SECTION 1: Identification

1.1. Identification
Product form : Mixture
Product name : Ammonium Nitrate Solution 83-85%
Product code : M16000

1.2. Recommended use and restrictions on use
No additional information available

1.3. Supplier
JR Simplot Company
P.O. Box 70013
Boise, ID 83707
T 1-208-336-2110

1.4. Emergency telephone number
Emergency number : CHEMTREC 1-800-424-9300

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS-US classification
Acute toxicity (oral), Category 4 : H302 - Harmful if swallowed
Serious eye damage/eye irritation, Category 2B : H320 - Causes eye irritation

Full text of H statements : see section 16

2.2. GHS Label elements, including precautionary statements

GHS-US labelling

Hazard pictograms (GHS-US) :

Signal word (GHS-US) : Warning
Hazard statements (GHS-US) :
H302 - Harmful if swallowed
H320 - Causes eye irritation

Precautionary statements (GHS-US) :
P264 - Wash hands, forearms and face thoroughly after handling
P270 - Do not eat, drink or smoke when using this product
P301+P312 - If swallowed: Call a poison center/doctor… if you feel unwell
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P330 - Rinse mouth
P337+P313 - If eye irritation persists: Get medical attention
P501 - Dispose of contents/container to ...

2.3. Other hazards which do not result in classification
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

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>GHS-US classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>ammonium nitrate</td>
<td>(CAS No) 6484-52-2</td>
<td>83 - 85</td>
<td>Eye Irrit. 2B, H320</td>
</tr>
<tr>
<td>Water</td>
<td>(CAS No) 7732-18-5</td>
<td>15 - 17</td>
<td>Not classified</td>
</tr>
</tbody>
</table>
Ammonium Nitrate Solution 83-85%
Safety Data Sheet
according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Full text of hazard classes and 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
Allow breathing of fresh air. Allow the victim to rest.

First-aid measures after skin contact
Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.

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

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

4.2. Most important symptoms and effects (acute and delayed)

Potential adverse human health effects and symptoms: Based on available data, the classification criteria are not met. Harmful if swallowed.

Symptoms/injuries after eye contact: Causes eye irritation.

Symptoms/injuries after ingestion: Swallowing a small quantity of this material will result in serious health hazard.

4.3. Immediate medical attention and special treatment, if necessary

No additional information available

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media


Unsuitable extinguishing media: Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

No additional information available

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.

Protection during firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel
Emergency procedures: Evacuate unnecessary personnel.

6.1.2. For emergency responders
Protective equipment: Equip cleanup crew with proper protection.

Emergency procedures: Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up: Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour.

Hygiene measures: Do not eat, drink or smoke when using this product. Wash hands, forearms and face thoroughly after handling.
Ammonium Nitrate Solution 83-85%
Safety Data Sheet
according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

7.2. Conditions for safe storage, including any incompatibilities

<table>
<thead>
<tr>
<th>Storage conditions</th>
<th>Keep only in the original container in a cool, well ventilated place away from: Keep container closed when not in use.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incompatible products</td>
<td>Strong bases. Strong acids.</td>
</tr>
<tr>
<td>Incompatible materials</td>
<td>Sources of ignition. Direct sunlight.</td>
</tr>
</tbody>
</table>

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

| ammonium nitrate (6484-52-2) | Not applicable |
| Water (7732-18-5) | Not applicable |

8.2. Appropriate engineering controls

No additional information available

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:

Avoid all unnecessary exposure.

