

**Section 1. Identification**

**Product Name:** Rocket Seeds® Moly Shine 1-5-0

**Recommended use:** Plant Food

**Restrictions on use:** Use only as directed

<b>Manufacturer Name:</b>	Compass Minerals USA Inc.	Compass Minerals Manitoba Inc.
<b>Address:</b>	9900 West 109th St., Suite 100 Overland Park, KS 66210	6700 Century Avenue Mississauga L5N 64 CA
<b>Telephone number:</b>	1 913-344-9200	1-905-567-0231

**E-mail:** [techservicesrequests@compassminerals.com](mailto:techservicesrequests@compassminerals.com)  
**Website:** [www.compassminerals.com](http://www.compassminerals.com)

**Emergency phone number:** Call CHEMTREC Day or Night  
+1 703-527-3887 (collect calls accepted)

**Section 2. Hazard(s) Identification**

**Classification:**

Physical	Health
Combustible Dust	Carcinogen Category 2 Eye Damage Category 1 Specific Target Organ Toxicity Repeated Exposure Category 2

**Danger!**



Hazard statement(s)	Precautionary statement(s)
May form combustible dust concentrations in air. H318 Causes serious eye damage. H351 Suspected of causing cancer by inhalation. H373 May cause damage to brain through prolonged or repeated exposure by inhalation.	P201 Obtain special instructions before use. P202 Do not handle until all safety precautions have been read and understood. P260 Do not breathe dust. P280 Wear eye protection. P308 + P313 IF exposed or concerned: Get medical attention. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present

	<p>and easy to do. Continue rinsing.                      P310 Immediately call a POISON CENTER or doctor.                      P501 Dispose of contents and container in accordance with local and national regulations.</p>
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**Section 3. Composition / Information on Ingredients**

Chemical name	CAS No.	Concentration
Non-Hazardous (trade secret) ingredients	Proprietary	10-30%
Titanium Dioxide	13463-67-7	10-30%
Zinc Oxide	1314-13-2	<25%
Manganese Sulfate	10034-96-5	7-13%
Zinc Sulfate	7446-19-7	1-5%
Iron Sulfate	17375-41-6	1-5%

**The exact concentration is being withheld as a trade secret.**

**Section 4. First-Aid Measures**

**Inhalation:** Remove to fresh air. If breathing is difficult, administer oxygen. Get medical attention if irritation persists.

**Skin contact:** No first aid should be needed. Remove contaminated clothing and launder before reuse. Wash skin with soap and water. Get medical attention if irritation develops or persists.

**Eye contact:** Immediately flush eyes thoroughly with large quantities of water for 20 minutes, while holding the eye lids open to be sure the material is washed out. Remove contact lenses if present and easy to do. Get immediate medical attention.

**Ingestion:** Rinse out mouth with water. Get medical attention.

**Most important symptoms/effects, acute and delayed:** Causes severe eye irritation or burns. Permanent eye damage may occur. May cause mechanical skin irritation. Inhalation of dust may cause respiratory irritation, coughing and difficulty in breathing. Prolonged overexposure by inhalation may cause brain damage. Titanium Dioxide is suspected of causing cancer by inhalation. Risk of cancer depends on duration and level of exposure.

**Indication of immediate medical attention and special treatment, if necessary:** If eye contact occurs, get immediate medical attention.

**Section 5. Fire-Fighting Measures**

**Suitable (and unsuitable) extinguishing media:** Use water fog or spray, alcohol-foam, universal foam, carbon dioxide or dry chemical. Do not use solid water jet as that may create a dust cloud that can present an explosion hazard.

**Specific hazards arising from the chemical:** Dust generated in handling this material may present a potential fire and explosion hazard if suspended in air at high concentrations. Settled dust presents a fire hazard. Resuspension of the dust into the air by vibration, traffic, material handling, etc. in high concentrations in the presence of an ignition source could result in a dust explosion. Minimize the generation and accumulation of dust. Combustion may produce oxides of carbon, zinc, manganese, and other metal compounds.

**Special protective equipment and precautions for fire-fighters:** Firefighters should wear positive pressure self-contained breathing apparatus and full protective clothing. Powders that become wet may cause surfaces to be extremely slippery and cause a slip hazard.

**Section 6. Accidental Release Measures**

**Personal precautions, protective equipment, and emergency procedures:** Avoid generating air-born dust. Remove all ignition sources such as open flames, spark producing equipment, pilot lights, etc. Wear appropriate protective clothing as described in Section 8.

**Environmental precautions:** Avoid release to the environment. Report spills and releases as required to appropriate authorities.

**Methods and materials for containment and cleaning up:** Scoop or shovel up using methods that minimize the generation of airborne dust. Non-sparking tools should be used. Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentrations. Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air). Place dry material into an appropriate container for disposal. Wipe spill area with a damp cloth. Do not flush to the sewer.

