Section 1 **Chemical Product and Company Identification** Page E1 of E2

Innovating Science by Aldon Corporation

"cutting edge science for the classroom"

221 Rochester Street (585) 226-6177

CHEMTREC 24 Hour Emergency Phone Number (800) 424-9300 For laboratory use only Not for drug, food or household use.

Product FERTILIZER 24-8-16

Synonyms Plant Nutrient; Nutrient QuickSolution

Section 2 Hazards Identification

Signal word: WARNING Pictograms: GHS07 Target organs: None known



GHS Classification:

Skin irritation (Category 2) Eye irritation (Category 2A) STOT-SE (Category 3)

GHS Label information: Hazard statement:

H315: Causes skin irritation.

H319: Causes serious eye irritation.

H335: May cause respiratory irritation.

Precautionary statement:

P261: Avoid breathing dust.

P264: Wash hands thoroughly after handling.

P271: Use only outdoors or in a well-ventilated area.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P302+P352: IF ON SKIN: Wash with plenty of water and soap.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P312: Call a POISON CENTER or doctor if you feel unwell. P332+P313: If skin irritation occurs: Get medical attention.

P337+P313: If eye irritation persists: Get medical attention.

P362+P364: Take off contaminated clothing and wash it before reuse.

P403+P233: Store in a well-ventilated place. Keep container tightly closed.

P405: Store locked up.

P501: Dispose of contents/container to a licensed chemical disposal agency in

accordance with local/regional/national regulations.

Ca Prop 65: This product does not contain any chemicals known to the State of California to cause cancer or reproductive toxicity.

Chemical NameCAS #%EINECSTotal NitrogenNot available24%Available PhosphateNot available8%Soluble PotashNot available16%	Section 3 C	Composition / Information on I	Ingredients			
Available Phosphate Not available 8%	hemical Name		CAS#	%	EINECS	
	Available Phosphate		Not available	8%		

Section 4 First Aid Measures

INGESTION: Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel. Never give anything by mouth to an unconscious person.

INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

EYE CONTACT: Check for and remove contact lenses. Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention.

SKIN ABSORPTION: Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention.

Section 5 **Fire Fighting Measures**

Suitable Extinguishing Media: Use any media suitable for extinguishing supporting fire.

Protective Actions for Fire-fighters: In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective gear. Use water spray to keep fire-exposed containers cool

Specific Hazards: During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

Section 6 **Accidental Release Measures**

Personal Precautions: Evacuate personnel to safe area. Use proper personal protective equipment as indicated in Section 8. Provide adequate ventilation.

Environmental Precautions: Avoid runoff into storm sewers and ditches which lead to waterways.

Containment and Cleanup: Sweep or vacuum up and place in a suitable container for proper disposal. Wash spill area with soap and water.

Section 7 Handling & Storage Page E2 of E2

Precautions for Safe Handling: Read label on container before using. Do not wear contact lenses when working with chemicals. Keep out of reach of children. Avoid contact with eyes, skin and clothing. Do not inhale dusts. Use with adequate ventilation. Avoid ingestion. Wash thoroughly after handling. Remove and wash clothing before

Conditions for Safe Storage: Store in a cool, dry, well-ventilated area away from incompatible substances.

Section 8	Exposure Controls / Personal Prof	tection		
Exposure Limits:	Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)
Exposure Limits.	Particulate not otherwise classified	None established	TWA: 15 mg/m ³ total dust	None established

Engineering controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower and fire extinguishing material. Personnel should wear safety glasses, goggles, or faceshield, lab coat or apron, appropriate protective gloves. Use adequate ventilation to keep airborne concentrations low.

Respiratory protection: None should be needed in normal laboratory handling at room temperatures. If dusty conditions prevail, work in fume hood or wear a NIOSH/MSHA-approved respirator.

Section 9 Physical & Chemical Properties

Appearance: Solid, Bluish green, crystals.

Odor: No odor.

Odor threshold: Data not available.

pH: Data not available

Melting / Freezing point: Data not available

Boiling point: Data not available **Flash point:** Data not available

Evaporation rate (= 1): Data not available Flammability (solid/gas): Data not available. Explosion limits: Lower / Upper: Data not available Vapor pressure (mm Hg): Data not available Vapor density (Air = 1): Data not available Relative density (Specific gravity): Data not available Solubility(ies): Soluble in water.

Partition coefficient: Data not available
Auto-ignition temperature: Data not available
Decomposition temperature: Data not available.

Viscosity: Data not available. Molecular formula: Mixture Molecular weight: Mixture

Section 10 Stability & Reactivity

Chemical stability: Stable Hazardous polymerization: Will not occur.

Conditions to avoid: Excessive temperatures and heat.

Incompatible materials: None known

Hazardous decomposition products: Carbon oxides, nitrogen oxides, phosphorous oxides, and ammonia.

