

**ZMM<sup>®</sup> TransCanada and Juniper Natural Zeolites**  
**Species: Analcime, Chabazite, Heulandite (Clinoptilolite), Phillipsite**

## Safety Data Sheet

### Section 1: Identification

---

<i>Date:</i>	Revised May 2, 2022	
<i>Product identified:</i>	Natural Zeolite	
	CAS No. 1318-02-1	
<i>Restrictions on use or sale:</i>	None	
<i>Company:</i>	ZMM Canada Minerals Corp. 6459 Mack Road Peachland, BC V0H 1X8	Phone: 250-767-6788 Website: <a href="http://www.zmmcanadamineralscorp.com">www.zmmcanadamineralscorp.com</a> Email at: <a href="mailto:verne@zmmcanadamineralscorp.com">verne@zmmcanadamineralscorp.com</a>
<i>Emergency telephone number:</i>	250-767-6788	

### Section 2: Hazard Identification

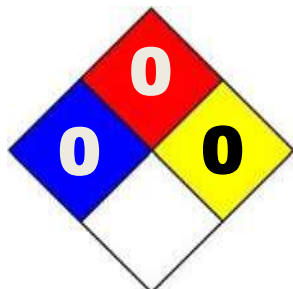
---

*Regulation (EU) No 1272/2008*

<i>GHS regulations:</i>	Not classified as hazardous.
<i>CLP regulation:</i>	Not classified as hazardous.
<i>Directive 67/548/EEC:</i>	Not applicable.
<i>Directive 1999/45/EC:</i>	Not applicable.
<i>Classification system:</i>	The classification is according to the latest editions of the EU-lists and extended by company literature data. The classification is in accordance with the latest editions of international substances lists and is supplemented by information from technical literature.

*Label elements:*

<i>Regulation (EC) No 1272/2008:</i>	Not regulated.
<i>Hazard pictogram:</i>	Not regulated.
<i>Signal word:</i>	Not regulated.
<i>Hazard determining components:</i>	None.
<i>Hazard statements:</i>	Not regulated.
<i>NFPA Hazard Rating (Scale 0 to 4)</i>	



Health (Blue)	0	No precaution necessary.
Flammability (Red)	0	Noncombustible.
Reactivity (Yellow)	0	Not reactive when mixed with water.
Special (White)		None

HMIS Hazard Rating (Scale 0 to 4)

<b>HEALTH</b>	<b>0</b>
<b>FLAMMABILITY</b>	<b>0</b>
<b>REACTIVITY</b>	<b>0</b>

Health (Blue)	0	No significant health risks.
Flammability (Red)	0	Will not burn.
Reactivity (Yellow)	0	Will not react, polymerize, decompose, condense, or self-react. Non-explosive.

PBT and vPvB Assessment: PBT Not applicable.  
vPvB Not applicable.

---

### Section 3: Composition/Information on ingredients

---

*Dangerous components:* None in reportable quantities.

<i>Chemical and common name</i>	<i>Wt. %</i>	<i>CAS Registry</i>	<i>EINECS</i>
Natural zeolite	5% - 70%	12173-10-3	215-283-8
Water	3-10	7732-18-5	231-791-2

### Section 4. First Aid Measures

---

<i>General:</i>	No special measures required.
<i>After inhalation:</i>	Supply fresh air; consult doctor in case of complaints.
<i>After skin contact:</i>	Clean with water and soap. If skin irritation is experienced, consult a doctor.
<i>After eye contact:</i>	Remove contact lenses if worn. Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
<i>After swallowing:</i>	Rinse out mouth and then drink plenty of water. Do not induce vomiting.
Treat symptomatically.	

### Section 5. Fire-Fighting Measures

---

<i>Suitable extinguishing media:</i>	Noncombustible.
<i>Extinguishing media:</i>	Compatible with all extinguishing media.
<i>Unusual hazards:</i>	None known.

### Section 6. Accidental Release Measures

---

<i>Personal precautions:</i>	Avoid dust – use NIOSH approved respirator where dust occurs.
<i>Environmental precautions:</i>	No special measures required.
<i>Protection equipment:</i>	Safety glasses or chemical goggles.
<i>Spills cleanup:</i>	Pick up mechanically and place in a suitable container - avoid generating dust.

