

1. Product and Company Identification

Product Code:	903767	
Product Name:	AMPXC Liquid Concentrate	
Company Name:	Turf Care Supply Corp.	Phone Number:
	50 Pearl Road	1 (330)558-0910
	Suite 200	
	Brunswick, OH 44212	
Web site address:	www.turfcaresupply.com	
Email address:	regaffairs@tcscusa.com	
Emergency Contact:	PERS	1 (800)633-8253
Information:	Turf Care Supply Corp.	1 (330)558-0910

2. Hazards Identification

GHS Signal Word:	None
GHS Hazard Phrases:	No phrases apply.
GHS Precaution Phrases:	No phrases apply.
GHS Response Phrases:	No phrases apply.
GHS Storage and Disposal Phrases:	No phrases apply.
Potential Health Effects (Acute and Chronic):	None.
Inhalation:	No hazard expected in normal industrial use. May cause respiratory tract irritation.
Skin Contact:	May cause skin irritation.
Eye Contact:	May cause eye irritation.
Ingestion:	No hazard expected in normal industrial use. May cause irritation of the digestive tract.

3. Composition/Information on Ingredients

CAS #	Hazardous Components (Chemical Name)	Concentration
68514-28-3	Humic acids, potassium salts	7.00 %
9014-01-1	Bacillus licheniformis	<1.00 %

4. First Aid Measures

Emergency and First Aid

Procedures:

In Case of Inhalation:	No specific treatment is necessary since this material is not likely to be hazardous by inhalation. Remove from exposure and move to fresh air immediately. If breathing is difficult, give oxygen. Get medical aid if cough or other symptoms appear.
In Case of Skin Contact:	No specific treatment is necessary, since this material is not likely to be hazardous. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists.
In Case of Eye Contact:	No specific treatment is necessary, since this material is not likely to be hazardous. Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.
In Case of Ingestion:	No specific treatment is necessary, since this material is expected to be non-hazardous. Do NOT induce vomiting.
Note to Physician:	Treat symptomatically and supportively.

5. Fire Fighting Measures

Flash Pt: NP Method Used: Estimate

Explosive Limits: LEL: No data. UEL: No data.

Autoignition Pt: NP

Suitable Extinguishing Media: Not available. Use water spray, dry chemical, carbon dioxide, or appropriate foam.

Fire Fighting Instructions: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Material will not burn.

Flammable Properties and Hazards: No data available.

Hazardous Combustion Products: No data available.

6. Accidental Release Measures

Steps To Be Taken In Case Material Is Released Or Spilled: Use proper personal protective equipment as indicated in Section 8. Spills/Leaks: Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Vacuum or sweep up material and place into a suitable disposal container. Avoid generating dusty conditions. Provide ventilation. Do not let this chemical enter the environment.

7. Handling and Storage

Precautions To Be Taken in Handling: No special handling procedures are required. Do not let this chemical enter the environment. Use with adequate ventilation. Avoid contact with eyes, skin, and clothing. Avoid ingestion and inhalation.

Precautions To Be Taken in Storing: No special storage requirements. Store in a cool, dry place.

8. Exposure Controls/Personal Protection

CAS #	Partial Chemical Name	OSHA TWA	ACGIH TWA	Other Limits
68514-28-3	Humic acids, potassium salts	No data.	No data.	No data.
9014-01-1	Bacillus licheniformis	No data.	CEIL: 0.00006 mg/m3	No data.

Respiratory Equipment (Specify Type): Respirator protection is not normally required. A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.

Eye Protection: Eye protection is not normally required. Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Protective Gloves: Protective garments not normally required. Wear appropriate protective gloves to prevent skin exposure.

Other Protective Clothing: Protective garments not normally required. Wear appropriate protective clothing to prevent skin exposure.

Engineering Controls (Ventilation etc.): There are no special ventilation requirements. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

9. Physical and Chemical Properties

Physical States:	[] Gas	[X] Liquid	[] Solid
Appearance and Odor:	Liquid. No apparent odor.		
pH:	~ 8.34		
Melting Point:	NA - 228 C		
Boiling Point:	100 C		
Flash Pt:	NP Method Used: Estimate		
Evaporation Rate:	No data.		
Flammability (solid, gas):	No data available.		
Explosive Limits:	LEL: No data.		UEL: No data.
Vapor Pressure (vs. Air or mm Hg):	No data.		
Vapor Density (vs. Air = 1):	No data.		
Specific Gravity (Water = 1):	~ 1.000		
Bulk density:	~ 9.2 LB/GA		
Solubility in Water:	No data.		
Octanol/Water Partition Coefficient:	No data.		
Autoignition Pt:	NP		
Decomposition Temperature:	No data.		
Viscosity:	No data.		

