

Simplot CRF 11-18-12

Safety Data Sheet

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

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Mixture
Product name : Simplot CRF 11-18-12
Product code : M828146

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

1.3. Details of the supplier of the safety data sheet

JR Simplot Company
Boise, ID 83707
T 1-208-336-2110

1.4. Emergency telephone number

Emergency number : CHEMTREC 1-800-424-9300

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS-US classification

Skin Irrit. 2 H315
Eye Irrit. 2B H320
STOT SE 3 H335

Full text of H-phrases: see section 16

2.2. Label elements

GHS-US labelling

Hazard pictograms (GHS-US) :



GHS07

Signal word (GHS-US) :

Warning

Hazard statements (GHS-US) :

H315 - Causes skin irritation
H320 - Causes eye irritation
H335 - May cause respiratory irritation

Precautionary statements (GHS-US) :

P261 - Avoid breathing dust/fume/gas/mist/vapours/spray
P264 - Wash ... thoroughly after handling
P271 - Use only outdoors or in a well-ventilated area
P280 - Wear protective gloves/protective clothing/eye protection/face protection
P302 + P352 - If on skin: Wash with plenty of water/...
P304 + P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P312 - Call a poison center/doctor/... if you feel unwell
P321 - Specific treatment (see ... on this label)
P332 + P313 - If skin irritation occurs: Get medical attention
P337 + P313 - If eye irritation persists: Get medical attention
P362 - Take off contaminated clothing and wash before reuse
P403 + P233 - Store in a well-ventilated place. Keep container tightly closed
P405 - Store locked up
P501 - Dispose of contents/container to ...

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS-US)

No data available

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SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

| Name | Product identifier | % | GHS-US classification |
|----------------------------|----------------------|---|---|
| Monoammonium Phosphate | (CAS No) 7722-76-1 | | Eye Irrit. 2B, H320 STOT SE 3, H335 |
| urea | (CAS No) 57-13-6 | | Skin Irrit. 2, H315 Eye Irrit. 2B, H320 STOT SE 3, H335 |
| potassium chloride | (CAS No) 7447-40-7 | | Not classified |
| Polymer Coating | | | Not classified |
| ammonium nitrate | (CAS No) 6484-52-2 | | Eye Irrit. 2B, H320 |
| Magnesium Succrate | | | Not classified |
| Pacmix | (CAS No) None | | Skin Irrit. 2, H315 Eye Irrit. 2B, H320 STOT SE 3, H335 |
| potassium sulfate | (CAS No) 7778-80-5 | | Not classified |
| Calcium Phosphate | (CAS No) 7758-23-8 | | Skin Irrit. 2, H315 Eye Irrit. 2B, H320 STOT SE 3, H335 |
| wax (paraffins- petroleum) | (CAS No) 64771-72-8 | | Not classified |
| Ammonium Polyphosphate | (CAS No) 68333-79-9 | | Skin Irrit. 2, H315 Eye Irrit. 2B, H320 STOT SE 3, H335 |
| Maleic-itaconic copolymer | (CAS No) 556055-76-6 | | Not classified |

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 | : Remove to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER/doctor/physician if you feel unwell. |
| First-aid measures after skin contact | : Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention. Specific treatment (see ... on this label). |
| 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 inhalation | : May cause respiratory irritation. |
| Symptoms/injuries after skin contact | : Causes skin irritation. |
| 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. |

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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.

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. Avoid breathing dust/fume/gas/mist/vapours/spray. Use only outdoors or in a well-ventilated area.

Hygiene measures : Wash ... thoroughly after handling.

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 tightly closed.

Incompatible products : Strong bases. Strong acids.

Incompatible materials : Sources of ignition. Direct sunlight.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Exposure controls

Personal protective equipment : Avoid all unnecessary exposure.

Hand protection : Wear protective gloves.

Eye protection : Chemical goggles or safety glasses.

Skin and body protection : Wear suitable protective clothing.

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 : Granule.