### Section 7. Handling and Storage

---

<i>Safe handling:</i>	Avoid contact with eyes, skin, and clothing. Avoid generating and breathing dust.
<i>Safe storage:</i>	No special requirements.

## Section 8. Exposure Controls and Personal Protection

---

*Limit values:* Does not contain any relevant quantities of materials with critical values that have to be monitored in the workplace.

<i>DNEL:</i>	No further information available.
<i>DNEC:</i>	No further information available.
<i>General protection:</i>	Use in a well-ventilated workplace. Avoid generating and contacting dust.
<i>Eye protection:</i>	Wear safety glasses.



<i>Respiratory protection:</i>	Not necessary in well ventilated area.
<i>Skin protection:</i>	Wear protective gloves against mechanical hazards according to NIOSH or EN 388.
<i>Body protection:</i>	Not required under normal conditions of use.

## Sections 9. Physical and Chemical Properties

---

<i>Appearance:</i>	Transparent/translucent red, brown, black, grey (powders and granules).
<i>Odor:</i>	Odorless.
<i>Odor threshold:</i>	Not determined.
<i>pH values:</i>	Not applicable.
<i>Change in condition:</i>	Melting point/melting range: Not determined. Boiling point/boiling range: Not determined.
<i>Flash point:</i>	Not applicable. Will not burn.
<i>Evaporation rate:</i>	Not applicable; does not evaporate.
<i>Flammability (solid, gas):</i>	Not flammable. Upper/lower limits: Not applicable.
<i>Danger of explosion:</i>	Does not present and explosive hazard. Upper/lower limits: Not applicable.
<i>Vapor density:</i>	Does not apply. Does not evaporate.
<i>Relative density:</i>	Not determined
<i>Solubility:</i>	Water: Insoluble. Alcohol: Insoluble.
<i>Partition coefficient:</i>	Not applicable (insoluble in n-octanol and water).
<i>Auto ignition temperature:</i>	Will not autoignite.
<i>Decomposition temperature:</i>	Not determined.
<i>Viscosity:</i>	Not applicable - solid.

## Section 10. Stability and Reactivity

---

<i>Chemical stability</i>	Stable if used as intended.
<i>Thermal stability:</i>	Stable if used as intended.
<i>Hazardous reaction:</i>	Possibility of hazardous reaction with strong acids and strong alkali.
<i>Conditions to avoid:</i>	No further information available
<i>Materials to avoid:</i>	Strong acids and strong bases.
<i>Hazardous decomposition:</i>	No further information available.

## Section 11. Toxicological Information

---

<i>Toxicological:</i>	When used and handled according to instructions, the product does not have any harmful effects based upon our experience.
<i>Sensitization:</i>	No sensitizing effects known.
<i>General EU Guidelines:</i>	Not subject to classification according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version.
<i>NTP IARC</i>	Not listed in the National Toxicological Program <i>Report on Carcinogens</i> , 2011. International Agency for Research on Cancer <i>MONOGRAPHS VOLUME 68</i> : clinoptilolite cannot be evaluated as to the carcinogenicity to humans (Group 3).

## Section 12. Ecological Information

---

<i>Toxicity:</i>	No known toxicity to plants or animals.
<i>Environmental fate</i>	Inorganic material does not decompose and is not eliminated from environment by means of biological cleaning processes.
<i>Bioaccumulation:</i>	Does not bioaccumulate in animal or plants.
<i>Mobility in soil:</i>	Not mobile.

## Section 13. Disposal Consideration

---

<i>Classification:</i>	Not a RCRA Hazardous Waste.
<i>Disposal method:</i>	Dispose in accordance with federal, state (provincial), and local regulations.

## Section 14. Transportation Information

---

<i>UN Number:</i>	DOT, ADR, ADN, IMDG, IATA:	Not Regulated.
<i>UN Proper Shipping Name:</i>	DOT, ADR, ADN, IMDG, IATA:	Not Regulated.
<i>Transport Hazard Class:</i>	DOT, ADR, ADN, IMDG, IATA:	Not Regulated.
<i>Packing Group:</i>	DOT, ADR, IMDG, IATA:	Not Regulated.
<i>Marine pollutant:</i>	No.	
<i>Proper shipping name:</i>	Non-Hazardous for Transport.	
<i>Hazard Symbol:</i>	None required.	
<i>Hazard Id Number (HIM):</i>	None.	

