

SECTION 1: Identification

1.1. Identification

Product form : Mixture
 Product name : BM 86
 Synonyms : 5-0-0 with Secondary and Micronutrients
 Other means of identification : EPA Reg. No 83941-2

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Foliar nutritional formulation

1.3. Details of the supplier of the safety data sheet

Arysta LifeScience North America LLC
 15401 Weston Parkway, Suite 150
 Cary, NC 27513 - USA

1.4. Emergency telephone number

Emergency number : Exposure Calls (PROSAR): +1-866-303-6952 or +1-651-603-3432 (international)
 Spill Calls (CHEMTREC) (Contract # CCN1779): +1-800-424-9300 or +1-703-527-3887 (international)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS-US classification

Not classified

2.2. Label elements

GHS-US labelling

No labelling applicable

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable.

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	% (w/w)	GHS-US classification
2-aminoethanol	(CAS No) 141-43-5	< 5	Flam. Liq. 4, H227 Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation:dust,mist), H332 Skin Corr. 1B, H314 STOT SE 3, H335

*Chemical name, CAS number and/or exact concentration have been withheld as a trade secret

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid measures after inhalation : If inhaled and if breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

First-aid measures after skin contact : Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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First-aid measures after ingestion : Do NOT induce vomiting. Rinse mouth. Call a POISON CENTER or doctor/physician if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries after eye contact : May cause slight irritation.

4.3. Indication of any immediate medical attention and special treatment needed

All treatments should be based on observed signs and symptoms of distress in the patient.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Use extinguishing media appropriate for surrounding fire.
Unsuitable extinguishing media : None known.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Not flammable.
Reactivity : No dangerous reactions known.

5.3. Advice for firefighters

Firefighting instructions : Do not allow run-off from fire fighting to enter drains or water courses. Exercise caution when fighting any chemical fire.
Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection. Wear a self contained breathing apparatus. Wear fire/flame resistant/retardant clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Avoid contact with skin and eyes.

6.1.1. For non-emergency personnel

Protective equipment : Wear suitable gloves.
Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Wear suitable gloves.
Emergency procedures : Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters.

6.3. Methods and material for containment and cleaning up

For containment : Absorb and/or contain spill with inert material, then place in suitable container. Never return spills to original container for re-use.
Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Take up in non-combustible absorbent material and shove into container for disposal.

6.4. Reference to other sections

Section 13: disposal information. Section 7: safe handling. Section 8: personal protective equipment.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Do not get in eyes, on skin, or on clothing.
Hygiene measures : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Do not store near food, foodstuffs, drugs, or potable water supplies. Keep only in the original container in a cool well ventilated place.
Incompatible materials : metals.
Storage area : Store out of frost (-10 °C).

7.3. Specific end use(s)

Fertilizer.

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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

BM 86		
ACGIH	Not applicable	
OSHA	Not applicable	
2-aminoethanol (141-43-5)		
ACGIH	ACGIH TWA (mg/m ³)	7.5 mg/m ³
ACGIH	ACGIH TWA (ppm)	3 ppm
ACGIH	ACGIH STEL (mg/m ³)	15 mg/m ³
ACGIH	ACGIH STEL (ppm)	6 ppm
ACGIH	Remark (ACGIH)	Eye & skin irr
OSHA	OSHA PEL (TWA) (mg/m ³)	6 mg/m ³
OSHA	OSHA PEL (TWA) (ppm)	3 ppm

8.2. Exposure controls

Appropriate engineering controls	: Avoid creating mist or spray. Avoid splashing. Eyewash stations.
Personal protective equipment	: Avoid all unnecessary exposure.
Hand protection	: Wear suitable protective clothing and gloves. Use rubber gloves.
Eye protection	: In case of splashing or aerosol production: protective goggles.
Skin and body protection	: Wear suitable protective clothing. Impervious clothing.
Respiratory protection	: Where exposure through inhalation may occur from use, respiratory protection equipment is recommended. Use an approved respirator equipped with oil/mist cartridges.
Other information	: Do not eat, drink or smoke when using this product.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: Green brown
Odour	: slight
Odour threshold	: No data available
pH	: 7.8 - 8.3 (pure product)
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: > 93.3 °C
Relative evaporation rate (butylacetate=1)	: No data available
Flammability (solid, gas)	: No data available
Explosive limits	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Vapour pressure	: No data available
Relative density	: 1.27 - 1.285
Relative vapour density at 20 °C	: No data available
Solubility	: Totally soluble in water in all proportions.
Log Pow	: No data available
Log Kow	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available

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9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reactions known.

10.2. Chemical stability

Stable under normal conditions. Product color changes with time, without effect on its properties.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

Avoid excessive heat or cold. Do not store product at a temperature above 40 °C or below -10 °C.

