**SECTION 1: Identification**

1.1. Identification

<table>
<thead>
<tr>
<th>Product form</th>
<th>Mixture</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product name</td>
<td>Simplot UAN-32 Urea Ammonium Nitrate Solution 32-0-0</td>
</tr>
<tr>
<td>Product code</td>
<td>M11040</td>
</tr>
</tbody>
</table>

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

No additional information available

1.3. Details of the supplier of the safety data sheet

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

<table>
<thead>
<tr>
<th>GHS-US classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Serious eye damage/eye irritation, Category 2B</td>
</tr>
</tbody>
</table>

Full text of H-statements: see section 16

2.2. Label elements

<table>
<thead>
<tr>
<th>GHS-US labelling</th>
</tr>
</thead>
<tbody>
<tr>
<td>Signal word (GHS-US)</td>
</tr>
<tr>
<td>Hazard statements (GHS-US)</td>
</tr>
<tr>
<td>Precautionary statements (GHS-US)</td>
</tr>
</tbody>
</table>

- Warning
- H320 - Causes eye irritation

P264 - Wash hands, forearms and face thoroughly after handling
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P337+P313 - If eye irritation persists: Get medical attention

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

<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></td>
<td>Eye Irrit. 2B, H320</td>
</tr>
<tr>
<td>urea (57-13-6)</td>
<td>(CAS No) 57-13-6</td>
<td></td>
<td>Eye Irrit. 2B, H320</td>
</tr>
<tr>
<td>Water</td>
<td>(CAS No) 7732-18-5</td>
<td></td>
<td>Not classified</td>
</tr>
</tbody>
</table>

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:
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.

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

**Symptoms/injuries after eye contact:**
Causes eye irritation.

### 4.3. Indication of any immediate medical attention and special treatment needed
No additional information available

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media
**Suitable extinguishing media:** Foam. Dry powder. Carbon dioxide. Water spray. Sand.

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

#### 5.2. Special hazards arising from the substance or mixture
No additional information available

#### 5.3. Advice for firefighters
**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
**For non-emergency personnel**
Evacuate unnecessary personnel.

**For emergency responders**
Equip cleanup crew with proper protection.

#### 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
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.

#### 7.2. Conditions for safe storage, including any incompatibilities
**Storage conditions:** Keep only in the original container in a cool, well ventilated place away from:

Sources of ignition. Direct sunlight.

**Incompatible products:** Strong bases. Strong acids.

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

<table>
<thead>
<tr>
<th>Substance</th>
<th>Control parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>ammonium nitrate (6484-52-2)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Water (7732-18-5)</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>
8.2. Exposure controls

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

Physical state: Liquid
Colour: Colourless Commonly dyed blue or green
Odour: There may be no odour warning properties, odour is subjective and inadequate to warn of overexposure. Mixture contains one or more component(s) which have the following odour(s): Odourless In moist air: Ammonia odour

Odour threshold: No data available
pH: 6.5 - 7
Melting point: No data available
Freezing point: No data available
Boiling point: 122 °C
Flash point: Non-flammable
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: No data available
Relative vapour density at 20 °C: No data available
Solubility: Complete.
Water: Solubility in water of component(s) of the mixture:
  • ammonium nitrate: 190 g/100ml • urea (57-13-6): 100 g/100ml
Log Pow: 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

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Stable.

10.3. Possibility of hazardous reactions

Not established.
10.4. Conditions to avoid
Heat and sources of ignition. Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

10.6. Hazardous decomposition products
Extremely high temperatures. Ammonia, POx and NOx. Fume. Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

**ammonium nitrate (6484-52-2)**
- LD50 oral rat: 4820 mg/kg (Rat)
- LD50 dermal rabbit: > 3000 mg/kg (Rabbit)
- ATE US (oral): 4820.000 mg/kg bodyweight

**urea (57-13-6) (57-13-6)**
- LD50 oral rat: 8471 mg/kg (Rat; OECD 401: Acute Oral Toxicity; Literature study; 14300 mg/kg bodyweight; Rat; Experimental value)
- LD50 dermal rat: > 3200 mg/kg (Rat; Literature study)
- LD50 dermal rabbit: > 21000 mg/kg (Rabbit; Literature study)
- ATE US (oral): 8471.000 mg/kg bodyweight

Skin corrosion/irritation : Not classified
pH: 6.5 - 7

Serious eye damage/irritation : Causes eye irritation.
pH: 6.5 - 7

Respiratory or skin sensitisation : Not classified

Germ cell mutagenicity : Not classified
Based on available data, the classification criteria are not met

Carcinogenicity : Not classified

Reproductive toxicity : Not classified
Based on available data, the classification criteria are not met

Specific target organ toxicity (single exposure) : Not classified

Specific target organ toxicity (repeated exposure) : Not classified

Aspiration hazard : Not classified

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

Symptoms/injuries after eye contact : Causes eye irritation.

SECTION 12: Ecological information

12.1. Toxicity

**ammonium nitrate (6484-52-2)**
- LC50 fish 1: 74 mg/l (48 h; Cyprinus carpio; Lethal)
- EC50 Daphnia 1: 555 mg/l (Daphnia magna)
- LC50 fish 2: 800 mg/l (3.9 h; Pisces)
- TLM fish 1: 100 - 1000,96 h; Pisces
- TLM other aquatic organisms 1: 100 - 1000,96 h
- Threshold limit algae 1: 83 mg/l (Scenedesmus quadricauda; Growth rate)

**urea (57-13-6) (57-13-6)**
- LC50 fish 1: > 6810 mg/l (96 h; Leuciscus idus; Nominal concentration)
Simplot UAN-32 Urea Ammonium Nitrate Solution 32-0-0
Safety Data Sheet
according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

12.2. Persistence and degradability
Simplot UAN-32 Urea Ammonium Nitrate Solution 32-0-0
Persistence and degradability  Not established.

ammonium nitrate (6484-52-2)

Water (7732-18-5)
Persistence and degradability  Not established.

urea (57-13-6) (57-13-6)
ThOD 0.27 g O₂/g substance

12.3. Bioaccumulative potential
Simplot UAN-32 Urea Ammonium Nitrate Solution 32-0-0
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.

urea (57-13-6) (57-13-6)
BCF fish 1 1 (72 h; Brachydanio rerio; Fresh water)
BCF other aquatic organisms 1 11700 (Chlorella sp.)
Log Pow < -1.73 (Experimental value; EU Method A.8: Partition Coefficient)
Bioaccumulative potential  Bioaccumulation: not applicable. Not established.

12.4. Mobility in soil
No additional information available

12.5. Other adverse effects
Effect on the global warming  No known ecological damage caused by this product.
Other information  Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods
Waste disposal recommendations  Dispose in a safe manner in accordance with local/national regulations.
Ecology - waste materials  Avoid release to the environment.

SECTION 14: Transport information
Department of Transportation (DOT)
In accordance with DOT
Not regulated for transport

TDG
No additional information available
Transports by sea
No additional information available

Air transport
No additional information available

SECTION 15: Regulatory information

15.1. US Federal regulations

Simplot UAN-32 Urea Ammonium Nitrate Solution 32-0-0
Not listed on the United States TSCA (Toxic Substances Control Act) inventory

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
No additional information available

EU-Regulations
No additional information available

National regulations
No additional information available

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

ammonium nitrate (6484-52-2)
U.S. - New Jersey - Right to Know Hazardous Substance List

SECTION 16: Other information

Data sources

Other information
None.

Full text of H-statements:

H320 Causes eye irritation

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