



# SAFETY DATA SHEET

SDS NUMBER: EUSA-050  
CURRENT ISSUE DATE:  
April, 2017  
Page 1 of 7

## AMMONIUM BICARBONATE

### 1. PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** Ammonium Bicarbonate, Coated Quality

**OTHER/GENERIC NAMES:** Acid ammonium carbonate, ammonium carbonate, ammonium hydrogen carbonate

**PRODUCT USE AND RESTRICTIONS ON USE:** Food additive and chemical intermediate.

**SUPPLIER:** Esseco USA LLC  
4 Gatehall Drive  
Parsippany, NJ 07054

**FOR MORE INFORMATION CALL:** 973-267-3330  
(Monday-Friday, 9:00am-4:30pm)

**FOR EMERGENCY IN USA, CALL CHEMTREC:** 800-424-9300  
(24 Hours/Day, 7 Days/Week)

### 2. HAZARDS IDENTIFICATION

#### GHS Classification

Acute Toxicity Category 4 (Oral)

#### Label Elements:



#### WARNING

Harmful if swallowed.

Wash thoroughly after handling.

Do not eat, drink or smoke when using this product.

IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell.

Rinse mouth.

Dispose of contents and container in accordance with local, state, and federal regulations.



# SAFETY DATA SHEET

SDS NUMBER: EUSA-050  
CURRENT ISSUE DATE:  
April, 2017  
Page 2 of 7

## AMMONIUM BICARBONATE

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

<u>INGREDIENT NAME</u>	<u>CAS NUMBER</u>	<u>WEIGHT %</u>
Ammonium bicarbonate	1066-33-7	≥97

Trace impurities and additional material names not listed above may appear in Section 15 of this SDS. These materials may be listed for local "Right-To-Know" compliance and for other reasons. The exact concentrations are a trade secret.

### 4. FIRST AID MEASURES

<b>SKIN:</b>	Wash skin with plenty of soap and water. Remove contaminated clothing and launder before reuse. Get medical attention if irritation persists.
<b>EYES:</b>	Flush eyes with water for several minutes. Remove contact lenses if present if you can do so easily and continue flushing. Get medical attention if irritation occurs and persists.
<b>INHALATION:</b>	Remove to fresh air. If breathing is difficult, give oxygen, provided a qualified operator is available. If symptoms persist, get medical attention.
<b>INGESTION:</b>	Rinse with water and give 1 glass of water or milk to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms develop.
<b>MOST IMPORTANT SYMPTOMS/EFFECTS, ACUTE AND DELAYED:</b>	May cause eye, skin, and respiratory tract irritation. May be harmful if swallowed.
<b>INDICATION OF IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT, IF NEEDED:</b>	Immediate medical attention should not be required. Treat symptomatically.

### 5. FIRE FIGHTING MEASURES

#### SUITABLE (AND UNSUITABLE) EXTINGUISHING MEDIA:

Material is not flammable. Use extinguishing media appropriate for material in surrounding fire.

#### SPECIFIC HAZARDS ARISING FROM THE CHEMICAL:

Thermal decomposition will generate toxic and corrosive ammonia gas and oxides of nitrogen.

#### SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIRE-FIGHTING:

Wear NIOSH-approved self-contained breathing apparatus to protect against any release of toxic and/or irritating fumes. Skin and eye protection should also be provided. Use water-spray to keep fire-exposed containers cool, and to knock down vapors and gases.



# SAFETY DATA SHEET

SDS NUMBER: EUSA-050  
CURRENT ISSUE DATE:  
April, 2017  
Page 3 of 7

## AMMONIUM BICARBONATE

### 6. ACCIDENTAL RELEASE MEASURES

**PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT, AND EMERGENCY PROCEDURES:** Ventilate the area to remove ammonia vapors. Wear appropriate personal protective equipment.

**ENVIRONMENTAL PRECAUTIONS:** Spills and releases may have to be reported to Federal and/or local authorities. See Section 15 regarding reporting requirements.

**METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP:** Promptly shovel or sweep up material with minimum dusting and shovel into an empty container with a cover. Clean spill area with plenty of water.

### 7. HANDLING AND STORAGE

**PRECAUTIONS FOR SAFE HANDLING:** (See section 8 for recommended personal protective equipment.)  
Avoid contact with skin, eyes and clothing. Do not breathe dust or mist. Use with adequate ventilation. Wash thoroughly after handling.

**CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES:**  
Store in a cool, dry, well-ventilated area away from incompatible materials. Keep container closed when not in use and protect from physical damage.

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### EXPOSURE GUIDELINES

<u>INGREDIENT NAME</u>	<u>ACGIH TLV</u>	<u>OSHA PEL</u>	<u>OTHER LIMIT</u>
Ammonium bicarbonate	None	None	None

#### **OTHER EXPOSURE LIMITS FOR POTENTIAL DECOMPOSITION PRODUCTS:**

Ammonia: OSHA TWA = 50 ppm  
ACGIH TLV = 25 ppm  
ACGIH STEL = 35 ppm

#### **APPROPRIATE ENGINEERING CONTROLS:**

Provide local exhaust if dusty or misty conditions exist or if there is a release of ammonia. Keep incompatible materials out of hoods, ducts, etc.