Hand protection:

Wear protective gloves

Eye protection:

Chemical goggles or safety glasses

Respiratory protection:

Wear appropriate mask

Other information:

Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Physical state</th>
<th>Liquid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Clear, colorless liquid.</td>
</tr>
<tr>
<td>Colour</td>
<td>Colourless</td>
</tr>
<tr>
<td>Odour</td>
<td>Odorless</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>No data available</td>
</tr>
<tr>
<td>pH solution</td>
<td>10 (4.5 - 5) %</td>
</tr>
<tr>
<td>Melting point</td>
<td>&lt; °C</td>
</tr>
<tr>
<td>Freezing point</td>
<td>No data available</td>
</tr>
<tr>
<td>Boiling point</td>
<td>No data available</td>
</tr>
<tr>
<td>Flash point</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative evaporation rate (butylacetate=1)</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Non flammable.</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative vapour density at 20 °C</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative density</td>
<td>No data available</td>
</tr>
<tr>
<td>Molecular mass</td>
<td>80.05 g/mol</td>
</tr>
<tr>
<td>Solubility</td>
<td>Complete.</td>
</tr>
<tr>
<td>Log Pow</td>
<td>No data available</td>
</tr>
</tbody>
</table>
Ammonium Nitrate Solution 83-85%
Safety Data Sheet

Auto-ignition temperature: No data available
Decomposition temperature: No data available
Viscosity, kinematic: No data available
Viscosity, dynamic: No data available
Explosive limits: No data available
Explosive properties: No data available
Oxidising properties: No data available

9.2. Other information
No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity
No additional information available

10.2. Chemical stability
Not established.

10.3. Possibility of hazardous reactions
Not established.

10.4. Conditions to avoid
Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials
Strong acids. Strong bases.

10.6. Hazardous decomposition products

SECTION 11: Toxicological information

11.1. Information on toxicological effects

| Acute toxicity (oral)       | Harmful if swallowed.     |
| Acute toxicity (dermal)     | Not classified             |
| Acute toxicity (inhalation) | Not classified             |

<table>
<thead>
<tr>
<th>Ammonium Nitrate Solution 83-85%</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 oral rat</td>
</tr>
<tr>
<td>LD50 dermal rat</td>
</tr>
<tr>
<td>LC50 inhalation rat (mg/l)</td>
</tr>
<tr>
<td>ATE US (oral)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ammonium nitrate (6484-52-2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 oral rat</td>
</tr>
<tr>
<td>LD50 dermal rabbit</td>
</tr>
<tr>
<td>ATE US (oral)</td>
</tr>
</tbody>
</table>

Skin corrosion/irritation: Not classified
Serious eye damage/irritation: Causes eye irritation.
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
Viscosity, kinematic: No data available
Likely routes of exposure: Skin and eye contact.
**SECTION 12: Ecological information**

### 12.1. Toxicity

<table>
<thead>
<tr>
<th>Substance/Property</th>
<th>Value/Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ammonium nitrate (6484-52-2)</strong></td>
<td></td>
</tr>
<tr>
<td>LC50 fish 1</td>
<td>74 mg/l (48 h; Cyprinus carpio; Lethal)</td>
</tr>
<tr>
<td>EC50 Daphnia 1</td>
<td>555 mg/l (Daphnia magna)</td>
</tr>
<tr>
<td>LC50 fish 2</td>
<td>800 mg/l (3.9 h; Piscis)</td>
</tr>
<tr>
<td>TLM fish 1</td>
<td>100 - 1000,96 h; Pisces</td>
</tr>
<tr>
<td>TLM other aquatic organisms 1</td>
<td>100 - 1000,96 h</td>
</tr>
<tr>
<td>Threshold limit algae 1</td>
<td>83 mg/l (Scenedesmus quadricauda; Growth rate)</td>
</tr>
</tbody>
</table>

### 12.2. Persistence and degradability

#### Ammonium Nitrate Solution 83-85%

- **Persistence and degradability**: Not established.

#### ammonium nitrate (6484-52-2)

- **Persistence and degradability**: Biodegradable in water. Biodegradable in the soil. Not established.

#### Water (7732-18-5)

- **Persistence and degradability**: Not established.

### 12.3. Bioaccumulative potential

#### Ammonium Nitrate Solution 83-85%

- **Bioaccumulative potential**: Not established.