Section 11 Toxicological Information

Acute toxicity: Oral-rat LD50: Data not available Skin corrosion/irritation: Data not available Serious eye damage/irritation: Data not available Respiratory or skin sensitization: Data not available

Germ cell mutagenicity: Data not available

Carcinogenity: Data not available

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity: Data not available STOT-single exposure: Data not available STOT-repeated exposure: Data not available Aspiration hazard: Data not available

Potential health effects:

Inhalation: Inhalation may cause irritation and coughing.

Ingestion: Ingestion may cause nausea, vomiting, and diarrhea.

Skin: Contact may cause irritation. Eyes: Contact may cause irritation.

Signs and symptoms of exposure: To the best of our knowledge the chemical, physical and toxicological properties have not been thoroughly investigated. Specific data is

not available. Exercise appropriate procedures to minimize potential hazards.

Additional information: RTECS #: None
Section 12 Ecological Information

Toxicity to fish: No data available

Toxicity to daphnia and other aquatic invertebrates: No data available

Toxicity to algae: No data available

Persistence and degradability: No data available

Mobility in soil: No data available

Bioaccumulative potential: No data available

PBT and vPvB assessment: No data available

Other adverse effects: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Section 13 Disposal Considerations

These disposal guidelines are intended for the disposal of catalog-size quantities only. Federal regulations may apply to empty container. State and/or local regulations may be different. Dispose of in accordance with all local, state and federal regulations or contract with a licensed chemical disposal agency.

Section 14 Transport Information (US DOT / CANADA TDG)

UN/NA number: Not applicable Shipping name: Not Regulated

Hazard class: Not applicable Packing group: Not applicable Reportable Quantity: No Marine pollutant: No

Exceptions: Not applicable **2012 ERG Guide #** Not applicable

Section 15 Regulatory Information

A chemical is considered to be listed if the CAS number for the anhydrous form is on the Inventory list.

Component	TSCA	CERLCA (RQ)	RCRA code	DSL	NDSL
Total nitrogen	Listed	Not listed	Not listed	Listed	Not listed
Available phosphates	Listed	Not listed	Not listed	Listed	Not listed
Soluble potash	Listed	Not listed	Not listed	Listed	Not listed

Section 16 Other Information

The information contained herein is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. NTP: National Toxicology Program, IARC: International Agency for Research on Cancer, OSHA: Occupational Safety and Health Administration, STOT: Specific Target Organ Toxicity, SE: Single Exposure, RE: Repeated Exposure, ERG: Emergency Response Guidebook.

Form 06/2015 Revision Date: June 29, 2016 Supercedes: May 11, 2016

Section 1 Chemical Product and Company Identification

Page E1 of E2

Innovating Science by Aldon Corporation "cutting edge science for the classroom"

221 Rochester Street Avon, NY 14414-9409 (585) 226-6177 CHEMTREC 24 Hour Emergency Phone Number (800) 424-9300 For laboratory use only. Not for drug, food or household use.

Product	VERMICULITE
Synonyme	None assigned

Section 2 Hazards Identification

Signal word: WARNING Pictograms: GHS07 Target organs: None known



GHS Classification: STOT-SE (Category 3)

GHS Label information: Hazard statement(s):

H335: May cause respiratory irritation.

Precautionary statement(s):

P261: Avoid breathing dust.

P271: Use only outdoors or in a well-ventilated area.

P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a position

comfortable for breathing.

P312: Call a POISON CENTER or doctor/physician if you feel unwell. P403+P233: Store in a well-ventilated place. Keep container tightly closed.

P405: Store locked up.

P501: Dispose of contents/container to a licensed chemical disposal agency in

accordance with all local, state and federal regulations.

Supplemental information:

Avoid processes that generate excessive dust and wear appropriate dust protection equipment to minimize potential hazards from chronic inhalation hazards.

Ca Prop 65: This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

Section 3 Composition / Information or	Ingredients			
Chemical Name	CAS#	%	EINECS	
Vermiculite	1318-00-9	100%	None assigned	
Contains: Quartz	14808-60-7	<0.1%	238-878-4	

Section 4 First Aid Measures

INGESTION: Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel. Never give anything by mouth to an unconscious person.

INHALATION: MAY CAUSE IRRITATION AND SORENESS IN THROAT AND NOSE. IN EXTREME EXPOSURES SOME CONGESTION MAY OCCUR. Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

EYE CONTACT: TEMPORARY IRRITATION OR INFLAMMATION. Check for and remove contact lenses. Flush thoroughly with water for at least 15 minutes, lifting upper and lower evelids occasionally. Get immediate medical attention.

SKIN ABSORPTION: Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention.

Section 5 Fire Fighting Measures

Suitable Extinguishing Media: Use any media suitable for extinguishing supporting fire

Protective Actions for Fire-fighters: In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective gear. Use water spray to keep fire-exposed containers cool.

Specific Hazards: During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

Section 6 Accidental Release Measures

Personal Precautions: Evacuate personnel to safe area. Use proper personal protective equipment as indicated in Section 8. Provide adequate ventilation.

Environmental Precautions: Avoid runoff into storm sewers and ditches which lead to waterways.