#### **INDIVIDUAL PROTECTION MEASURES, SUCH AS PERSONAL PROTECTIVE EQUIPMENT**

**SKIN PROTECTION:** For handling dry material, wear rubber gloves and full work clothing, including long-sleeved shirt and trousers. When handling solutions, wear impervious gloves and an apron. If contact with the solution is repeated and/or prolonged, wear full impervious clothing.

**EYE PROTECTION:** Wear chemical safety glasses/goggles.



# SAFETY DATA SHEET

SDS NUMBER: EUSA-050  
CURRENT ISSUE DATE:  
April, 2017  
Page 4 of 7

## AMMONIUM BICARBONATE

**RESPIRATORY PROTECTION:** Where required, use a NIOSH-approved respirator for dust, mist, and /or ammonia, as conditions indicate. Some exposures may require a NIOSH-approved self-contained breathing apparatus or supplied-air respirator. Equipment selection depends on contaminant type and concentration. Select in accordance with 29 CFR 1910.134 and good industrial hygiene practice.

**ADDITIONAL RECOMMENDATIONS:** Eyewash and safety shower are recommended.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>APPEARANCE:</b>	White granules or crystals.		
<b>PHYSICAL STATE:</b>	Solid.		
<b>ODOR:</b>	Slight ammonia odor.		
<b>ODOR THRESHOLD:</b>	Not determined.		
<b>MOLECULAR WEIGHT:</b>	79.06		
<b>CHEMICAL FORMULA:</b>	CH <sub>5</sub> O <sub>3</sub> N		
<b>RELATIVE DENSITY (water = 1.0):</b>	1.586		
<b>SOLUBILITY IN WATER (weight %):</b>	17.4% @ 20°C (68°F)		
<b>pH:</b>	-7.6 (10% w/w solution)		
<b>INITIAL BOILING POINT/RANGE:</b>	Not applicable.		
<b>MELTING/FREEZING POINT:</b>	107.85°C (226.13°F)		
<b>VAPOR PRESSURE:</b>	Not applicable.		
<b>VAPOR DENSITY (air = 1.0):</b>	Not applicable.		
<b>EVAPORATION RATE:</b>	Not applicable.	<b>COMPARED TO:</b>	Not applicable.
<b>% VOLATILES:</b>	Not applicable.		
<b>PARTITION COEFFICIENT (N-OCTANOL/WATER):</b>	Not determined.		
<b>VISCOSITY:</b>	Not applicable.		
<b>FLASH POINT:</b>	Not flammable.		
<b>FLASH POINT METHOD:</b>	Not applicable.		
<b>AUTOIGNITION TEMPERATURE:</b>	Not applicable.		
<b>UPPER FLAME LIMIT (volume % in air):</b>	Not applicable.		
<b>LOWER FLAME LIMIT (volume % in air):</b>	Not applicable.		
<b>DECOMPOSITION TEMPERATURE:</b>	Not determined.		
<b>FLAMMABILITY (SOLID, GAS)</b>	Not flammable.		
<b>OSHA FLAMMABILITY CLASS:</b>	Not applicable.		

### 10. STABILITY AND REACTIVITY

**REACTIVITY:**  
Not normally reactive

**CHEMICAL STABILITY:**  
Normally stable.

**POSSIBILITY OF HAZARDOUS REACTIONS:**  
None known.

**CONDITIONS TO AVOID:**  
Avoid elevated temperatures.

**INCOMPATIBILITIES:**  
Strong oxidizers, strong acids, alkalis.



# SAFETY DATA SHEET

SDS NUMBER: EUSA-050  
CURRENT ISSUE DATE:  
April, 2017  
Page 5 of 7

## AMMONIUM BICARBONATE

### HAZARDOUS DECOMPOSITION PRODUCTS:

Carbon monoxide, carbon dioxide, nitrogen oxides, ammonia.

## 11. TOXICOLOGICAL INFORMATION

### POTENTIAL HEALTH HAZARDS

#### ACUTE EFFECTS OF EXPOSURE:

- SKIN:** Dust, solutions or mist may cause skin irritation from repeated or prolonged contact.
- EYES:** Dust, solutions or mist may irritate the eyes.
- INHALATION:** Inhalation of product dust or mist may irritate the respiratory tract.
- INGESTION:** Ingestion may cause irritation of the gastrointestinal tract and purging, if a large quantity is ingested. Relatively low in acute toxicity.
- CHRONIC EFFECTS:** None known.

Ingredients found on one of the three OSHA designated carcinogen lists are listed below.