#### ammonium nitrate (6484-52-2)

- **Log Pow**: 3.1
- **Bioaccumulative potential**: Bioaccumulation: not applicable. Not established.

#### Water (7732-18-5)

- **Bioaccumulative potential**: Not established.

### 12.4. Mobility in soil

No additional information available

### 12.5. Other adverse effects

Other information: Avoid release to the environment.

---

**SECTION 13: Disposal considerations**

### 13.1. Disposal methods

- **Product/Packaging disposal recommendations**: Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to...
- **Ecology - waste materials**: Avoid release to the environment.

---

**SECTION 14: Transport information**

### Department of Transportation (DOT)

In accordance with DOT

- **Transport document description**: UN2426 Ammonium nitrate, liquid, 5.1
- **UN-No.(DOT)**: UN2426
- **Proper Shipping Name (DOT)**: Ammonium nitrate, liquid
- **Class (DOT)**: 5.1 - Class 5.1 - Oxidizer 49 CFR 173.128
Ammonium Nitrate Solution 83-85%
Safety Data Sheet
according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Hazard labels (DOT) : 5.1 - Oxidiser

DOT Packaging Non Bulk (49 CFR 173.xxx) : None
DOT Packaging Bulk (49 CFR 173.xxx) : 243
DOT Special Provisions (49 CFR 172.102) : B5 - Only ammonium nitrate solutions with 35 percent or less water that will remain completely in solution under all conditions of transport at a maximum lading temperature of 116 C (240 F) are authorized for transport in the following bulk packagings: MC 307, MC 312, DOT 407 and DOT 412 cargo tanks with at least 172 kPa (25 psig) design pressure. The packaging shall be designed for a working temperature of at least 121 C (250 F). Only Specifications MC 304, MC 307 or DOT 407 cargo tank motor vehicles are authorized for transportation by vessel.

T7 - 4 178.274(d)(2) Normal........... 178.275(d)(3)

DOT Packaging Exceptions (49 CFR 173.xxx) : None
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27) : Forbidden
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75) : Forbidden

DOT Vessel Stowage Location : D - The material must be stowed “on deck only” on a cargo vessel and on a passenger vessel carrying a number of passengers limited to not more than the larger of 25 passengers or one passenger per each 3 m of overall vessel length, but the material is prohibited on passenger vessels in which the limiting number of passengers is exceeded.

Transport/Additional information : 59 - Stow “separated from” combustible materials, 60 - Stow “separated from” chlorates, chlorites, hypochlorites, nitrates, perchlorates, permanganates, and metallic powders

Other information : No supplementary information available.

TDG

Transport by sea

Air transport

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

15.2. International regulations

CANADA
No additional information available

Water (7732-18-5)
Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations
No additional information available

National regulations
No additional information available

15.3. US State regulations

10/30/2019 EN (English) 6/7
Ammonium Nitrate Solution 83-85%
Safety Data Sheet

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

<table>
<thead>
<tr>
<th>Component</th>
<th>State or local regulations</th>
</tr>
</thead>
<tbody>
<tr>
<td>ammonium nitrate(6484-52-2)</td>
<td>U.S. - New Jersey - Right to Know Hazardous Substance List</td>
</tr>
</tbody>
</table>

SECTION 16: Other information


Other information: None.

Full text of H-statements:

- H302: Harmful if swallowed
- H320: Causes eye irritation

SDS US (GHS HazCom 2012)

Disclaimer: This information relates to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is to the best of our knowledge and belief, accurate and reliable as of the date compiled. However, no representation, warranty or guarantee is made as to its accuracy, reliability or completeness. NO WARRANTY OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED, IS MADE CONCERNING THE INFORMATION HEREIN PROVIDED. It is the user's responsibility to satisfy himself as to the suitability and completeness of such information for his own particular use. We do not accept liability for any loss or damage that may occur from the use of this information nor do we offer warranty against patent infringement.