**Section 7. Handling and Storage**

**Precautions for safe handling:** Prevent contact with eyes. Avoid contact with skin and clothing. Avoid generating or breathing dust. Wear protective clothing and equipment as described in Section 8. Use with adequate ventilation and proper dust collection methods to keep exposure level below occupational exposure limits. Wash thoroughly with soap and water after use. Do not eat, drink or smoke in the work area. Keep containers closed when not in use. Possible combustible dust hazard. Minimize the generation and accumulation of dust. Keep dust away from heat, sparks, flames and all other sources of ignition. Follow good housekeeping practices to keep surfaces, including areas overhead such as piping, drop ceilings, ductwork, etc. free from settled dust. Dry powders can build static electricity charges when subjected to friction of transfer and in mixing operations. Provide adequate precautions, such as electrical grounding and bonding, or inert atmospheres.

**Conditions for safe storage, including any incompatibilities:** Store in a cool, well-ventilated area. Protect from physical damage.

**Section 8. Exposure Controls / Personal Protection**

**Exposure guidelines:**

Non-Hazardous (trade secret) ingredients	10 mg/m3 TWA ACGIH TLV 5 mg/m3 (respirable fraction), 15 mg/m3 (Total dust) TWA OSHA PEL
Titanium Dioxide	10 mg/m3 TWA ACGIH TLV 15 mg/m3 TWA OSHA PEL (total dust)
Zinc Oxide	2 mg/m3 TWA, 10 mg/m3 STEL ACGIH TLV (Respirable) 5 mg/m3 (respirable fraction), 15 mg/m3 (total dust) TWA OSHA PEL
Manganese Sulfate (as Mn inorganic compounds)	0.02 mg/m3 TWA (respirable), 0.1 mg/m3 TWA (inhalable) ACGIH TLV 5 mg/m3 Ceiling OSHA PEL
Zinc Sulfate	None Established
Iron Sulfate	None Established

**Appropriate engineering controls:** Use with general or adequate local exhaust ventilation to minimize exposure levels. It is recommended that all dust control equipment such as local exhaust ventilation and material

transport systems involved in handling this product contain explosion relief vents or an explosion suppression system or an oxygen deficient environment. Ensure that dust handling systems (such as exhaust ducts, dust collectors, vessels and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e. there is no leakage from the equipment). Use only appropriately classified electrical equipment and powered industrial trucks.

**Personal Protective Equipment:**

**Respiratory protection:** If occupational exposure limits are exceeded, a dust filtering mask, an approved respirator with a dust/mist cartridge, or a supplied air respirator may be used. Respirator selection and use should be based on contaminant type, form and concentration. Follow applicable regulations and good Industrial Hygiene practice.

**Skin protection:** Suitable gloves are recommended as needed to avoid prolonged contact.

**Eye protection:** Chemical safety goggles are recommended if contact is possible.

**Other:** Eye wash should be available if contact may occur.

**Section 9. Physical and Chemical Properties**

**Appearance:** Red powder.

**Odor:** Not available

<b>Odor threshold:</b> Not available	<b>pH:</b> Not available
<b>Melting point/freezing point:</b> Not available	<b>Boiling Point:</b> Not applicable
<b>Flash point:</b> Not applicable	<b>Evaporation rate:</b> Not applicable
<b>Flammability (solid, gas):</b> Combustible dust	
<b>Flammable limits: LEL:</b> Not applicable	<b>UEL:</b> Not applicable
<b>Vapor pressure:</b> Not applicable	<b>Vapor density:</b> Not applicable
<b>Relative density:</b> Not available	<b>Solubility(ies):</b> Not available
<b>Partition coefficient: n-octanol/water:</b> Not applicable	<b>Auto-ignition temperature:</b> Not available
<b>Decomposition temperature:</b> Not available	<b>Viscosity:</b> Not applicable

**Section 10. Stability and Reactivity**

**Reactivity:** Not reactive under normal conditions of use.

**Chemical stability:** Stable

**Possibility of hazardous reactions:** Hazardous polymerization will not occur.

**Conditions to avoid:** Keep away from heat, sparks, flames and other sources of ignition. Avoid hygroscopic conditions and dust formation.

**Incompatible materials:** None known.

**Hazardous decomposition products:** Thermal decomposition may release oxides of carbon, zinc, manganese, and other metal compounds.

**Section 11. Toxicological Information**

**Acute effects of exposure:**

**Inhalation:** Dust may cause upper respiratory irritation with sneezing and coughing.

**Ingestion:** Swallowing large amounts may cause gastrointestinal irritation, nausea and diarrhea.

**Skin contact:** No adverse effects expected. May cause mechanical skin irritation.

**Eye contact:** Contact may cause severe irritation, redness and tearing. May cause permanent eye damage.

**Chronic effects:** Prolonged overexposure to manganese has been shown to cause permanent neurological damage in humans.

