

# Apex 18-6-11 with GAL-Xe Technology and X-cote

## 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 : Apex 18-6-11 with GAL-Xe Technology and X-cote  
Product code : M753348

#### 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  
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: 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 ... in accordance with local/regional/national regulations

#### 2.3. Other hazards

No additional information available

#### 2.4. Unknown acute toxicity (GHS-US)

Not applicable

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### SECTION 3: Composition/information on ingredients

#### 3.1. Substance

Not applicable

#### 3.2. Mixture

Name	Product identifier	%	GHS-US classification
ammonium nitrate	(CAS No) 6484-52-2		Eye Irrit. 2B, H320 STOT SE 3, H335
potassium sulfate	(CAS No) 7778-80-5		Not classified
Monoammonium Phosphate	(CAS No) 7722-76-1		Eye Irrit. 2B, H320 STOT SE 3, H335
Polymer Coating			Not classified
urea	(CAS No) 57-13-6		Skin Irrit. 2, H315 Eye Irrit. 2B, H320 STOT SE 3, H335
Pacmix	(CAS No) None		Skin Irrit. 2, H315 Eye Irrit. 2B, H320 STOT SE 3, H335
Calcium Phosphate	(CAS No) 7758-23-8		Skin Irrit. 2, H315 Eye Irrit. 2B, H320 STOT SE 3, H335
Ammonium Polyphosphate	(CAS No) 68333-79-9		Skin Irrit. 2, H315 Eye Irrit. 2B, H320 STOT SE 3, H335
sulfur	(CAS No) 7704-34-9		Skin Irrit. 2, H315 Eye Irrit. 2B, H320
wax (paraffins- petroleum)	(CAS No) 64771-72-8		Not classified

Full text of H-phrases: 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 victim to breathe 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 : Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persist.
- 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 : Not expected to present a significant hazard under anticipated conditions of normal use.

#### 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.

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### 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.

### 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.

### 7.3. Specific end use(s)

No additional information available

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

Apex 18-6-11 with GAL-Xe Technology and X-cote		
ACGIH	Not applicable	
OSHA	Not applicable	
urea (57-13-6)		
ACGIH	Not applicable	
OSHA	Not applicable	
ammonium nitrate (6484-52-2)		
ACGIH	Not applicable	
OSHA	Not applicable	
sulfur (7704-34-9)		
ACGIH	ACGIH TWA (mg/m <sup>3</sup> )	3 mg/m <sup>3</sup>
OSHA	Not applicable	
Monoammonium Phosphate (7722-76-1)		
ACGIH	Not applicable	
OSHA	Not applicable	
Calcium Phosphate (7758-23-8)		
ACGIH	Not applicable	
OSHA	Not applicable	
Ammonium Polyphosphate (68333-79-9)		
ACGIH	Not applicable	
OSHA	Not applicable	

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<b>potassium sulfate (7778-80-5)</b>	
ACGIH	Not applicable
OSHA	Not applicable

  

<b>wax (paraffins- petroleum) (64771-72-8)</b>	
ACGIH	Not applicable
OSHA	Not applicable

  

<b>Pacmix (None)</b>	
ACGIH	Not applicable
OSHA	Not applicable

  

<b>Polymer Coating</b>	
ACGIH	Not applicable
OSHA	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	: Multicolored granules.
Colour	: Multi-colored
Odour	: characteristic
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
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	: Slowly soluble, coating insoluble. Water: Solubility in water of component(s) of the mixture : • urea: 100 g/100ml • ammonium nitrate: 190 g/100ml • Monoammonium Phosphate: 38 g/100ml • Ammonium Polyphosphate: < 15 g/100ml • wax (paraffins- petroleum): insoluble • Calcium Phosphate: 1.8 g/100ml (30 °C) • potassium sulfate: 11 g/100ml • sulfur: insoluble
Log Pow	: No data available
Log Kow	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity	: No data available

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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>urea (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>ammonium nitrate (6484-52-2)</b>	
LD50 oral rat	4820 mg/kg (Rat)
LD50 dermal rabbit	> 3000 mg/kg (Rabbit)
ATE US (oral)	4820.000 mg/kg bodyweight
<b>sulfur (7704-34-9)</b>	
LD50 oral rat	> 5000 mg/kg (Rat)
LD50 dermal rabbit	> 2000 mg/kg (Rabbit)
LC50 inhalation rat (mg/l)	> 9.23 mg/l/4h (Rat)
<b>Monoammonium Phosphate (7722-76-1)</b>	
LD50 oral rat	5750 mg/kg (Rat)
LD50 dermal rat	> mg/kg
LD50 dermal rabbit	> 7940 mg/kg (Rabbit)
ATE US (oral)	5750.000 mg/kg bodyweight
<b>Calcium Phosphate (7758-23-8)</b>	
LD50 oral rat	17500 mg/kg (Rat; Literature)
LD50 dermal rabbit	> 2000 mg/kg (Rabbit; Literature)
ATE US (oral)	17500.000 mg/kg bodyweight
<b>Ammonium Polyphosphate (68333-79-9)</b>	
LD50 oral rat	5625 mg/kg (Rat)
LD50 dermal rabbit	> 3160 mg/kg (Rabbit)
ATE US (oral)	5625.000 mg/kg bodyweight
<b>potassium sulfate (7778-80-5)</b>	
LD50 oral rat	6600 mg/kg (Rat)

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<b>potassium sulfate (7778-80-5)</b>	
ATE US (oral)	6600.000 mg/kg bodyweight

  

<b>wax (paraffins- petroleum) (64771-72-8)</b>	
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  
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) : 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.