<u>INGREDIENT NAME</u>	<u>NTP STATUS</u>	<u>IARC STATUS</u>	<u>OSHA LIST</u>
No ingredients listed in this section.	----	----	----

### NUMERICAL MEASURES OF TOXICITY:

#### Immediate (Acute) Effects:

Ammonium Bicarbonate - LD<sub>50</sub> (oral, rat) = 1576 mg/kg.

#### Delayed (Subchronic and Chronic) Effects:

Data not available.

#### Other Data:

None

## 12. ECOLOGICAL INFORMATION

### ECOTOXICITY:

The following ecotoxicity data is available for Ammonium bicarbonate:  
Oncorhynchus mykiss LC50 96 hrs 17.3 mg/l

### PERSISTENCE AND DEGRADABILITY:

No data available

### BIOACCUMULATIVE POTENTIAL:

No data available

### MOBILITY IN SOIL:

No data available



# SAFETY DATA SHEET

SDS NUMBER: EUSA-050  
CURRENT ISSUE DATE:  
April, 2017  
Page 6 of 7

## AMMONIUM BICARBONATE

### OTHER ADVERSE EFFECTS:

No data available.

### 13. DISPOSAL CONSIDERATIONS

#### RCRA

Is the unused product a RCRA hazardous waste if discarded? No

If yes, the RCRA ID number is: Not applicable.

#### OTHER DISPOSAL CONSIDERATIONS:

Dispose of in accordance with applicable Federal, State and Local regulations.

The information offered in section 13 is for the product as shipped. Use and/or alterations to the product such as mixing with other materials may significantly change the characteristics of the material and alter the RCRA classification and the proper disposal method.

### 14. TRANSPORT INFORMATION

US DOT HAZARD CLASS: Not regulated.  
US DOT ID NUMBER: Not applicable.  
PROPER SHIPPING NAME: Not applicable.

For additional information on shipping regulations affecting this material, contact the information number found in Section 1.

### 15. REGULATORY INFORMATION

#### TOXIC SUBSTANCES CONTROL ACT (TSCA)

TSCA INVENTORY STATUS: All components are listed on TSCA Inventory of Chemical Substances.  
OTHER TSCA ISSUES: None.

#### SARA TITLE III/CERCLA

"Reportable Quantities" (RQs) and/or "Threshold Planning Quantities" (TPQs) exist for the following ingredients.

INGREDIENT NAME	SARA/CERCLA RQ (lb)	SARA EHS TPQ (lb)
Ammonium bicarbonate	5000	----

Spills or releases resulting in the loss of any ingredient at or above its RQ requires immediate notification to the National Response Center [(800) 424-8802] and to your Local Emergency Planning Committee. Many states have more stringent regulations. Report all spills in accordance with local, state and federal regulations.

SECTION 311 HAZARD CLASS: See OSHA Hazard Classification in Section 2.

#### SARA 313 TOXIC CHEMICALS:

The following ingredients are SARA 313 "Toxic Chemicals" and may be subject to annual reporting requirements. CAS numbers and weight percents are found in Section 2.

INGREDIENT NAME	COMMENT
No ingredients listed in this section.	----



# SAFETY DATA SHEET

SDS NUMBER: EUSA-050  
CURRENT ISSUE DATE:  
April, 2017  
Page 7 of 7

## AMMONIUM BICARBONATE

### STATE RIGHT-TO-KNOW

In addition to the ingredients found in Section 2, the following are listed for state right-to-know purposes.

<u>INGREDIENT NAME</u>	<u>WEIGHT %</u>	<u>COMMENT</u>
No ingredients listed in this section.	----	----

### CALIFORNIA PROPOSITION 65

This product does not contain any ingredients known to the State of California to cause cancer and/or reproductive harm.

### ADDITIONAL REGULATORY INFORMATION:

None

### FOREIGN CHEMICAL CONTROL INVENTORY STATUS:

Listed on Canadian DSL, Australian AICS, Phillipines PICCS, Chinese IECSC, Japanese MITI, Korean KECL, and EU EINECS.

## 16. OTHER INFORMATION

CURRENT ISSUE DATE: April, 2017  
PREVIOUS ISSUE DATE: December, 2013

### CHANGES TO SDS FROM PREVIOUS ISSUE DATE ARE DUE TO THE FOLLOWING:

Updated CERCLA and removed old WHMIS classification system.

OTHER INFORMATION: None.

The information in this Safety Data Sheet is believed to be accurate and reliable as of the date issued. Esseco USA makes no warranties, expressed or implied, including, but not limited to, any implied warranty of merchantability or fitness for a particular purpose or course of performance or usage of trade. Accordingly, Esseco USA will not be responsible for damages resulting from use of or reliance upon this information. The user is responsible for determining whether the Esseco USA product is fit for a particular purpose and suitable for user's method of use or application. Given the variety of factors that can affect the use and application on an Esseco USA product, some of which are uniquely within the user's knowledge and control, it is essential that the user evaluate the Esseco USA product to determine whether it is fit for a particular purpose and suitable for user's method of use or application.