10.5. Incompatible materials

metals.

10.6. Hazardous decomposition products

No dangerous decomposition products known.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Likely routes of exposure : Skin and eye contact

Acute toxicity : Not classified

2-aminoethanol (141-43-5)	
LD50 oral rat	1515 mg/kg
LD50 dermal rabbit	1822 (1822 - 3451) mg/kg
LC50 inhalation rat (mg/l)	> 1.3 mg/l
ATE US (oral)	1515.000 mg/kg bodyweight
ATE US (dermal)	1822.000 mg/kg bodyweight
ATE US (dust,mist)	1.500 mg/l/4h

Skin corrosion/irritation : Not classified.
(Not irritating to rabbits on cutaneous application)

Serious eye damage/irritation : Not classified.
(Not irritating to rabbits on ocular application)

Respiratory or skin sensitisation : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

Specific target organ toxicity (single exposure) : Not classified

Specific target organ toxicity (repeated exposure) : Not classified

Aspiration hazard : Not classified

Symptoms/injuries after eye contact : May cause slight irritation.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : No ecotoxicological data about this product are known.

2-aminoethanol (141-43-5)	
LC50 fish 1	165 mg/l 48 h
EC50 Daphnia 1	65 mg/l 48 h

12.2. Persistence and degradability

BM 86	
Persistence and degradability	Not established.
2-aminoethanol (141-43-5)	
Persistence and degradability	Readily biodegradable.

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12.3. Bioaccumulative potential

BM 86	
Bioaccumulative potential	Not established.
2-aminoethanol (141-43-5)	
Log Pow	-1.31

12.4. Mobility in soil

BM 86	
Ecology - soil	Mixture components are completely soluble in water.

12.5. Other adverse effects

Other information : No additional information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Do not dispose in household garbage. Dispose of in authorized waste collection plant.
Sewage disposal recommendations : Do not dispose of waste into sewer.
Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.
Ecology - waste materials : Dispose of container in a licensed facility.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT
Not regulated.

Additional information

Other information : No supplementary information available.

Transport by sea

IMDG

Transport hazard class(es) (IMDG) : Not applicable
Marine pollutant : No

Air transport

IATA

Transport hazard class(es) (IATA) : Not applicable
Marine pollutant : No

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

This product or mixture does not contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

15.2. International regulations

CANADA

2-aminoethanol (141-43-5)
Listed on the Canadian DSL (Domestic Substances List) inventory

National regulations

2-aminoethanol (141-43-5)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances) Listed on NZIoC (New Zealand Inventory of Chemicals) Listed on the AICS (Australian Inventory of Chemical Substances) Listed on Taiwan National Chemical Inventory Listed on the Korean ECL (Existing Chemicals List) Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory Listed on the Inventory of Existing Chemical Substances Produced or Imported in China (IECSC) Listed on the Chinese Catalog of Hazardous Chemicals

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15.3. US State regulations

California Proposition 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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U.S. - New York - Right to Know List of Hazardous Substances
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Minnesota - Hazardous Substance List
U.S. - Washington - Permissible Exposure Limits - Carcinogens
U.S. - Idaho - Non-Carcinogenic Toxic Air Pollutants - Emission Levels (ELs)

SECTION 16: Other information

Revision date : 08/12/2016
Data sources : European Chemicals Agency (ECHA) C&L Inventory database. Accessed at <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>.
National Fire Protection Association; Fire Protection Guide to Hazardous Materials; 10th edition.
Krister Forsberg and S.Z. Mansdorf, "Quick Selection Guide to Chemical Protective Clothing", Fifth Edition.
REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

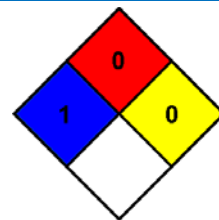
Full text of H-statements:

H227	Combustible liquid
H302	Harmful if swallowed
H312	Harmful in contact with skin
H314	Causes severe skin burns and eye damage
H332	Harmful if inhaled
H335	May cause respiratory irritation

Abbreviations and acronyms:

	ACGIH (American Conference of Government Industrial Hygienists)
	ATE: Acute Toxicity Estimate
	CAS (Chemical Abstracts Service) number
	CLP: Classification, Labelling, Packaging.
	GHS: Globally Harmonized System (of Classification and Labeling of Chemicals).
	OSHA: Occupational Safety & Health Administration
	TSCA: Toxic Substances Control Act

NFPA health hazard : 1 - Exposure could cause irritation but only minor residual injury even if no treatment is given.
NFPA fire hazard : 0 - Materials that will not burn.
NFPA reactivity : 0 - Normally stable, even under fire exposure conditions, and not reactive with water.



Indication of changes:
Product identifier.

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This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product