

# Safety Data Sheet

## Multicote 18-6-12

### SECTION 1. IDENTIFICATION

**Product Identifier** Multicote 18-6-12  
**Recommended Use** Controlled Release Fertilizer for Plants.  
**Restrictions on Use** No information available.  
**Manufacturer / Supplier** Haifa North America, 307 Cranes Roost Blvd, Suite 2030, Altamonte Springs, Florida, 32701, Northamerica@haifa-group.com  
**Emergency Phone No.** CHEMTREC, 1-800-424-9300, 24 Hours  
**Date of Preparation** October 12, 2015

### SECTION 2. HAZARDS IDENTIFICATION

#### GHS Classification

Skin corrosion/irritation - Category 3; Specific target organ toxicity (repeated exposure) - Category 2; Aquatic hazard (Acute) - Category 3; Aquatic hazard (Chronic) - Category 3

#### GHS Label Elements



Signal Word:

Warning

Hazard Statement(s):

H316 Causes mild skin irritation.  
H373 May cause damage to organs through prolonged or repeated exposure.  
H402 Harmful to aquatic life.  
H412 Harmful to aquatic life with long lasting effects.

Precautionary Statement(s):

Prevention:

P260 Do not breathe dust/fume/gas/mist/vapours/spray.  
P273 Avoid release to the environment.

Response:

P314 Get medical advice/attention if you feel unwell.  
P332 + P313 If skin irritation occurs: Get medical advice/attention.

Disposal:

P501 Dispose of contents/container in accordance with local, regional, national and international regulations.

### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixture:

Chemical Name	CAS No.	%	Other Identifiers
Ammonium nitrate	6484-52-2	25-30	
Urea	57-13-6	15-20	
Potassium nitrate	7757-79-1	7-8	

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Zinc Sulphate	7446-20-0	1-2	
Manganese Sulphate	7785-87-7	1-2	
Ferrous Sulphate	7720-78-7	1.5-3	
Copper Sulphate	7758-98-7	0.05-1	

## SECTION 4. FIRST-AID MEASURES

### First-aid Measures

#### Inhalation

Move to fresh air. Remove source of exposure or move to fresh air. Get medical advice/attention if you feel unwell or are concerned.

#### Skin Contact

Take off contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Wash gently and thoroughly with lukewarm, gently flowing water and mild soap for 5 minutes. Get medical advice/attention if you feel unwell or are concerned.

#### Eye Contact

Immediately rinse the contaminated eye(s) with lukewarm, gently flowing water for 15-20 minutes, while holding the eyelid(s) open. Remove contact lenses, if present and easy to do. If eye irritation persists, get medical advice/attention.

#### Ingestion

Get medical advice/attention if you feel unwell or are concerned. Rinse mouth with water. Never give anything by mouth if victim is rapidly losing consciousness, or is unconscious or convulsing. Do not induce vomiting.

### Most Important Symptoms and Effects, Acute and Delayed

If on skin: may cause mild irritation. If in eyes: may cause mild irritation. May cause damage to organs through prolonged or repeated exposure.

### Immediate Medical Attention and Special Treatment

#### Medical Conditions Aggravated by Exposure

None known.

## SECTION 5. FIRE-FIGHTING MEASURES

### Extinguishing Media

#### Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

#### Unsuitable Extinguishing Media

No information available.

### Specific Hazards Arising from the Chemical

Thermal decomposition can lead to release of irritating or toxic fumes.

No information available.

### Special Protective Equipment and Precautions for Fire-fighters

Wear SCBA and full protective clothing. Approach fire from upwind to avoid hazardous vapours or gases. Review Section 6 (Accidental Release Measures) for important information on responding to leaks/spills.

Fire-fighters may enter the area if positive pressure SCBA and full Bunker Gear is worn.

## SECTION 6. ACCIDENTAL RELEASE MEASURES

### Personal Precautions, Protective Equipment, and Emergency Procedures

Use the personal protective equipment recommended in Section 8 of this safety data sheet. Avoid dust formation. Ensure adequate ventilation.