10. Stability and Reactivity

Stability:	Unstable []	Stable [X]
Conditions To Avoid - Instability:	Incompatible materials, dust generation.	
Incompatibility - Materials To Avoid:	None. Strong oxidizing agents.	
Hazardous Decomposition or Byproducts:	None. Carbon monoxide.	
Possibility of Hazardous Reactions:	Will occur []	Will not occur [X]
Conditions To Avoid - Hazardous Reactions:	No data available.	

11. Toxicological Information

Toxicological Information: Epidemiology: No data available.
Teratogenicity: No data available.
Reproductive Effects: Mutagenicity: Neurotoxicity: Other Studies: Tumorigenic effects have been reported in experimental animals.
Teratogenicity: No information available.
Adverse reproductive effects have occurred in experimental animals.
No information available.

Carcinogenicity/Other Information: CAS# 7732-18-5: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

CAS #	Hazardous Components (Chemical Name)	NTP	IARC	ACGIH	OSHA
68514-28-3	Humic acids, potassium salts	n.a.	n.a.	n.a.	n.a.
9014-01-1	Bacillus licheniformis	n.a.	n.a.	n.a.	n.a.

12. Ecological Information

General Ecological Information: Environmental: No information available.
Physical: No information available.
Other: Do not empty into drains.

13. Disposal Considerations

Waste Disposal Method: Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.
RCRA P-Series: None listed.
RCRA U-Series: None listed.

14. Transport Information

LAND TRANSPORT (US DOT):

DOT Proper Shipping Name: Not regulated as a hazardous material. Not Regulated.

DOT Hazard Class:

UN/NA Number:

LAND TRANSPORT (Canadian TDG):

TDG Shipping Name: No information available. Not Regulated.

15. Regulatory Information

EPA SARA (Superfund Amendments and Reauthorization Act of 1986) Lists

CAS #	Hazardous Components (Chemical Name)	S. 302 (EHS)	S. 304 RQ	S. 313 (TRI)
68514-28-3	Humic acids, potassium salts	No	No	No
9014-01-1	Bacillus licheniformis	No	No	No

This material meets the EPA 'Hazard Categories' defined for SARA Title III Sections 311/312 as indicated:

- | | |
|---|--|
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Explosive | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Acute toxicity (any route of exposure) |
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Flammable (gases, aerosols, liquid, or solid) | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Skin Corrosion or Irritation |
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Oxidizer (liquid, solid or gas) | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Serious eye damage or eye irritation |
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Self-reactive | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Respiratory or Skin Sensitization |
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Pyrophoric (liquid or solid) | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Germ cell mutagenicity |
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Pyrophoric gas | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Carcinogenicity |
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Self-heating | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Reproductive toxicity |
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Organic peroxide | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Specific target organ toxicity (single or repeated exposure) |
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Corrosive to metal | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Aspiration Hazard |
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Gas under pressure (compressed gas) | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Simple Asphyxiant |

<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	In contact with water emits flammable gas	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	(Health) Hazard Not Otherwise Classified (HNOC)
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Combustible Dust		
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	(Physical) Hazard Not Otherwise Classified (HNOC)		
CAS #	Hazardous Components (Chemical Name)	Other US EPA or State Lists	
68514-28-3	Humic acids, potassium salts	CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: No; MA Oil/HazMat: No; MI CMR, Part 5: No; NJ EHS: No; NY Part 597: No; PA HSL: No	
9014-01-1	Bacillus licheniformis	CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: No; MA Oil/HazMat: No; MI CMR, Part 5: No; NJ EHS: No; NY Part 597: No; PA HSL: No	

16. Other Information

Revision Date: 02/19/2018

Additional Information About This Product: No data available.

Company Policy or Disclaimer: Disclaimer and Limitation of Liability: This data sheet was developed from information on the constituent materials identified herein and does not relate to the use of such materials in combination with any other material or process. No warranty is expressed or implied with respect to the completeness or ongoing accuracy of the information contained in this data sheet, and Turf Care Supply Corp. disclaims all liability for reliance on such information. This data sheet is not a guarantee of safety. Users are responsible for ensuring that they have all current information necessary to safely use the product described by this data sheet for their specific purposes.