Colour : Multi-colored

Odour : characteristic

Odour threshold : No data available

pH : No data available

Relative evaporation rate (butylacetate=1) : No data available

Melting point : No data available

Freezing point : No data available

Boiling point : No data available

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| | |
|----------------------------------|--|
| Flash point | : No data available |
| Auto-ignition temperature | : No data available |
| Decomposition temperature | : No data available |
| Flammability (solid, gas) | : No data available |
| Vapour pressure | : No data available |
| Relative vapour density at 20 °C | : No data available |
| Relative density | : No data available |
| Solubility | : Slowly soluble, coating insoluble. Water: Solubility in water of component(s) of the mixture : • urea: 100 g/100ml • ammonium nitrate: 190 g/100ml • Calcium Phosphate: 1.8 g/100ml (30 °C) • Ammonium Polyphosphate: < 15 g/100ml • Monoammonium Phosphate: 38 g/100ml • potassium sulfate: 11 g/100ml • potassium chloride: 34 g/100ml • wax (paraffins- petroleum): insoluble |
| Log Pow | : No data available |
| Log Kow | : No data available |
| Viscosity, kinematic | : No data available |
| Viscosity, dynamic | : No data available |
| Explosive properties | : No data available |
| Oxidising properties | : No data available |
| Explosive limits | : 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

| urea (57-13-6) | |
|-------------------------------|-----------------------------------|
| LD50 oral rat | 8471 mg/kg (Rat) |
| LD50 dermal rat | > 3200 mg/kg (Rat) |
| LD50 dermal rabbit | > 21000 mg/kg (Rabbit) |
| ATE US (oral) | 8471.00000000 mg/kg bodyweight |
| ammonium nitrate (6484-52-2) | |
| LD50 oral rat | 4820 mg/kg (Rat) |
| LD50 dermal rabbit | > 3000 mg/kg (Rabbit) |
| ATE US (oral) | 4820.00000000 mg/kg bodyweight |
| Calcium Phosphate (7758-23-8) | |
| LD50 oral rat | 17500 mg/kg (Rat; Literature) |
| LD50 dermal rabbit | > 2000 mg/kg (Rabbit; Literature) |

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| Calcium Phosphate (7758-23-8) | |
|--|---------------------------------|
| ATE US (oral) | 17500.00000000 mg/kg bodyweight |
| Ammonium Polyphosphate (68333-79-9) | |
| LD50 oral rat | 5625 mg/kg (Rat) |
| LD50 dermal rabbit | > 3160 mg/kg (Rabbit) |
| ATE US (oral) | 5625.00000000 mg/kg bodyweight |
| Monoammonium Phosphate (7722-76-1) | |
| LD50 oral rat | 5750 mg/kg (Rat) |
| LD50 dermal rat | > mg/kg |
| LD50 dermal rabbit | > 7940 mg/kg (Rabbit) |
| ATE US (oral) | 5750.00000000 mg/kg bodyweight |
| potassium sulfate (7778-80-5) | |
| LD50 oral rat | 6600 mg/kg (Rat) |
| ATE US (oral) | 6600.00000000 mg/kg bodyweight |
| potassium chloride (7447-40-7) | |
| LD50 oral rat | 2600 mg/kg (Rat) |
| ATE US (oral) | 2600.00000000 mg/kg bodyweight |
| wax (paraffins- petroleum) (64771-72-8) | |
| LD50 oral rat | > 5000 mg/kg (Rat) |
| LD50 dermal rabbit | > 2000 mg/kg (Rabbit) |

| | |
|---|---|
| Skin corrosion/irritation | : Causes skin irritation. |
| 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) | : May cause respiratory irritation. |
| 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 inhalation | : May cause respiratory irritation. |
| Symptoms/injuries after skin contact | : Causes skin irritation. |
| Symptoms/injuries after eye contact | : Causes eye irritation. |

