

# Simplot Growers Solutions 32-4-5 custom blend for Jack Barrowcliffs

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### SECTION 1: Identification

#### 1.1. Identification

Product form : Mixture  
Product name : Simplot Growers Solutions 32-4-5 custom blend for Jack Barrowcliffs  
Product code : M26859

#### 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

##### GHS-US classification

Serious eye damage/eye irritation, Category 2B H320

Reproductive toxicity, Category 2 H361

Full text of H statements : see section 16

#### 2.2. Label elements

##### GHS-US labelling

Hazard pictograms (GHS-US) :



GHS08

Signal word (GHS-US) : Warning

Contains : disodium tetraborate, pentahydrate

Hazard statements (GHS-US) : H320 - Causes eye irritation  
H361 - Suspected of damaging fertility or the unborn child

Precautionary statements (GHS-US) : P201 - Obtain special instructions before use  
P202 - Do not handle until all safety precautions have been read and understood  
P264 - Wash hands, forearms and face thoroughly after handling  
P280 - Wear protective gloves/protective clothing/eye protection/face protection  
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
P308+P313 - If exposed or concerned: Get medical attention  
P337+P313 - If eye irritation persists: Get medical attention  
P405 - Store locked up  
P501 - Dispose of contents/container to ...in accordance with local/regional/national regulations

#### 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

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| Name                               | Product identifier  | % | GHS-US classification                |
|------------------------------------|---------------------|---|--------------------------------------|
| urea (57-13-6)                     | (CAS No) 57-13-6    |   | Eye Irrit. 2B, H320                  |
| ammonium sulfate (7783-20-2)       | (CAS No) 7783-20-2  |   | Not classified                       |
| potassium chloride                 | (CAS No) 7447-40-7  |   | Not classified                       |
| disodium tetraborate, pentahydrate | (CAS No) 12179-04-3 |   | Eye Irrit. 2A, H319<br>Repr. 2, H361 |
| Proprietary                        |                     |   | Not classified                       |

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 exposed or concerned: Get medical advice/attention.
- 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 : Suspected of damaging fertility or the unborn child.
- 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

##### 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 : On land, sweep or shovel into suitable containers. Minimize generation of dust. Store away from other materials.

#### 6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

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### 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. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.

#### 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 : Keep container closed when not in use.  
Incompatible products : Strong bases. Strong acids.  
Incompatible materials : Sources of ignition. Direct sunlight.

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

| ammonium sulfate (7783-20-2) (7783-20-2)        |                                 |                     |
|---|---------------------------------|---------------------|
| Not applicable                                  |                                 |                     |
| potassium chloride (7447-40-7)                  |                                 |                     |
| Not applicable                                  |                                 |                     |
| urea (57-13-6) (57-13-6)                        |                                 |                     |
| Not applicable                                  |                                 |                     |
| disodium tetraborate, pentahydrate (12179-04-3) |                                 |                     |
| ACGIH   | ACGIH TWA (mg/m <sup>3</sup> )  | 2 mg/m <sup>3</sup> |
| ACGIH   | ACGIH STEL (mg/m <sup>3</sup> ) | 6 mg/m <sup>3</sup> |
| Proprietary                                     |                                 |                     |
| Not applicable                                  |                                 |                     |

#### 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 : Solid  
Appearance : Granules.  
Colour : Mixture contains one or more component(s) which have the following colour(s):  
Colourless-white Unpurified: grey-brown White Colourless  
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 : No data available  
Melting point : No data available  
Freezing point : No data available  
Boiling point : No data available  
Flash point : No data available  
Relative evaporation rate (butylacetate=1) : No data available  
Flammability (solid, gas) : No data available

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|                                  |  |
|----------------------------------|--|
| 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                       | : Water: Solubility in water of component(s) of the mixture :<br>• ammonium sulfate (7783-20-2): 77 g/100ml • potassium chloride: 34 g/100ml • disodium tetraborate, pentahydrate: 3.6 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

