

SAFETY DATA SHEET (SDS)

BioSafe® Weed & Grass Killer

Form #:	SDS-113
Revision Date:	07/18/2019
Revision #:	01
Supersedes Date:	NA

Section 1: Identification			
Product Name:	BioSafe® Weed & Grass Killer	Product Type / Description:	Non-selective herbicide
Recommended Use:	Herbicide	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 #:	70299-25
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 skin 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 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. 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:	Full chemical protection suits and boots (rubber or PVC) and self-contained breathing apparatus. Cordon the area to keep out all unnecessary personnel. Keep upwind. Use large quantities of water spray to fight fire. Cool containers / tanks with water spray. If safe to do, move product away from fire to secure area. Eliminate all possible sources of ignition and remove flammable material.

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:	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. 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.

Section 7: Handling and Storage	
Handling:	Put on appropriate personal protective equipment. 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. Do not reuse container.
Storage:	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.
Incompatible Materials:	No specific data.

Section 8: Exposure Controls / Personal Protection			
Components with Workplace Control Parameters			
Component	ACGIH	NIOSH	OSHA
Ammonium Nonanoate	NA	NA	NA
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			
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.		
Hand Protection:	Chemical resistant gloves.		
Skin / Body Protection:	Wear suitable protective clothing.		

Section 9: Physical and Chemical Properties					
Appearance:	Clear, pale liquid.	Odor:	Slight ammonia.	Odor Threshold:	NA
Physical State:	Liquid.	pH:	8.0 – 9.0	Specific Gravity:	1.00 g/cm ³
Melting Point:	NA	Freezing Point:	NA	Boiling Point:	104.4°C (219.9°F)
Flash Point:	NA	Flammability:	NA	Flammability Limits:	NA
Vapor Pressure:	NA	Vapor Density:	NA	Solubility:	Complete.
Evaporation Rate:	NA	Auto-Ignition Temperature:	NA	Decomposition Temperature:	NA
Relative Density:	NA	Partition Coefficient n-octanol / water:	NA	Viscosity:	0.61 cm ² /s (61 cSt)

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Section 10: Stability and Reactivity	
Reactivity:	No specific data.
Stability:	Stable under recommended storage 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 Rat:	>5000 mg/kg	Dermal LD50 Rabbit:	>2000 mg/kg
Inhalation LC50 Rat:	NA		
Symptoms and Effects			
Condition	Acute Effects	Chronic (Delayed) Effects	
Eye Contact:	Causes serious eye irritation.	None.	
Skin Contact:	No specific data.	None.	
Inhalation:	No specific data.	None.	
Ingestion:	No specific data.	None.	

Section 12: Ecological Information	
Ecotoxicity:	No data available.
Persistence and Degradability:	No data available.
Bioaccumulative Potential:	No data available.
Mobility in Soil:	No data available.
Results of PBT & vPvB:	This mixture contains no substance considered to be persistent, bioaccumulating nor toxic (PBT).
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 containers. Triple rinse empty containers with clean water. Clean and empty containers should be taken to an approved waste handling site for recycling or disposal.

Section 14: Transport Information					
UN Number	UN Proper Shipping Name	Hazard Class (Subsidiary)	Packing Group	IATA	Marine Pollutant
Not regulated					
Special Precautions:	None known				
Shipping Placards:	None				

Section 15: Regulatory Information					
TSCA Inventory List		US EPA CERCLA Hazardous Substances		Clean Water Act	
Ammonium Nonanoate	Yes	Ammonium Nonanoate	NA	NA	
SARA Title III					
	Sec. 302 TPQ.	Sec 304 RQ.	Sec 311 / Sec 312 Hazard Category		Sec 313
Ammonium Nonanoate	NA	NA	NA		NA
NFPA 704 Rating		Health: 2	Flammability: 0	Reactivity: 0	Special: None.
HMIS Rating		Health: 2	Flammability: 0	Physical: 0	PPE: Recommended.
Uniform Fire Code (NFPA 400)		Not applicable.			

California Prop 65	This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm.
FIFRA	This product is a registered pesticide with the United States Environmental Protection Agency and is subject to EPA labeling requirements under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). These requirements may differ from the classification criteria and hazard information required for a safety data sheet under the Global Harmonized Systems (GHS), and for workplace labels of non-pesticide chemicals. It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Always refer to product label for further precautionary information and use directions.



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

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