

MATERIAL SAFETY DATA SHEET

SECTION I - MATERIAL IDENTIFICATION AND USE

PRODUCT IDENTIFIER: <i>MM-7000</i>	MANUFACTURER'S NAME & ADDRESS: Circul-Aire Inc. 3999 Cote Vertu Montreal, Quebec Canada H4R 1R2
TRADE NAME: <i>MM-7000</i>	TELEPHONE NO.: (1) 514-337-3331 FAX NO.: (1) 514-336-3023
CHEMICAL IDENTITY: <i>Activated carbon and aqueous phosphoric acid</i>	
SYNONYMS: <i>MM-7000</i>	SUPPLIER'S NAME & ADDRESS: Circul-Aire Inc. 3999 Cote Vertu Montreal, Quebec Canada H4R 1R2
CHEMICAL FORMULA: $C + H_2O + H_3PO_4$	EMERGENCY TELEPHONE NO.: (1) 514-337-3331
CHEMICAL FAMILY: <i>Inorganic</i>	
MATERIAL USE: <i>Air purification</i>	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>	76	7440-44-0	<i>N/A</i>	<i>LD₅₀ 10 g/kg oral-RAT</i>
<i>Phosphoric acid</i>	10	7664-38-2		

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>.55 - .65</i>
Vapor Pressure (mm) <i>N/A</i>	Vapor Density (Air=1) <i>N/A</i>	Evaporation Rate <i>N/A</i>	Boiling Point (°C) <i>N/A</i>
Solubility in Water (20°C) <i>10-15%</i>	% Volatile (by volume) <i>10-15% as water vapor</i>	pH <i>(10% suspension) 2.5</i>	Freezing Point (°C) <i>N/A</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>Flood with water or use foam, CO₂ or dry chemical.</i>	
Special Procedures <i>MM-7000 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 ***</i>	
Flashpoint (°C) and Method <i>N/A</i>	Upper explosion limit (% by volume) <i>N/A</i>
Auto Ignition Temperature (°C) <i>> 175°C</i>	Lower explosion limit (% by volume) <i>N/A</i>
Hazardous Combustion Products <i>CO may be generated in case of combustion.</i>	
Explosion Data Sensitivity to Mechanical Impact <i>N/A</i>	Rate of Burning <i>N/A</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>Organic liquids, strong oxidizers.</i>
Reactivity and under what conditions <i>Contact with strong oxidizers such as ozone, liquid oxygen, chlorine, etc. may result in a fire.</i>	
Hazardous Decomposition Products <i>Carbon monoxide may be generated in the event of combustion.</i>	

*** itself will not 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-7000

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
N/A

Effects of Chronic Exposure to Product
N/A

LD ₅₀ of Product (Specify Species and Route) N/A	Irritancy of Product N/A	Exposure Limits of Product N/A	
LC ₅₀ of Product (Specify Species) N/A	Sensitization to Product N/A	Synergistic Materials N/A	
<input type="checkbox"/> Carcinogenicity	<input type="checkbox"/> Reproductive effects N/A	<input type="checkbox"/> Teratogenicity	<input type="checkbox"/> Mutagenicity

SECTION VII - PREVENTIVE MEASURES

Personal Protective Equipment
See below

Gloves (Specify) <i>Rubber</i>	Respiratory (Specify) <i>Particulate mask</i>	Eye (Specify) <i>Full faceshield or safety glasses/goggles</i>	Footwear (Specify) <i>Rubber</i>
Clothing (Specify) N/A	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
Consult federal, provincial and local authorities.

Handling Procedures and Equipment
Do not get in eyes, on skin or clothing. Do not breathe dust.

Storage Requirements *Wet MM-7000 removes oxygen from air causing a severe hazard to workers inside MM-7000 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.*

Special Shipping Information
CLASS 8 Packing Group II U.N. #1805

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. Consult a physician.

Ingestion
N/A

General Advice
N/A

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

Additional Information
N/A

Sources Used
Chemical literature, MSDS for impregnated carbons from Weststates Carbon Co. Inc. U.S.A.

Prepared by: <i>Christopher Flaherty</i>	Telephone Number <i>(1) 514-337-3331</i>	Date <i>February 2009</i>
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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.