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

fume. Carbon monoxide. Carbon dioxide.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity : Not classified

| <b>ammonium sulfate (7783-20-2) (7783-20-2)</b>        |  |
|--|--|
| LD50 oral rat  | 2840 mg/kg (Rat)   |
| LD50 dermal rat  | > 2000 mg/kg   |
| ATE US (oral)  | 2840.000 mg/kg bodyweight  |
| <b>potassium chloride (7447-40-7)</b>                  |  |
| LD50 oral rat  | 2600 mg/kg (Rat)   |
| ATE US (oral)  | 2600.000 mg/kg bodyweight  |
| <b>urea (57-13-6) (57-13-6)</b>                        |  |
| 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  |
| <b>disodium tetraborate, pentahydrate (12179-04-3)</b> |  |
| LD50 oral rat  | > 2000 mg/kg (Rat; OECD 401: Acute Oral Toxicity; Literature study; >2500 mg/kg bodyweight; Rat; Experimental value) |
| LD50 dermal rabbit                                     | > 2000 mg/kg (Rabbit; Experimental value; Other)   |

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|   |   |
|---|---|
| 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                               | : Suspected of damaging fertility or the unborn child.              |
| 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

| <b>ammonium sulfate (7783-20-2) (7783-20-2)</b>        |  |
|--|--|
| LC50 fish 1  | 126 mg/l (96 h; <i>Poecilia reticulata</i> )                       |
| EC50 Daphnia 1   | 202 mg/l (96 h; <i>Daphnia magna</i> )                             |
| LC50 fish 2  | 250 - 480 mg/l (96 h; <i>Brachydanio rerio</i> )                   |
| EC50 Daphnia 2   | 433 mg/l (50 h; <i>Daphnia magna</i> )                             |
| TLM fish 1   | 1290 ppm (96 h; <i>Gambusia affinis</i> )                          |
| <b>potassium chloride (7447-40-7)</b>                  |  |
| LC50 fish 1  | 920 mg/l (96 h; <i>Gambusia affinis</i> ; Static system)           |
| EC50 Daphnia 1   | 630 mg/l (48 h; <i>Ceriodaphnia dubia</i> )                        |
| LC50 fish 2  | 2010 mg/l (96 h; <i>Lepomis macrochirus</i> ; Static system)       |
| EC50 Daphnia 2   | 660 mg/l (48 h; <i>Daphnia magna</i> )                             |
| Threshold limit algae 1                                | 850 mg/l (72 h; <i>Scenedesmus subspicatus</i> )                   |
| Threshold limit algae 2                                | > 100 mg/l (72 h; <i>Scenedesmus subspicatus</i> ; GLP)            |
| <b>urea (57-13-6) (57-13-6)</b>                        |  |
| LC50 fish 1  | > 6810 mg/l (96 h; <i>Leuciscus idus</i> ; Nominal concentration)  |
| EC50 Daphnia 1   | > 10000 mg/l (48 h; <i>Daphnia magna</i> ; Nominal concentration)  |
| LC50 fish 2  | 17500 mg/l (96 h; <i>Poecilia reticulata</i> )                     |
| EC50 Daphnia 2   | > 10000 mg/l (24 h; <i>Daphnia magna</i> )                         |
| TLM fish 1   | 17500 ppm (96 h; <i>Poecilia reticulata</i> )                      |
| Threshold limit other aquatic organisms 1              | 120000 mg/l (16 h; Bacteria; Toxicity test)                        |
| Threshold limit other aquatic organisms 2              | > 10000 mg/l ( <i>Pseudomonas putida</i> )                         |
| Threshold limit algae 1                                | > 10000 mg/l (168 h; <i>Scenedesmus quadricauda</i> ; Growth rate) |
| Threshold limit algae 2                                | 47 mg/l (192 h; <i>Microcystis aeruginosa</i> ; Growth rate)       |
| <b>disodium tetraborate, pentahydrate (12179-04-3)</b> |  |
| LC50 fish 1  | 100 - 1000 mg/l (96 h; Pisces; Decahydrate)                        |
| LC50 other aquatic organisms 1                         | 100 - 100 mg/l (96 h)  |
| EC50 Daphnia 1   | 340 mg/l (24 h; <i>Daphnia magna</i> ; Anhydrous form)             |
| LC50 fish 2  | 1900 mg/l ( <i>Pimephales promelas</i> )                           |
| TLM fish 1   | 8200 ppm (48 h; <i>Gambusia affinis</i> ; Anhydrous form)          |
| Threshold limit other aquatic organisms 1              | 100 - 100,96 h; Protozoa; Anhydrous form                           |
| Threshold limit other aquatic organisms 2              | 1 mg/l (72 h)  |
| Threshold limit algae 1                                | 47 mg/l (96 h; <i>Scenedesmus subspicatus</i> ; Anhydrous form)    |
| Threshold limit algae 2                                | 0.58 mg/l ( <i>Scenedesmus quadricauda</i> ; Anhydrous form)       |

