

ZMM® T-Carbon
Material Safety Data Sheet

SECTION 1 – PRODUCT IDENTIFICATION AND USE

PRODUCT IDENTIFIER: ZMM® T-Carbon	
PRODUCT USE: WHMIS CLASSIFICATION: Not WHMIS controlled	
MANUFACTURER & SUPPLIER'S NAME:	ZMM® Canada Minerals Corp.
ADDRESS:	6459 Mack Road, Peachland, BC V0H 1X8
IN CASE OF EMERGENCY:	(250) 767-6788

SECTION 2 – HAZARDOUS INGREDIENTS

HAZARDOUS INGREDIENTS	%
Wood Chip Based Carbon (no paint or stain)	>85%
Wood chip based [soluble and non-soluble] ash	<15%
Water	<5%

SECTION 3 – PHYSICAL DATA

PHYSICAL STATE: Solid	ODOR & APPEARANCE: Color is gray to black predominantly black, odorless	SPECIFIC GRAVITY: (H ₂ O=1) 1.8-2.1 Note that bulk density differs, and T-Carbon will float for some hours prior to taking on water and sinking			
SOLUBILITY IN WATER: Insoluble in water	VAPOUR DENSITY: (Air=1) NAP	EVAPORATION RATE: No Information	BOILING POINT (°C): Sublimates 4827	FREEZING POINT (°C): NAP	MELTING POINT(°C): 350°C

SECTION 4 – FIRE AND EXPLOSION DATA

EXTINGUISHING MEDIA: Water spray, dry chemical, alcohol foam, or carbon dioxide			
SPECIAL FIRE FIGHTING PROCEDURES: None			
FLASHPOINT (°C) AND METHOD: Non Flammable	FLAMMABLE LIMITS: No data found	LEL: No data found	UEL: No data found

UNUSUAL FIRE AND EXPLOSION HAZARDS: Fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard. Minimum explosible concentration 0.140 g/l

SECTION 5 – REACTIVITY DATA

CHEMICAL STABILITY:	Stable under ordinary conditions of use and storage.
INCOMPATIBILITY: (Materials to Avoid)	CONDITIONS TO AVOID: Strong oxidizers such as ozone, liquid oxygen, chlorine, permanganate, etc. may result in rapid combustion. Avoid contact with strong acids. Avoid high temperatures and O ² . Also avoid listed conditions to avoid above
REACTIVITY AND UNDER WHAT CONDITIONS: Stable	
HAZARDOUS POLYMERIZATION: Will not occur	

SECTION 6 – TOXICOLOGICAL PROPERTIES

ROUTE OF ENTRY: SKIN CONTACT: No SKIN ABSORPTION: , use of long sleeves, pants, close toed shoes, and eye protection is recommended EYE CONTACT: Yes, dust INHALATION: Inhalation - avoid inhalation by use of P100 respirator or P100 + VOC control INGESTION: Ingestion, use reparatory filters to not ingest, do not ingest. Low amounts of T-Carbon contact should only produce mild irritation which can be corrected with rinsing with water.			
EFFECTS OF ACUTE EXPOSURE TO PRODUCT: Prolonged inhalation of excessive dust may produce pulmonary disorders.			
CARCINOGENICITY: Not known			
MEDICAL CONDITIONS GENERALLY AGGREVATED BY EXPOSURE:		NTP- does not address activated T-Carbon. IARC Monographs no monograph is available on activated carbon or biochar. Monographs are available on carbon black a product with more volatile product then is contained in biochar.	
SYNERGISTIC PRODUCTS: None Known	IRRITANCY:	OSHA Regulated OSHA does not regulate activated T-Carbon. OSHA does report that after activated T-Carbon is used to adsorb vapors that T-Carbon may pose a fire risk	
TERATOGENCITY: NAV	REPRODUCTIVE HAZARD: NAV	MUTAGENCY: NAV	

SECTION 7– PREVENTIVE MEASURES

PERSONAL PROTECTIVE EQUIPMENT:

Glove and Eye Protection: YES (goggle or side shield types)

Footwear:

Protective Clothing: long sleeves, pants, closed toed shoe

Respirators:

Other Protective Equipment:

Work/Hygienic Practices:

ENGINEERING CONTROLS: A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area

LEAK AND SPILL PROCEDURE:

WASTE DISPOSAL: Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

HANDLING PROCEDURES AND EQUIPMENT: Avoid sending product airborne in a confined environment. Wet carbon can deplete oxygen from the air avoid confined or non-ventilated spaces.

STORAGE REQUIREMENTS:

SPECIAL SHIPPING INFORMATION:

SECTION 8– CONTROL MEASURES

INHALATION: If dust is airborne remove sources of ignition, ventilate area, wear appropriate personal protective equipment including long pants and sleeves, eye protection and respirator (P100 type). Reduce airborne dust with water. Use non sparking tools and equipment. Spent product may absorb other products in that environment.

EYE CONTACT: Flush eyes with large amounts of water. If irritation persists, get medical attention. Have eye wash stations available.

RESPIRATORY PROTECTION:

SKIN CONTACT; Wash skin with soap and water. Protective gloves normally not necessary.

INGESTION: NAP

SECTION 9– PREPARATION DATE OF MSDS

PREPARED BY:
LuVerne E.W. Hogg, President and CEO
ZMM Canada Minerals Corp.
6459 Mack Road
Peachland, BC V0H 1X8

SIGNATURE:

DATE: March 5, 2018

BUSINESS PHONE: 250-767-6788

ADDITIONAL INFORMATION:

NAP: Not applicable

NAV: Not available