Containment and Cleanup: Minimize dust generation and accumulation. Use a dust suppressant such as water. Sweep or vacuum up and place in a suitable container for proper disposal. Wash spill area with soap and water.

Page E2 of E2 Section 7 **Handling & Storage**

Precautions for Safe Handling: Read label on container before using. Do not wear contact lenses when working with chemicals. Keep out of reach of children. Avoid contact with eyes, skin and clothing. Do not inhale dusts. Use with adequate ventilation. Avoid ingestion. Wash thoroughly after handling. Remove and wash clothing before

Conditions for Safe Storage: Store in a cool, dry, well-ventilated area away from incompatible substances. Minimize dust generation.

Section 8	Exposure Controls / Personal Pro	tection		
Exposure Limits:	Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)
Exposure Limits.	Silica, crystalline, α -quartz	TWA: 0.025 mg/m ³ (A2) respirable	Not listed	TWA: 0.05 mg/m ³ respirable

Engineering controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower and fire extinguishing material. Personnel should wear safety glasses, goggles, or faceshield, lab coat or apron, appropriate protective gloves. Use adequate ventilation to keep airborne concentrations low.

Respiratory protection: None should be needed in normal laboratory handling at room temperatures. If dusty conditions prevail, work in fume hood or wear a NIOSH/MSHAapproved respirator.

Section 9 **Physical & Chemical Properties**

Appearance: Solid. Tan-brown coarse particles

Odor: No odor.

Odor threshold: Data not available

pH: Data not available

Melting / Freezing point: 1350°C (2462°F) Boiling point: Data not available

Flash point: Non-flammable

Evaporation rate (= 1): Data not available Flammability (solid/gas): Not applicable Explosion limits: Lower / Upper: Not applicable Vapor pressure (mm Hg): Data not available

Vapor density (Air = 1): Data not available Relative density (Specific gravity): 2.5 Solubility(ies): Negligible in water (<1%)

Partition coefficient: Data not available Auto-ignition temperature: Not applicable Decomposition temperature: Data not available

Marine pollutant: No

Viscosity: Not applicable Molecular formula: Mixture Molecular weight: Mixture

Section 10 Stability & Reactivity

Chemical stability: Stable Hazardous polymerization: Will not occur.

Conditions to avoid: None in designed use. Incompatible materials: Hydrofluoric acid.

Hazardous decomposition products: None known. Toxic silicon tetrafluoride gas will result with contact with hydrofluoric acid.

Section 11 **Toxicological Information**

Acute toxicity: Data not available

Skin corrosion/irritation: Data not available Serious eye damage/irritation: Data not available Respiratory or skin sensitization: Data not available

Germ cell mutagenicity: Data not available

Carcinogenity: This product contains less than 0.1% crystalline silica, and few particles of respirable size, hence present very low risk. NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity: Data not available

STOT-single exposure: The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with respiratory effects.

STOT-repeated exposure: Data not available Aspiration hazard: Data not available

Potential health effects:

Inhalation: May be harmful if inhaled over long periods.

Ingestion: No hazard expected. Skin: No hazard expected. Eyes: Transient irritation.

Signs and symptoms of exposure: This product contains crystalline silica, which is considered to be a hazard by inhalation. Crystalline silica is also a known cause of

silicosis, a non-cancerous lung disease. Symptoms may include coughing from excess inhalation and eye irritation from dust particles.

Additional information: RTECS #: Not listed Section 12 **Ecological Information**

Toxicity to fish: No data available

Toxicity to daphnia and other aquatic invertebrates: No data available

Toxicity to algae: No data available

Persistence and degradability: No data available Bioaccumulative potential: No data available Mobility in soil: No data available PBT and vPvB assessment: No data available

Other adverse effects: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Disposal Considerations

These disposal guidelines are intended for the disposal of catalog-size quantities only. Federal regulations may apply to empty container. State and/or local regulations may be different. Dispose of in accordance with all local, state and federal regulations or contract with a licensed chemical disposal agency.

Transport Information (US DOT / CANADA TDG) Section 14

UN/NA number: Not applicable Shipping name: Not Regulated Hazard class: Not applicable Packing group: Not applicable

Reportable Quantity: No

Exceptions: Not applicable 2012 ERG Guide # Not applicable

Section 15 Regulatory Information

A chemical is considered to be listed if the CAS number for the anhydrous form is on the Inventory list.

Component	TSCA	CERLCA (RQ)	RCRA code	DSL	NDSL
Vermiculite	Listed	Not listed	Not listed	Not listed	Not listed

Section 16 Other Information

The information contained herein is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent dent determinations of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. NTP: National Toxicology Program, IARC: International Agency for Research on Cancer, OSHA: Occupational Safety and Health Administration, STOT: Specific Target Organ Toxicity, SE: Single Exposure, RE: Repeated Exposure, ERG: Emergency Response Guidebook.

Form 06/2015 Revision Date: October 21, 2015 Supercedes: September 17, 2014