SECTION 12: Ecological information

12.1. Toxicity

| urea (57-13-6) | |
|---|---|
| LC50 fishes 1 | > 6810 mg/l (96 h; Leuciscus idus) |
| EC50 Daphnia 1 | > 10000 mg/l (48 h; Daphnia magna) |
| LC50 fish 2 | 17500 mg/l (96 h; Poecilia reticulata) |
| EC50 Daphnia 2 | > 10000 mg/l (24 h; Daphnia magna) |
| TLM fish 1 | 17500 ppm (96 h; Poecilia reticulata) |
| Threshold limit other aquatic organisms 1 | 120000 mg/l (16 h; Bacteria; Toxicity test) |
| Threshold limit other aquatic organisms 2 | > 10000 mg/l (Pseudomonas putida) |
| Threshold limit algae 2 | > 10000 mg/l (168 h; Scenedesmus quadricauda) |
| ammonium nitrate (6484-52-2) | |
| LC50 fishes 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) |

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

| Monoammonium Phosphate (7722-76-1) | |
|---|-------------------------------------|
| LC50 fishes 1 | 155 ppm (96 h; Pimephales promelas) |

| potassium sulfate (7778-80-5) | |
|---|---|
| LC50 fishes 1 | 1692.4 mg/l (96 h; Alburnus alburnus) |
| LC50 other aquatic organisms 1 | > 1000 mg/l (96 h) |
| EC50 Daphnia 1 | 890 mg/l (48 h; Daphnia magna; Static system) |
| LC50 fish 2 | 653 - 796 mg/l (96 h; Lepomis macrochirus) |
| EC50 Daphnia 2 | 1180 mg/l (96 h; Crustacea) |
| TLM fish 1 | 3550 ppm (96 h; Lepomis sp.) |
| Threshold limit other aquatic organisms 1 | > 1000 mg/l (96 h) |
| Threshold limit algae 1 | 2900 mg/l (72 h; Scenedesmus subspicatus) |

| potassium chloride (7447-40-7) | |
|---------------------------------------|--|
| LC50 fishes 1 | 920 mg/l (96 h; Gambusia affinis; Static system) |
| EC50 Daphnia 1 | 630 mg/l (48 h; Ceriodaphnia dubia) |
| LC50 fish 2 | 2010 mg/l (96 h; Lepomis macrochirus; Static system) |
| EC50 Daphnia 2 | 660 mg/l (48 h; Daphnia magna) |
| Threshold limit algae 1 | 850 mg/l (72 h; Scenedesmus subspicatus) |
| Threshold limit algae 2 | > 100 mg/l (72 h; Scenedesmus subspicatus; GLP) |

12.2. Persistence and degradability

| Simplot CRF 11-18-12 | |
|-------------------------------|------------------|
| Persistence and degradability | Not established. |

| urea (57-13-6) | |
|-------------------------------|---|
| Persistence and degradability | Inherently biodegradable. Hydrolysis in water. Not established. |
| ThOD | 0.27 g O ₂ /g substance |

| ammonium nitrate (6484-52-2) | |
|-------------------------------------|---|
| Persistence and degradability | Biodegradable in water. Biodegradable in the soil. Not established. |

| Calcium Phosphate (7758-23-8) | |
|--------------------------------------|--|
| 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 |

| Ammonium Polyphosphate (68333-79-9) | |
|--|---|
| Persistence and degradability | Biodegradability in water: no data available. No (test)data on mobility of the components available. Not established. |

| Monoammonium Phosphate (7722-76-1) | |
|---|--|
| Persistence and degradability | Biodegradability in water: no data available. Not established. |

| potassium sulfate (7778-80-5) | |
|--------------------------------------|--|
| 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 |

| potassium chloride (7447-40-7) | |
|---------------------------------------|--|
| Persistence and degradability | Biodegradability: not applicable. Not established. |
| Biochemical oxygen demand (BOD) | Not applicable |
| Chemical oxygen demand (COD) | Not applicable |

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| potassium chloride (7447-40-7) | |
|---------------------------------------|----------------|
| ThOD | Not applicable |
| BOD (% of ThOD) | Not applicable |

| Pacmix (None) | |
|-------------------------------|------------------|
| Persistence and degradability | Not established. |

| wax (paraffins- petroleum) (64771-72-8) | |
|--|---------------------------------|
| Persistence and degradability | Readily biodegradable in water. |

| Maleic-itaconic copolymer (556055-76-6) | |
|--|------------------|
| Persistence and degradability | Not established. |

