



# MATERIAL SAFETY DATA SHEET

## 1. Product and Company Identification

**Material name** Brandt AMS  
**Version #** 01  
**Issue date** 05-22-2013  
**CAS #** Mixture  
**Product use** Liquid Ammonium Sulfate Fertilizer; Herbicide Adjuvant, Water Treatment  
**Manufacturer information** Brandt Consolidated, Inc.  
2935 South Koke Mill Road  
Springfield, IL 62711 United States  
msds@brandt.co  
www.brandt.co  
1-217-547-5800  
CHEMTREC (24 hours): 1-800-424-3900

## 2. Hazards Identification

### Potential health effects

**Eyes** Health injuries are not known or expected under normal use.  
**Skin** Health injuries are not known or expected under normal use.  
**Inhalation** Health injuries are not known or expected under normal use.  
**Ingestion** Health injuries are not known or expected under normal use.

**Potential environmental effects** May cause long-term adverse effects in the environment.

## 3. Composition / Information on Ingredients

Non-hazardous components	CAS #	Percent
Ammonium Hydrogen Sulfate	7783-20-2	15 - 40
Other components below reportable levels		60 - 100

## 4. First Aid Measures

### First aid procedures

**Eye contact** Rinse with water. Get medical attention if irritation develops and persists.  
**Skin contact** Rinse skin with water/shower. Get medical attention if irritation develops and persists.  
**Inhalation** If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. Call a physician if symptoms develop or persist.  
**Ingestion** Rinse mouth. If ingestion of a large amount does occur, call a poison control center immediately.

**General advice** If you feel unwell, seek medical advice (show the label where possible). Show this safety data sheet to the doctor in attendance.

## 5. Fire Fighting Measures

**Flammable properties** Not flammable by WHMIS criteria.

### Extinguishing media

**Suitable extinguishing media** Water fog. Foam. Dry chemical powder. Carbon dioxide (CO<sub>2</sub>).  
**Unsuitable extinguishing media** Do not use water jet as an extinguisher, as this will spread the fire.

### Protection of firefighters

**Protective equipment for firefighters** Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

**Fire fighting equipment/instructions** Not available.

<b>Explosion data</b>	
<b>Sensitivity to static discharge</b>	Not available.
<b>Sensitivity to mechanical impact</b>	Not available.

## 6. Accidental Release Measures

<b>Personal precautions</b>	Keep unnecessary personnel away. For personal protection, see section 8 of the MSDS.
<b>Environmental precautions</b>	Prevent further leakage or spillage if safe to do so. Do not contaminate water.
<b>Methods for containment</b>	Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible.
<b>Methods for cleaning up</b>	Should not be released into the environment.

Large Spills: Dike the spilled material, where this is possible. Stop the flow of material, if this is without risk. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Never return spills in original containers for re-use.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. For waste disposal, see section 13 of the MSDS.

## 7. Handling and Storage

<b>Handling</b>	Avoid release to the environment.
<b>Storage</b>	Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the MSDS).

## 8. Exposure Controls / Personal Protection

<b>Occupational exposure limits</b>	No exposure limits noted for ingredient(s).
<b>Personal protective equipment</b>	
<b>Eye / face protection</b>	Not normally needed.
<b>Skin protection</b>	Wear suitable protective clothing.
<b>Respiratory protection</b>	No personal respiratory protective equipment normally required.

## 9. Physical & Chemical Properties

<b>Appearance</b>	Not available.
<b>Physical state</b>	Liquid.
<b>Form</b>	Liquid. Aqueous solution.
<b>Color</b>	Colourless to light yellow.
<b>Odor</b>	Not available.
<b>Odor threshold</b>	Not available.
<b>pH</b>	6 - 7
<b>Vapor pressure</b>	0 hPa estimated
<b>Vapor density</b>	Not available.
<b>Boiling point</b>	219.2 °F (104 °C) estimated
<b>Salt-Out / Crystallization Temp</b>	Not available.
<b>Melting point/Freezing point</b>	Not available.
<b>Solubility (water)</b>	100 %
<b>Specific gravity</b>	1.17 - 1.19 (@ 68 degrees F)
<b>Relative density</b>	Not available.
<b>Flash point</b>	Not available.
<b>Flammability limits in air, upper, % by volume</b>	Not available.

**Flammability limits in air, lower, % by volume** Not available.  
**Auto-ignition temperature** Not available.  
**Percent volatile** 66 % estimated

**Other data**

**pH in aqueous solution** 5 - 7 (2% Solution)

## 10. Chemical Stability & Reactivity Information

**Chemical stability** Material is stable under normal conditions.  
**Conditions to avoid** None under normal conditions.  
**Incompatible materials** Not available.  
**Hazardous decomposition products** Not available.

## 11. Toxicological Information

**Chronic effects** Not expected to be hazardous by WHMIS criteria.

## 12. Ecological Information

### Ecotoxicological data

Product		Species	Test Results
Brandt AMS (CAS Mixture)			
Crustacea	EC50	Daphnia	152.9412 mg/l, 48 hours, estimated
Fish	LC50	Fish	3243.8323 mg/l, 96 hours, estimated

Components		Species	Test Results
Ammonium Hydrogen Sulfate (CAS 7783-20-2)			
<b>Aquatic</b>			
Crustacea	EC50	Water flea (Ceriodaphnia dubia)	52 - 67 mg/l, 48 hours
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	35.2 - 43.8 mg/l, 96 hours

\* Estimates for product may be based on additional component data not shown.

**Ecotoxicity** Contains a substance which causes risk of hazardous effects to the environment.  
**Environmental effects** An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.  
**Persistence and degradability** Not available.

## 13. Disposal Considerations

**Disposal instructions** Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Dispose in accordance with all applicable regulations.  
**Waste from residues / unused products** Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).  
**Contaminated packaging** Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

## 14. Transport Information

### TDG

Not regulated as dangerous goods.

### IATA

Not regulated as dangerous goods.

### IMDG

Not regulated as dangerous goods.

## 15. Regulatory Information

<b>Canadian regulations</b>	This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.
<b>WHMIS status</b>	Non-controlled

### Inventory status

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

## 16. Other Information

### Disclaimer

While the information contained herein are presented in good faith and believed to be accurate, it is provided for your guidance only. Because many factors may affect processing or application, we recommend that you make tests to determine the suitability of a product for your particular purpose prior to use. No warranties of any kind, either expressed or implied, including warranties of merchantability or fitness for a particular purpose, are made regarding products described or information set forth, or that the products, or information may be used without infringing the intellectual property rights of others. In no case shall the information provided be considered a part of our terms and conditions of sale. Further, you expressly understand and agree that the information furnished by our company hereunder are given gratis and we assume no obligation or liability for the information given or results obtained, all such being given and accepted at your risk.