## SECTION 12: Ecological information

### 12.1. Toxicity

<b>urea (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>ammonium nitrate (6484-52-2)</b>	
LC50 fish 1	74 mg/l (48 h; <i>Cyprinus carpio</i> ; Lethal)
EC50 Daphnia 1	555 mg/l ( <i>Daphnia magna</i> )
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 ( <i>Scenedesmus quadricauda</i> ; Growth rate)

  

<b>sulfur (7704-34-9)</b>	
LC50 fish 1	866 mg/l (96 h; <i>Brachydanio rerio</i> )
LC50 fish 2	> 100 mg/l 96 h; <i>Salmo gairdneri</i> ( <i>Oncorhynchus mykiss</i> )
TLM fish 1	10000 ppm (96 h; <i>Gambusia affinis</i> )
Threshold limit other aquatic organisms 1	> 10000 mg/l (24 h; <i>Daphnia magna</i> )

  

<b>Monoammonium Phosphate (7722-76-1)</b>	
LC50 fish 1	155 ppm (96 h; <i>Pimephales promelas</i> )

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<b>potassium sulfate (7778-80-5)</b>	
LC50 fish 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)

### 12.2. Persistence and degradability

<b>Apex 18-6-11 with GAL-Xe Technology and X-cote</b>	
Persistence and degradability	Not established.
<b>urea (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>ammonium nitrate (6484-52-2)</b>	
Persistence and degradability	Biodegradable in water. Biodegradable in the soil. Not established.
<b>sulfur (7704-34-9)</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>Monoammonium Phosphate (7722-76-1)</b>	
Persistence and degradability	Biodegradability in water: no data available. Not established.
<b>Calcium Phosphate (7758-23-8)</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>Ammonium Polyphosphate (68333-79-9)</b>	
Persistence and degradability	Biodegradability in water: no data available. No (test)data on mobility of the components available. Not established.
<b>potassium sulfate (7778-80-5)</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>wax (paraffins- petroleum) (64771-72-8)</b>	
Persistence and degradability	Readily biodegradable in water.
<b>Pacmix (None)</b>	
Persistence and degradability	Not established.

### 12.3. Bioaccumulative potential

<b>Apex 18-6-11 with GAL-Xe Technology and X-cote</b>	
Bioaccumulative potential	Not established.

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<b>urea (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>ammonium nitrate (6484-52-2)</b>	
Log Pow	-3.1
Bioaccumulative potential	Bioaccumulation: not applicable. Not established.
<b>sulfur (7704-34-9)</b>	
Log Pow	0.23 (Estimated value)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4). Not established.
<b>Monoammonium Phosphate (7722-76-1)</b>	
Bioaccumulative potential	Not bioaccumulative. Not established.
<b>Calcium Phosphate (7758-23-8)</b>	
Bioaccumulative potential	No bioaccumulation data available. Not established.
<b>Ammonium Polyphosphate (68333-79-9)</b>	
Bioaccumulative potential	No bioaccumulation data available. Not established.
<b>potassium sulfate (7778-80-5)</b>	
Bioaccumulative potential	Not bioaccumulative. Not established.
<b>wax (paraffins- petroleum) (64771-72-8)</b>	
Bioaccumulative potential	No bioaccumulation data available.
<b>Pacmix (None)</b>	
Bioaccumulative potential	Not established.

### 12.4. Mobility in soil

<b>sulfur (7704-34-9)</b>	
Ecology - soil	Not toxic to bees.

### 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

### Additional information

Other information : No supplementary information available.

### ADR

No additional information available

### Transport by sea

UN-No. (IMDG) : 2071  
Proper Shipping Name (IMDG) : AMMONIUM NITRATE BASED FERTILIZER  
Class (IMDG) : 9 - Miscellaneous dangerous substances and articles



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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:

wax (paraffins- petroleum)	CAS No 64771-72-8	
Pacmix	CAS No None	
Polymer Coating	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

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

No additional information available

#### Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

Not classified

#### National regulations

No additional information available

### 15.3. US State regulations

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

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

#### sulfur (7704-34-9)

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

## SECTION 16: Other information

Data sources : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.  
Other information : None.

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Full text of H-phrases:

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)

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