


Form #:	SDS-035
Revision Date:	01/31/2019
Revision #:	03
Supersedes Date:	08/22/2018

Section 1: Identification					
Product Name:	AXXE® Broad Spectrum Herbicide	Product Type / Description:		Herbicide	
Recommended Use:	Non-selective herbicide for commercial use.	Other Means of Identification:		Ammonium Nonanoate Solution	
Use Restrictions:	It is a violation of federal law to use this product in a manner inconsistent with its labeling.				
Manufacturer:	BioSafe Systems, LLC 22 Meadow Street East Hartford, CT 06108	EPA Registration #:	70299-23	Canada PMRA Registration #:	32719
Telephone Number:	1-888-273-3088	Emergency Number: 1-800-424-9300 (CHEMTREC)			

Section 2: Hazard Identification	
GHS Classification	Hazard Statements
Serious Eye Damage / Irritation: Category 2A	H319: Causes serious eye irritation.
Pictograms	Signal Word
	WARNING
Precautionary Statements	
General	Response
P101: If medical advice is needed, have product container or label at hand. P102: Keep out of reach of children. P103: Read label before use.	P301+P330+P331: IF SWALLOWED: Rinse mouth. Do not induce vomiting. P303+P361+P353: IF ON SKIN: Take off immediately all contaminated clothing. Rinse skin with water/shower. P304+P340: IF INHALED: Move person to fresh air and keep comfortable for breathing. P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Prevention	Storage / Disposal
P264: Wash thoroughly after handling. P280: Wear protective gloves, clothing, eye protection, face protection.	P405: Store locked up. P501: Dispose of contents/container in accordance with local/regional/national/international regulations.

Section 3: Composition / Information on Ingredients		
Components	CAS-No	% Composition (w/w)
Ammonium Nonanoate	63718-65-0	36.0 – 41.0%
Other proprietary ingredients	-	59.0 – 64.0%

Section 4: First-Aid Measures	
Eye Contact:	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
Skin Contact:	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Ingestion:	Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
Inhalation:	Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

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Section 5: Fire-Fighting Measures

Suitable Extinguishing Media:	Use alcohol-resistant foam, carbon dioxide, water or dry chemical spray.
Unsuitable Extinguishing Media:	None known.
Combustion Products:	None known, not combustible.
Unusual Fire and Explosion Hazards:	In a fire or if heated, a pressure increase will occur and the container may burst.
Protective Equipment for Firefighters:	Do not enter fire area without proper protective equipment, including respiratory protection.

Section 6: Accidental Release Measures

Personal Precautions:	Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation.
Emergency Procedures:	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
Environmental Precautions:	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
Methods and Material for Containment and Clean-Up:	<p>Small Spill: Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.</p> <p>Large Spill: Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product.</p>

Section 7: Handling and Storage

Handling:	Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
Storage:	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
Incompatible Materials:	Do not store below the following temperature: 0°C (32°F). Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8: Exposure Controls / Personal Protection

Components with Workplace Control Parameters

Component	ACGIH	NIOSH	OSHA
Ammonium Nonanoate	Not applicable.	Not applicable.	Not applicable.
Engineering Controls:	Good general ventilation should be sufficient to control worker exposure to airborne contaminants.		
General Hygienic Practices:	Do not eat, drink or smoke during use.		
Personal Protective Equipment:	Protective clothing, protective goggles, gloves, face shield.		
Respiratory Protection:	Use NIOSH-approved respirator where airborne concentrations of vapor are expected to exceed exposure limits.		
Eye / Face Protection:	Chemical goggles or face shield.		
Hands:	Chemical resistant gloves.		
Skin / Body:	Wear suitable protective clothing.		