### Environmental Precautions

Do not allow into any sewer, on the ground or into any waterway.

### Methods and Materials for Containment and Cleaning Up

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Review Section 7 (Handling) of this safety data sheet before proceeding with clean-up. Sweep up spilled material and dispose of in approved manner. Avoid generating dust. Flush spill area. Review Section 13 (Disposal Considerations) of this safety data sheet.

## SECTION 7. HANDLING AND STORAGE

### Precautions for Safe Handling

Avoid breathing in this product. Prevent skin contact. Do not get in eyes, on skin or on clothing. Wear personal protective equipment to avoid direct contact with this chemical. Only use where there is adequate ventilation. Avoid generating dusts. Avoid release to the environment. Prevent accidental contact with incompatible chemicals. Keep containers tightly closed when not in use or empty. General hygiene considerations: do NOT smoke in work areas. Do NOT eat, drink or store food in work areas. Wash hands thoroughly after handling this material. Remove contaminated clothing and protective equipment before entering eating areas or leaving work area.

### Conditions for Safe Storage

Store in an area that is: cool, dry, well-ventilated, out of direct sunlight and away from heat and ignition sources, separate from incompatible materials (see Section 10: Stability and Reactivity).

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control Parameters

Chemical Name	ACGIH TLV®		OSHA PEL		AIHA WEEL	
	TWA	STEL	TWA	Ceiling	8-hr TWA	TWA
Potassium nitrate	5 mg/m <sup>3</sup>					
Ammonium nitrate	10 mg/m <sup>3</sup>		15 mg/m <sup>3</sup>			
Copper Sulphate	1 mg/m <sup>3</sup>		1 mg/m <sup>3</sup>			
Manganese Sulphate	0.2 mg/m <sup>3</sup>			5 mg/m <sup>3</sup>		
Urea					10 mg/m <sup>3</sup>	

### Appropriate Engineering Controls

Use local exhaust ventilation, if general ventilation is not adequate to control amount in the air. Provide eyewash and safety shower if contact or splash hazard exists.

### Individual Protection Measures

#### Eye/Face Protection

Wear chemical safety goggles.

#### Skin Protection

Wear chemical protective clothing e.g. gloves, aprons, boots.

#### Respiratory Protection

Disposable particle mask. If the oxygen content of the air is below acceptable limits, wear a NIOSH approved self-contained breathing apparatus (SCBA) or supplied air respirator.

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

### Basic Physical and Chemical Properties

Appearance	Brown particles. Particle Size: Not available
Odour	Odourless
Odour Threshold	Not available
pH	Not available
Melting Point/Freezing Point	Not available (melting); Not available (freezing)
Initial Boiling Point/Range	Not available
Flash Point	Not available
Evaporation Rate	Not available
Flammability (solid, gas)	Not available

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<b>Upper/Lower Flammability or Explosive Limit</b>	Not available (upper); Not available (lower)
<b>Vapour Pressure</b>	Not available
<b>Vapour Density (air = 1)</b>	Not available
<b>Relative Density (water = 1)</b>	Not available
<b>Solubility</b>	Not available in water
<b>Partition Coefficient, n-Octanol/Water (Log Kow)</b>	Not available
<b>Decomposition Temperature</b>	Not available
<b>Other Information</b>	
<b>Physical State</b>	Solid
<b>Molecular Formula</b>	Not applicable
<b>Molecular Weight</b>	Not applicable
<b>Bulk Density</b>	Not available

## SECTION 10. STABILITY AND REACTIVITY

### Reactivity

Stable in normal use and storage.

### Chemical Stability

Normally stable.

### Possibility of Hazardous Reactions

None expected under normal conditions of storage and use.

### Conditions to Avoid

Open flames, sparks, static discharge, heat and other ignition sources. Generation of dust. Water, moisture or humidity. Incompatible materials.