12.3. Bioaccumulative potential

| Simplot CRF 11-18-12 | |
|-----------------------------|------------------|
| Bioaccumulative potential | Not established. |

| urea (57-13-6) | |
|-------------------------------|---|
| BCF fish 1 | 1 (72 h; Brachydanio rerio; Fresh water) |
| BCF other aquatic organisms 1 | 11700 (Chlorella sp.) |
| Log Pow | -2.59 - -1.59 |
| Bioaccumulative potential | Bioaccumulation: not applicable. Not established. |

| ammonium nitrate (6484-52-2) | |
|-------------------------------------|---|
| Log Pow | -3.1 |
| Bioaccumulative potential | Bioaccumulation: not applicable. Not established. |

| Calcium Phosphate (7758-23-8) | |
|--------------------------------------|---|
| Bioaccumulative potential | No bioaccumulation data available. Not established. |

| Ammonium Polyphosphate (68333-79-9) | |
|--|---|
| Bioaccumulative potential | No bioaccumulation data available. Not established. |

| Monoammonium Phosphate (7722-76-1) | |
|---|---------------------------------------|
| Bioaccumulative potential | Not bioaccumulative. Not established. |

| potassium sulfate (7778-80-5) | |
|--------------------------------------|---------------------------------------|
| Bioaccumulative potential | Not bioaccumulative. Not established. |

| potassium chloride (7447-40-7) | |
|---------------------------------------|---|
| Log Pow | -0.46 (Estimated value) |
| Bioaccumulative potential | Bioaccumulation: not applicable. Not established. |

| Pacmix (None) | |
|---------------------------|------------------|
| Bioaccumulative potential | Not established. |

| wax (paraffins- petroleum) (64771-72-8) | |
|--|------------------------------------|
| Bioaccumulative potential | No bioaccumulation data available. |

| Maleic-itaconic copolymer (556055-76-6) | |
|--|------------------|
| Bioaccumulative potential | Not established. |

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

- Effect on ozone layer : No additional information available
- 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.

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Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

In accordance with DOT
Not regulated for transport

Additional information

Other information : No supplementary information available.

ADR

Transport document description :

Transport by sea

UN-No. (IMDG) : 2071
Proper Shipping Name (IMDG) : AMMONIUM NITRATE BASED FERTILIZER
Class (IMDG) : 9 - Miscellaneous dangerous substances and articles
Packing group (IMDG) : III - substances presenting low danger

Air transport

UN-No.(IATA) : 2071
Proper Shipping Name (IATA) : AMMONIUM NITRATE FERTILIZERS
Class (IATA) : 9 - Miscellaneous Dangerous Goods

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:

| | | |
|--|--------------------|--|
| Magnesium Sulfate | CAS No | C _≥ 2.00% ; C _≤ 10.00% |
| Pacmix | CAS No None | C _≥ 2.00% ; C _≤ 10.00% |
| Polymer Coating wax (paraffins- petroleum) | CAS No | C _≥ 5.00% ; C _≤ 20.00% |
| Maleic-itaconic copolymer | CAS No 64771-72-8 | C _≤ 2.00% |
| | CAS No 556055-76-6 | C _≤ 1.00% |

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.

Magnesium Sulfate

Not listed on the United States TSCA (Toxic Substances Control Act) inventory

Pacmix (None)

Not listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. International regulations

CANADA

No additional information available

EU-Regulations

No additional information available

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Classification according to Directive 67/548/EEC or 1999/45/EC

Not classified

15.2.2. 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 and/or reproductive harm

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ammonium nitrate (6484-52-2)

U.S. - New Jersey - Right to Know Hazardous Substance List

SECTION 16: Other information

Other information :
: None.

Full text of H-phrases: see section 16:

| | |
|---------------|--|
| Eye Irrit. 2B | Serious eye damage/eye irritation, Category 2B |
| Skin Irrit. 2 | Skin corrosion/irritation, Category 2 |
| STOT SE 3 | Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation |
| H315 | Causes skin irritation |
| H320 | Causes eye irritation |
| H335 | May cause respiratory 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.