

SAFETY DATA SHEET



molecular

OXYGEN CANDLE

Safety Data Ref: 9a

Date: 24/01/2008

Issue No: 4

Pages: 1 of 2

1 IDENTIFICATION OF SUBSTANCE	Commercial Name Chemical Name	Oxygen Candle, Oxygen Generator Chlorate Candle			
2 COMPOSITION	Components	% W/W	CAS	EINECS	Supply Class
	Sodium Chlorate	>85%	7775-09-9	231-887-4	O.Xn;R9-22
	Barium Peroxide	< 4%	1304-29-6	215-128-4	O.Xn;R8-20/22
	Iron Powder	< 8%	7439-89-6	231-096-4	
3 HAZARDS IDENTIFICATION		Contact with combustible materials may cause fire. Harmful if swallowed or dust inhaled. Risk of blood or kidney damage			
4 FIRST AID MEASURE	Inhalation Skin Eyes Ingestion	Remove from exposure. Obtain medical attention Drench with clean water. Obtain medical attention if skin becomes inflamed Irrigate thoroughly with clean water. Obtain medical attention Wash out mouth thoroughly. Obtain medical attention			
5 FIRE FIGHTING	Extinguishing Media Fire & Explosion Hazards Protective Measures	Water only suitable. Do not use foam Liberates oxygen when heated to greater than 300°C and may cause fire or explosion in contact with combustible materials. Containers near heat source must be removed or cooled with water Breathing apparatus, boots and gloves			
6 ACCIDENTAL RELEASE	Personal Precautions Environmental Precautions Recovery	Avoid inhaling dust. Avoid skin and eye contact Sodium Chlorate damages plant and animal life. Do not wash dust into sewers or water course Contain material. Collect up large fragments. Absorb dust and small fragments in damp sand then sweep or vacuum up. Do not sweep up dry dust because of risk of ignition			
7 HANDLING & STORAGE		Store in a clean dry environment. Avoid direct sunlight or heat. Handle with care and do not drop. Keep away from organic and combustible materials			
8 EXPOSURE CONTROLS	Occupational Exposure Limits	Component	TWA/8h		
PERSONAL PROTECTION	Respiratory	Sodium Chlorate	5mg/m ³		
	Skin	Barium Peroxide	0.5mg(Ba)/m ³		
	Eyes	Classified dust mask recommended			
	Hygiene	General purpose rubber gloves			
			Glasses to protect against dust		
		Wash after skin contact			
9 PHYSICAL & CHEMICAL PROPERTIES	Appearance Odour Melting Point Decomposition Point Relative Density Solubility in water Other	Grey coloured solids None Approx 200°C Approx 300°C 2 g/cm ³ Partial Strong oxidising agent			

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10 STABILITY & REACTIVITY

Material decomposes to produce oxygen on heating or ignition. Ignition can be caused by friction or impact. With strong acids, Chlorine and Chlorine Dioxide are evolved. Can burn with explosive violence if fuels or organic materials are present

11 TOXICOLOGICAL INFORMATION

Sodium Chlorate LD(50) = 1200mg/kg rbt
Barium Peroxide LD(50) = Not known

12 ECOLOGICAL INFORMATION

Risk of damage to animal or plant life

13 DISPOSAL CONSIDERATIONS

Disposal by licensed contractor and carrier
Material is a special waste under UK legislation

14 TRANSPORT INFORMATION

Transport Classification	Oxidizer
UN Number	1479
Proper Shipping Name	Oxidizing Solid N.O.S. (containing Sodium Chlorate)
Hazard Class	5.1
Packing Group	II
Subsidiary Risk	Harmful

15 REGULATORY INFORMATION

Supply Classification	Oxidising substance
Risk Phrases	R9 Explosive when mixed with combustible material R22 Harmful if swallowed
Safety Phrases	S13 Keep away from food, drink and animal feedstuffs S17 Keep away from combustible materials S46 If swallowed seek medical advice immediately and show the container or label

16 OTHER INFORMATION

The intended use of this product is as a source of oxygen for life support or industrial applications. A generator and filter unit is required, except for self contained candles

For information relating to:

- a) use of product and general enquiries
- b) purchase orders or delivery
- c) technical information and copies of safety data sheets

Please contact: Molecular Products Ltd, Mill End, Thaxted, Essex CM6 2LT, UK
Tel: +44 (0) 1371 830676 Fax: +44 (0) 1371 830998 E.mail: sales@molprod.com

For advice on medical emergencies, fires, spillages or chemical hazards involving warehousing, air, sea, road or rail transportation.

Please contact: National Chemicals Emergency Centre, OX14 3DE
24 hour emergency number: +44 (0) 1865 407333

THE INFORMATION IN THIS SAFETY DATA SHEET IS BASED ON BEST KNOWLEDGE AVAILABLE AT THE TIME AND CURRENT NATIONAL LEGISLATION. IT PROVIDES GUIDANCE ON HEALTH, SAFETY AND ENVIRONMENTAL ASPECTS OF THE PRODUCT AND SHOULD NOT BE CONSTRUED AS ANY GUARANTEE OF TECHNICAL PERFORMANCE OR SUITABILITY FOR PARTICULAR APPLICATION. AS THE SPECIFIC CONDITIONS OF USE ARE OUTSIDE THE CONTROL OF THE SUPPLIER, THE USER IS RESPONSIBLE FOR ENSURING THAT THE PRODUCT IS USED IN A SAFE WAY AND THE REQUIREMENTS OF RELEVANT LEGISLATION ARE COMPLIED WITH.