Section 9: Physical and Chemical Properties

Appearance:	Clear, pale liquid.	Odor:	Slight ammonia.	Odor Threshold:	Not available.
pH:	8.0 – 9.0	Specific Gravity:	1.00 g/cm ³	Viscosity:	0.61 cm ² /s (61 cSt)
Melting Point:	Not available.	Freezing Point:	Not available.	Boiling Point:	104.4°C (219.9°F)
Flash Point:	Not available.	Flammability:	Not available.	Flammability Limits:	Not available.
Vapor Pressure:	Not available.	Vapor Density:	Not available.	Solubility:	Complete.
Evaporation Rate:	Not available.	Auto-Ignition Temperature:	Not available.	Decomposition Temperature:	Not available.
Relative Density:	Not available.	Partition Coefficient n-octanol / water:	Not available.		

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Section 10: Stability and Reactivity

Stability:	Stable under normal conditions.
Conditions to Avoid:	No specific data.
Incompatible Materials:	No specific data.
Hazardous Decomposition Products:	Carbon Dioxide, Carbon Monoxide, Nitrogen Oxides.

Section 11: Toxicological Information

Acute Toxicological Data

Oral LD50:	>5000 mg/kg (rat)	Dermal LD50:	>2000 mg/kg (rabbit)	Inhalation LC50:	Not available.
Likely Routes of Exposure:	Eye contact, skin contact.				

Symptoms and Effects

Condition	Acute Effects	Chronic (Delayed) Effects
Eye Contact:	Causes serious eye irritation.	Persistent irritation.
Skin Contact:	No specific data.	No specific data.
Inhalation:	No specific data.	No specific data.
Ingestion:	No specific data.	No specific data.

Section 12: Ecological Information

Ecotoxicity:	Not available.
Persistence and Degradability:	Not available.
Bioaccumulation Potential:	Not available.
Mobility in Soil:	Not available.
Other Adverse Effects:	Avoid release to the environment.

Section 13: Disposal Considerations

Waste from Residues and Unused Product:	Dispose of waste material in accordance with all local, regional, national, provincial, territorial and international regulations.
Contaminated Container Disposal:	Do not reuse or refill this container. Triple rinse empty containers with clean water. Clean and empty containers are to be recycled or placed in the trash.

Section 14: Transport Information

UN Number	UN Proper Shipping Name	Hazard Class (Subsidiary)	Label (Subsidiary)	Packing Group	Marine Pollutant
Not regulated.					

Section 15: Regulatory Information

TSCA Inventory List:	Yes	US EPA CERCLA Hazardous Substances:	Not applicable.		
SARA Title III Sec. 302/303	Not applicable.		Sec. 302 TPQ:	Not applicable.	
SARA Title III Sec. 311/312	Not applicable.	Hazard Category:	Not applicable.		Sec. 304 EHS RQ: Not applicable.
US EPA EPCRA Sec. 313	Not applicable.		CAA Threshold Qty:	Not applicable.	
NFPA Rating	Health: 2	Flammability: 0	Reactivity: 0	Special:	None
HMIS Rating	Health: 2	Flammability: 0	Physical: 0	PPE:	Recommended.
CAN WHMIS Classification	Class D-2B: Material causing other toxic effects				
California Prop 65	This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm.				

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Section 16: Other Information

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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AXXE[®] Broad Spectrum Herbicide is a registered trademark of BioSafe Systems, LLC.

For additional information, call us toll-free at 1.888.273.3088 or visit www.biosafesystems.com

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Key to Abbreviations

ACGIH - American Conference of Governmental Industrial Hygiene	TWA - Time-Weighted Averages are based on 8h/day, 40h/week exposures
NIOSH - National Institute of Occupational Safety and Health	STEL - Short Term Exposure Limits are based on 15-minute exposures
OSHA - Occupational Safety and Health Administration	STEV - Short Term Exposure Value
EHS - Environmental Health and Safety	PEL - Permissible Exposure Limit
DOT - Department of Transportation	CAN TDG - Canadian Transportation of Dangerous Goods
EPA - Environmental Protection Agency	TSCA - Toxic Substances Control Act
TPQ - Threshold Planning Quantity	RQ - Reportable Quantity
CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act	SARA - Superfund Amendments and Reauthorization Act
NFPA - National Fire Protection Association	HMIS - Hazardous Materials Identification System
WHMIS - Workplace Hazardous Materials Information System (Canada)	EPCRA - Emergency Planning and Community Right-to-Know Act