

MATERIAL SAFETY DATA SHEET

SECTION I - MATERIAL IDENTIFICATION AND USE

PRODUCT IDENTIFIER: <i>MM-9000LT</i>	MANUFACTURER'S NAME & ADDRESS: Circul-Aire Inc. 3999 Cote Vertu Montreal, Quebec Canada H4R 1R2
TRADE NAME: <i>MM-9000LT</i>	CA CIRCUL-AIRE®
CHEMICAL IDENTITY: <i>Activated carbon and aqueous potassium hydroxide</i>	
SYNONYMS: <i>MM-9000LT</i>	TELEPHONE NO.: (1) 514-337-3331
CHEMICAL FORMULA: <i>C + H₂O + KOH</i>	FAX NO.: (1) 514-336-3023
CHEMICAL FAMILY: <i>Inorganic</i>	SUPPLIER'S NAME & ADDRESS: Circul-Aire Inc. 3999 Cote Vertu Montreal, Quebec Canada H4R 1R2
MATERIAL USE: <i>Air purification</i>	CA CIRCUL-AIRE®
	EMERGENCY TELEPHONE NO.: (1) 514-337-3331
	MOLECULAR WEIGHT: <i>N/A</i>

SECTION II - HAZARDOUS INGREDIENTS OF MATERIAL

Hazardous Ingredients	Approximate Concentrations %	C.A.S. N.A. or U.N. Numbers	"Exposure Limits"	LD ₅₀ / LC ₅₀ Specify Species & Route
<i>Activated carbon</i>	<i>90-95</i>	<i>7440-44-0</i>	<i>N/A</i>	<i>LD₅₀ 10 g/kg oral-RAT</i>
<i>Potassium hydroxide</i>	<i>1-2</i>	<i>1310-58-3</i>	<i>N/A</i>	<i>LD₅₀ 273 Mg/kg oral-RAT</i>

SECTION III - PHYSICAL DATA FOR MATERIAL

Physical State Gas <input type="checkbox"/> Liquid <input type="checkbox"/> Solid <input checked="" type="checkbox"/>	Odor and Appearance <i>Black odorless granules</i>	Odor Threshold (p.p.m.) <i>N/A</i>	Specify Gravity <i>Packed density .5 - .6 g/cc</i>
Vapor Pressure (mm) <i>N/A</i>	Vapor Density (Air=1) <i>N/A</i>	Evaporation Rate <i>N/A</i>	Freezing Point (°C) <i>N/A</i>
Solubility in Water (20°C) <i>2%</i>	% Volatile (by volume) <i>5% (H₂O)</i>	pH <i>9.0 (10% suspension)</i>	Coefficient of water/oil distribution <i>N/A</i>

SECTION IV - FIRE AND EXPLOSION HAZARD OF MATERIAL

Flammability Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	If yes, under which conditions: <i>Ignition temperature > 300°C</i>
Means of Extinction <i>If involved in fire, flood with plenty of water.</i>	
Special Procedures <i>MM-9000LT in large vessels under static conditions is susceptible to exothermic reaction on contact with oxidizable material. Flooding the vessel with water will extinguish any hot zones. Copious volumes of steam will be generated in the process of extinguishing the hot zones. The carbon itself will not *</i>	
Flashpoint (°C) and Method <i>N/A</i>	Upper explosion limit (% by volume) <i>N/A</i>
Auto Ignition Temperature (°C) <i>N/A</i>	Lower explosion limit (% by volume) <i>N/A</i>
Hazardous Combustion Products <i>CO may be generated in the event of combustion.</i>	
Explosion Data Sensitivity to Mechanical Impact <i>N/A</i>	Rate of Burning <i>N.D.</i>
	Explosive Power <i>N/A</i>
	Sensitivity to Static Discharge <i>N/A</i>

SECTION V - REACTIVITY DATA

Chemical Stability Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	If no, under which conditions:
Incompatibility to other substances Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	If so, which ones? <i>Strong oxidizers. Avoid contact with vapor streams that have high concentration of combustible hydrocarbons.</i>
Reactivity and under what conditions	
Hazardous Decomposition Products <i>Carbon monoxide may be generated in the event of fire.</i>	

** exhibit flaming although any combustible material in contact with it will. Since wet activated carbons adsorb oxygen, do not enter a closed area without using a self-contained breathing apparatus.*

MATERIAL NAME/IDENTIFIER: MM-9000LT

SECTION VI - TOXICOLOGICAL PROPERTIES OF PRODUCT

Route of Entry Skin Contact Skin Absorption Eye Contact Inhalation Acute Inhalation Chronic Ingestion

Effects of Acute Exposure to Product

If the active ingredients of the product are leached out by water, the resulting solution may cause skin, eye and mucous membrane burn and/or irritation.

Effects of Chronic Exposure to Product

N/A

LD₅₀ of Product (Specify Species and Route)

N/A

Irritancy of Product

N/A

Exposure Limits of Product

N/A

LC₅₀ of Product (Specify Species)

N/A

Sensitization to Product

N/A

Synergistic Materials

N/A

Carcinogenicity

Reproductive effects

N/A

Teratogenicity

Mutagenicity

SECTION VII - PREVENTIVE MEASURES

Personal Protective Equipment

See following details

Gloves (Specify)

Rubber

Respiratory (Specify)

Particulate mask

Eye (Specify)

Safety glasses/goggles

Footwear (Specify)

N/A

Clothing (Specify)

Work apparel

Other (Specify)

N/A

Engineering Controls (e.g. ventilation, enclosed process, specify)

Handle in a well-ventilated area.

Leak and Spill Procedure

Avoid direct body contact. If dry, scoop or rake. If wet, rinse with copious amounts of water, scoop or rake, and store in waterproof container.

Waste Disposal

Dispose of in accordance with all Government regulations.

Handling Procedures and Equipment

*Wet MM-9000LT removes oxygen from air causing a severe hazard to workers inside MM-9000LT vessels and enclosed or confined spaces. Before entering such an area, sampling and work procedures for low oxygen levels should be taken to ensure ample oxygen***

Storage Requirements

Store in a closed container in a cool dry area.

Special Shipping Information

Class 8 Packing Group II U.N 1813

SECTION VIII - FIRST AID MEASURES

Skin

Wash with soap and water.

Eye

Flush with plenty of water for at least 15 minutes. Get prompt medical attention if irritation persists.

Inhalation

Move to clean air.

Ingestion

Consult doctor and drink water.

General Advice

Wash hands before eating or smoking. Wash contaminated clothing.

SECTION IX - PREPARATION, DATE OF M.S.D.S.

Additional Information

WHMIS CLASS E

Sources Used

Chemical literature, MSDS for base impregnated carbon from Calgon Carbon Corp. and Weststates Carbon Co., Inc. U.S.A., COH

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Telephone Number

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Date

February 2009

N/A - NOT APPLICABLE

N.D. - NOT DETERMINED

Circul-Aire Inc. requests the users of this product to study this Material Safety Data Sheet (MSDS) and become aware of product hazards and safety information. To promote safe use of this product, a user should (1) notify its employees, agents and contractors of the information on this MSDS and any product hazards and safety information, (2) furnish this same information to each of its customers for the product, and (3) request such customers to notify their employees and customers for the product of the same product hazards and safety information.

** availability, observing all Government regulations.