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### 12.2. Persistence and degradability

| <b>Simplot Growers Solutions 32-4-5 custom blend for Jack Barrowcliffs</b> |   |
|--|---|
| Persistence and degradability  | Not established.  |
| <b>ammonium sulfate (7783-20-2) (7783-20-2)</b>                            |   |
| Persistence and degradability  | Biodegradability in water: no data available. Not established.  |
| <b>potassium chloride (7447-40-7)</b>                                      |   |
| Persistence and degradability  | Biodegradability: not applicable. Not established.  |
| Biochemical oxygen demand (BOD)  | Not applicable  |
| Chemical oxygen demand (COD)   | Not applicable  |
| ThOD   | Not applicable  |
| BOD (% of ThOD)  | Not applicable  |
| <b>urea (57-13-6) (57-13-6)</b>  |   |
| Persistence and degradability  | Inherently biodegradable. Hydrolysis in water. Not established.   |
| ThOD   | 0.27 g O <sub>2</sub> /g substance  |
| <b>disodium tetraborate, pentahydrate (12179-04-3)</b>                     |   |
| Persistence and degradability  | Biodegradability: not applicable. Biodegradability in soil: not applicable. Adsorbs into the soil. Not established. |
| Biochemical oxygen demand (BOD)  | Not applicable  |
| Chemical oxygen demand (COD)   | Not applicable  |
| ThOD   | Not applicable  |
| BOD (% of ThOD)  | Not applicable  |
| <b>Proprietary</b>   |   |
| Persistence and degradability  | Not established.  |

### 12.3. Bioaccumulative potential

| <b>Simplot Growers Solutions 32-4-5 custom blend for Jack Barrowcliffs</b> |  |
|--|--|
| Bioaccumulative potential  | Not established.   |
| <b>ammonium sulfate (7783-20-2) (7783-20-2)</b>                            |  |
| Log Pow  | -5.1   |
| Bioaccumulative potential  | Bioaccumulation: not applicable. Not established.                  |
| <b>potassium chloride (7447-40-7)</b>                                      |  |
| Log Pow  | -0.46 (Estimated value)  |
| Bioaccumulative potential  | Bioaccumulation: not applicable. Not established.                  |
| <b>urea (57-13-6) (57-13-6)</b>  |  |
| 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.                  |
| <b>disodium tetraborate, pentahydrate (12179-04-3)</b>                     |  |
| Bioaccumulative potential  | Not bioaccumulative. Not established.                              |
| <b>Proprietary</b>   |  |
| Bioaccumulative potential  | Not established.   |

### 12.4. Mobility in soil

| <b>disodium tetraborate, pentahydrate (12179-04-3)</b> |   |
|--|---|
| Ecology - soil   | May be harmful to plant growth, blooming and fruit formation. |

### 12.5. Other adverse effects

Effect on the global warming : No known ecological damage caused by this product.

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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. 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

Not regulated for transport

#### TDG

No additional information available

#### Transport by sea

No additional information available

#### Air transport

No additional information available

### 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 except for:

|                                    |                   |   |
|------------------------------------|-------------------|---|
| disodium tetraborate, pentahydrate | CAS No 12179-04-3 | % |
| Proprietary                        | CAS No            | % |

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

### SECTION 16: Other information

Other information : None.

Full text of H-statements:

|      |   |
|------|---|
| H319 | Causes serious eye irritation                       |
| H320 | Causes eye irritation                               |
| H361 | Suspected of damaging fertility or the unborn child |

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