### Incompatible Materials

Oxidizing agents (e.g. peroxides), reducing agents (e.g. hydroquinone), strong acids (e.g. hydrochloric acid), strong bases (e.g. sodium hydroxide), metals (e.g. aluminum).

### Hazardous Decomposition Products

Not available.

## SECTION 11. TOXICOLOGICAL INFORMATION

### Likely Routes of Exposure

Skin contact; eye contact; inhalation.

### Acute Toxicity

Chemical Name	LD50 (oral)	LD50 (dermal)	LC50
Potassium nitrate	3750 mg/kg (rat)		
Ammonium nitrate	2800 mg/kg (rat)		
Copper Sulphate	300 mg/kg (rat)		
Ferrous Sulphate	1520 mg/kg (mouse)		
Manganese Sulphate	2150 mg/kg		
Urea	8471 mg/kg (rat)		

### Skin Corrosion/Irritation

May cause mild irritation based on information for closely related chemicals.

### Serious Eye Damage/Irritation

May cause mild irritation based on information for closely related chemicals.

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## STOT (Specific Target Organ Toxicity) - Single Exposure

### Inhalation

No information was located.

### Skin Absorption

No information was located.

### Ingestion

No information was located.

## Aspiration Hazard

No information was located.

## STOT (Specific Target Organ Toxicity) - Repeated Exposure

May cause damage to organs through prolonged or repeated exposure based on information for closely related chemicals.

## Respiratory and/or Skin Sensitization

Skin sensitizer.

## Carcinogenicity

No information was located.

## Reproductive Toxicity

### Development of Offspring

No information was located.

### Sexual Function and Fertility

No information was located.

### Effects on or via Lactation

No information was located.

## Germ Cell Mutagenicity

No information was located.

## Interactive Effects

No information was located.

## SECTION 12. ECOLOGICAL INFORMATION

This section is not required by WHMIS. This section is not required by OSHA. Keep out of water supplies, lakes, ponds, streams and rivers.

### Toxicity

Harmful to aquatic life, May cause long lasting harmful effects to aquatic life., (Ammonium nitrate)

#### Acute Aquatic Toxicity

Chemical Name	LC50 Fish	EC50 Crustacea	ErC50 Aquatic Plants	ErC50 Algae
Potassium nitrate		490 mg/L (Daphnia magna (water flea); 24-hour)		
Ammonium nitrate	6000 mg/L (Oncorhynchus mykiss (rainbow trout); 96-hour)	555 mg/L (Daphnia magna (water flea); 24-hour; fresh water; static)		
Urea		3910 mg/L (Daphnia magna (water flea); 48-hour)		

#### Chronic Aquatic Toxicity

Chemical Name	NOEC Fish	EC50 Fish	NOEC Crustacea	EC50 Crustacea
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Potassium nitrate				900 mg/L (Daphnia magna (water flea); 4.2 days)
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**Persistence and Degradability**

No information was located.

**Bioaccumulative Potential**

No information was located.

**Mobility in Soil**

No information was located.

**SECTION 13. DISPOSAL CONSIDERATIONS**

**Disposal Methods**

Contact local environmental authorities for approved disposal or recycling methods in your jurisdiction.

**SECTION 14. TRANSPORT INFORMATION**

Not regulated under Canadian TDG Regulations. Not regulated under US DOT Regulations. Not regulated under IATA Regulations.

**Special Precautions for User** Not applicable

**Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code**

Not applicable

**SECTION 15. REGULATORY INFORMATION**

**SECTION 16. OTHER INFORMATION**

**SDS Prepared By** MPPI Technical Department

**Phone No.** 905-793-8000

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**Key to Abbreviations** NIOSH = National Institute for Occupational Safety and Health

**References** CHEMINFO database. Canadian Centre for Occupational Health and Safety (CCOHS). NIOSH Pocket Guide database. National Institute for Occupational Safety and Health. Available from Canadian Centre for Occupational Health and Safety (CCOHS).

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