**Germ Cell Mutagenicity:** None of the components have been shown to cause germ cell mutagenicity.

**Reproductive Toxicity:** None of the components have been shown to cause reproductive or developmental toxicity.

**Carcinogenicity:** Titanium Dioxide is listed by IARC as Possibly Carcinogenic to Humans (Group 2B). None of the other components of this product are listed as carcinogens or suspected carcinogens by IARC, NTP, OSHA or ACGIH.

**Acute toxicity values:**

Product Acute Toxicity Value: >5000 mg/kg (oral)

Non-Hazardous (trade secret) ingredients: Not toxic

Titanium Dioxide: Oral rat LD50: > 5000 mg/kg, Inhalation rat LC50: > 6.82 mg/L

Zinc Oxide: Oral rat LD50: >5000 mg/kg, Inhalation rat LC50: >5700 mg/m<sup>3</sup>/4hr (no mortality), Skin rat LD50: >2000 mg/kg

Manganese Sulfate: Oral rat LD50: 2150 mg/kg, inhalation rat LC50: > 4.45 mg/L/4 hr (no mortality)

Zinc Sulfate: Oral rat LD50: 1710 mg/L, Skin rat LD50: >2000 mg/kg

Iron Oxide: Oral rat LD50: >5000 mg/kg

Iron Sulfate: Oral rat LD50: 500 mg/kg (point estimate)

**Section 12. Ecological Information**

**Ecotoxicity Data:**

Titanium Dioxide: 48 hr LC50 *Leuciscus idus*: >1000 mg/l

Zinc Oxide: 96 hr LC50 *Oncorhynchus kisutch*: 727 ug/L, 48 hr EC50 *Daphnia magna*: 860 ug/L, 72 hr

NOEC *Pseudokirchneriella subcapitata*: 5.4 ug/L

Manganese Sulfate: 96 hr LC50 *Oncorhynchus mykiss*: 3.17 mg,

Zinc Sulfate: 96 hr LC50 *Oncorhynchus kisutch*: 727 ug/L, 48 hr EC50 *Daphnia magna*: 860 ug/L, 72 hr

NOEC *Pseudokirchneriella subcapitata*: 5.4 ug/L

This product is classified as toxic to aquatic life with long lasting effects. Releases to the environment should be avoided.

**Persistence and degradability:** Biodegradation is not applicable to inorganic compounds.

**Bioaccumulative potential:** Not data available.

**Mobility in soil:** No data available.

**Other adverse effects:** None known.

**Section 13. Disposal Considerations**

Dispose in accordance with all local, state and federal regulations.

**Section 14. Transport Information**

	UN Number	Proper shipping name	Hazard Class	Packing Group	Environmental Hazard
<b>US DOT</b>		Not Regulated			
<b>Canadian TDG</b>		Not Regulated			
<b>EU ADR/RID</b>	UN3077	Environmentally hazardous substance, solid, n.o.s (Zinc Oxide, zinc sulfate)	9	PG III	Yes

<b>IMDG*</b>	UN3077	Environmentally hazardous substance, solid, n.o.s (Zinc Oxide, zinc sulfate)	9	PG III	Yes
<b>IATA/ICAO*</b>	UN3077	Environmentally hazardous substance, solid, n.o.s (Zinc Oxide, zinc sulfate)	9	PG III	Yes

\*This product is classified as a Marine Pollutant (Environmentally Hazardous Substance) in accordance with the IMDG Code and the UN Model Regulations. However, if it is packaged in either single packages or inner containers (packagings) in combination packages containing net quantities of less than 5 kg/5 L, the Marine Pollutant does not apply (IMDG Code 2.10.2.7).

**Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code):** Not applicable

**Special precautions:** None known

**Section 15. Regulatory Information**

**CERCLA Hazardous Substances (Section 103)/RQ:** This product has a Reportable Quantity (RQ) of 20,000 lbs. (based on the RQ for Iron Sulfate of 1,000 lbs.). Releases above the RQ must be reported to the National Response Center. Many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

**SARA Hazard Category (311/312):** Refer to Section 2 for OSHA Hazard Classification

**SARA 313 Information: This product contains the following chemicals subject to Annual Release Reporting Requirements Under SARA Title III, Section 313 (40 CFR 372):**

Zinc Oxide	1314-13-2	<25%
Manganese Sulfate	10034-96-5	7-13%
Zinc Sulfate	7446-19-7	1-5%

**US EPA TSCA Inventory:** All of the ingredients in this product are listed on the EPA TSCA Inventory.

**California Proposition 65:**

This product can expose you to chemicals including Titanium Dioxide, which is known to the State of California to cause cancer. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

**International Chemical Inventories:**

**Canadian CEPA:** All of the components are listed on the Canadian Domestic Substances List (DSL) or exempt.

**Section 16. Other Information**

**SDS Revision History:** New SDS

**Date of preparation:** August 16, 2019

**Date of last revision:** N/A