---

## Section 15. Regulatory Information

---

### United States

<i>SARA 355:</i>	Extremely hazardous substances:	None of the ingredients listed.
<i>SARA 313:</i>	Specific toxic chemical listings:	None of the ingredients listed.
<i>TSCA:</i>	All of the ingredients are listed.	
<i>California Prop 65:</i>	Known to cause cancer:	None of the ingredients listed.
	Known to cause reproductive toxicity:	None of the ingredients listed.
	Known to cause developmental toxicity:	None of the ingredients listed.
	EPA	None of the ingredients listed.
	IARC	None of the ingredients listed.
	TLV by ACGHI	None of the ingredients listed.
	NIOSH-Ca	None of the ingredients listed.
	Ingredients Disclosure List (limit 0.1%)	None of the ingredients listed.
	Ingredients Disclosure List (limit 1%)	None of the ingredients listed.
<i>REACH, Article 57:</i>	Substances of very high concern (SVHC)	None of the ingredients listed.

---

*Canada: CPR:* (Canadian Controlled Products Regulations): This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR. WHMIS Classification: Not Controlled.

*DSL / NDSL:* (Canadian Domestic Substances List / Non-Domestic Substance List): Components of this product identified by CAS number are not listed on the DSL or NDSL, or are otherwise in compliance with the New Substances Notifications (NSN) regulations.

*Chemical Safety Assessment:* A Chemical Safety Assessment has not been carried out.

## Section 16. Other information

---

### *Safety Data Sheet:*

*Approved by:* LuVerne E.W. Hogg

*Date:* March 14, 2018

### *Abbreviations:*

<i>ACGIH</i>	American Conference of Governmental Industrial Hygienists
<i>ADR</i>	European Agreement concerning the International Carriage of Dangerous Goods by Road
<i>ADN</i>	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
<i>CAS</i>	Chemical Abstracts Service (division of the American Chemical Society)
<i>CLP</i>	Classification, Labeling, and Packaging Regulation (EC) No 1272/2008
<i>DNEL</i>	Derived No-Effect Level (REACH)
<i>DOT</i>	US Department of Transportation
<i>DSL</i>	Domestic Substance List
<i>EINECS</i>	European Inventory of Existing Commercial Chemical Substances
<i>ELINCS</i>	European List of Notified Chemical Substances
<i>EPA</i>	Environmental Protection Agency

<i>GHS</i>	Globally Harmonized System of Classification and Labeling of Chemicals
<i>HMIS</i>	Hazardous Materials Identification System (USA)
<i>IARC</i>	International Agency of Research on Cancer
<i>IATA</i>	International Air Transport Association
<i>IMDG</i>	International Maritime Code for Dangerous Goods
<i>NIOSH</i>	National Institute of Occupational Safety and Health
<i>NFPA</i>	National Fire Protection Association (USA)
<i>NTP</i>	National Toxicological Program
<i>PBT</i>	Persistent, Bio accumulative, and Toxic
<i>PNEC</i>	Predicted No-Effect Concentration (REACH)
<i>REACH</i>	Registration, Evaluation, Authorization, and Restriction of Chemicals; (EC) 1907/2008
<i>RCRA</i>	Resource Conservation and Recovery Act
<i>SARA</i>	Superfund Amendment and Reauthorization Act
<i>SVHC</i>	Substances of very high concern
<i>TSCA</i>	Toxic Substances Control Act
<i>TLV</i>	Threshold Limit Value
<i>vPvB</i>	Very persistent and very bio accumulative
<i>WHMIS</i>	Workplace Hazardous Materials Information System (Canada)

The information on this Safety Data Sheet is believed to be accurate and is the best information available to ZMM® Canada Minerals Corp. This document is intended only as a guide to the appropriate precautions for handling. ZMM® Canada Minerals Corp. makes no warranty of merchantability or any other warrant, expressed or implied with respect to the information or the product to which this Safety Sheet relates. Users and handlers of this product should make their own investigations to determine the suitability of the information provided herein for their own purposes.