is a permanent gas	Solubility in Water	Slight
Specific Gravity or Density	1.442 kg/m ³ @ 1 bar	Flash Point	Non flammable
Upper and Lower Flammable (explosive) Limits in Air	Non flammable	Ignition Temperature	Non flammable

SECTION 10: STABILITY AND REACTIVITY			
Chemical Stability	Stable under recommended conditions of storage.	Conditions to Avoid	Temperatures above 50 Degrees C
Incompatible Materials	Because of Carbon dioxide: (Al + Na2O2) (Mg + Na2O), Cs2O, Li, K, Mg(C2H5)2, KC2H, Na, NaK, and Ti.	Hazardous Decomposition Products	No hazardous decomposition products are known.
Hazardous Reactions	Hazardous polymerisation will not occur.		

SECTION 11: TOXICOLOGICAL INFORMATION		
Health Effects From the Likely Routes of Exposure	EYE CONTACT	Non-irritating gas.
	SKIN CONTACT	Non-irritating gas.
	INHALATION	Not an asphyxiant at its normal design concentration of 34-70 % V/V.
	INGESTION	Not applicable, as Inergen is a gas.
Acute Overexposure	See above	
Chronic Overexposure	Dizziness, disorientation, loss of motor control, symptoms of exposure are directly related to the displacement of oxygen	

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity	This product is a mixture of normal atmospheric gases and has no known eco-toxicological effects.
Mobility	Not available
Persistence and Degradability	Not available
Bioaccumulative Potential	Not available
Environmental Fate (Exposure)	Not available

SECTION 13: DISPOSAL CONSIDERATIONS

Disposal Methods and Containers	Cylinders should be returned to the supplier for disposal of contents.
Special Precautions for Landfill or Incineration	Not available

SECTION 14: TRANSPORT INFORMATION

UN Number	UN 1956	UN Proper Shipping Name	Inergen
Class and Subsidiary Risk	D. G. Class 2.2	Packing Group	Group III
Special Precautions for User	None	Hazchem Code	2TE

SECTION 15: REGULATORY INFORMATION

The regulatory status of a material (including its ingredients) under relevant Australian health, safety and environmental legislation.	Inergen is an approved gas which is listed in Australian Standard AS ISO 14520. Inergen also has Australian ActivFire approval listing as a fire extinguishing agent
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SECTION 16: OTHER INFORMATION

Date of Preparation	February 2013		
Abbreviations	CAS - Chemical Abstract Service number	STEL – Short Term Exposure Limit	
	TWA – Time Weighted Average	V/V – Volume to Volume	

END OF SDS

Contact Us

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