

### 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 : Rainbow® Plant Food Onion 6-12-18

Product code : 1000049

#### 1.2. Recommended use and restrictions on use

Use of the substance/mixture : Fertilizer
Recommended use : Fertilizers

### 1.3. Supplier

Rainbow Fertilizer LLC, a division of TIMAC AGRO USA, Inc. 1011 Oak Avenue

Americus, GA 31709, Georgia 31719

USA

T 1-800-763-0334 www.rainbowplantfood.com

## 1.4. Emergency telephone number

Country/Area	Organization/Company	Address	Emergency number	Comment
Americas	3E		+1-760-476-3962 (Access code : 333021)	(24/7)
USA	USA POISON CONTROL CENTER (24h/7d)		1-800-222-1222	

### **SECTION 2: Hazard(s) identification**

#### 2.1. Classification of the substance or mixture

#### **GHS US classification**

Not classified

### 2.2. GHS Label elements, including precautionary statements

#### **GHS US labeling**

No labeling applicable

#### 2.3. Other hazards which do not result in classification

No additional information available

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

No additional information available

### **SECTION 3: Composition/Information on ingredients**

#### 3.1. Substances

Not applicable

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#### 3.2. Mixtures

Name	Common Name (Synonyms)	Product identifier	%	GHS US classification
Potassium chloride		CAS-No.: 7447-40-7	10 – 25	Not classified
Calcium carbonate		CAS-No.: 1317-65-3	5 – 10	Not classified
Ammonium nitrate		CAS-No.: 6484-52-2	1 – 5	Ox. Sol. 3, H272 Eye Irrit. 2, H319
Calcium sulphate, dihydrate		CAS-No.: 10101-41-4	1 – 5	Not classified

Full text of hazard classes and H-statements : see section 16

### **SECTION 4: First-aid measures**

### 4.1. Description of first aid measures

First-aid measures general : If you feel unwell, seek medical advice.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Seek medical attention if ill

effect develops.

First-aid measures after skin contact : Wash skin with plenty of water. Take off contaminated clothing. If case of redness or irritation,

call a doctor.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to

do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion : If swallowed, rinse mouth with water (only if the person is conscious). Do not induce vomiting

without medical advice. Seek medical attention if ill effect develops.

#### 4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects : see section(s) : 2.1/2.3).
Symptoms/effects after ingestion : None under normal conditions

### 4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

### **SECTION 5: Fire-fighting measures**

### 5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : water, carbon dioxide (CO2), powder and foam. Use extinguishing media appropriate for

surrounding fire. Water spray. Dry powder. Foam.

Unsuitable extinguishing media : None known.

### 5.2. Specific hazards arising from the chemical

Fire hazard : Not flammable. Non oxidizing material.

Explosion hazard : No direct explosion hazard.

Hazardous decomposition products in case of fire : Thermal decomposition generates : fume.

### 5.3. Special protective equipment and precautions for fire-fighters

Precautionary measures fire : Evacuate area. Eliminate all ignition sources if safe to do so.

Firefighting instructions : Contain the extinguishing fluids by bunding. Do not enter fire area without proper protective

equipment, including respiratory protection.

Protection during firefighting : Complete protective clothing. EN 469. Self-contained breathing apparatus.

Other information : Relevant water authorities should be notified of any large spillage to water course or drain.

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#### **SECTION 6: Accidental release measures**

### 6.1. Personal precautions, protective equipment and emergency procedures

General measures : Evacuate area. Notify authorities if product enters sewers or public waters.

#### 6.1.1. For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment.

Emergency procedures : Do not breathe dust. Mechanically ventilate the spillage area. Only qualified personnel equipped

with suitable protective equipment may intervene.

#### 6.1.2. For emergency responders

Protective equipment : For further information refer to section 8: "Exposure controls/personal protection".

Emergency procedures : Ventilate area. Dike and contain spill. Evacuate unnecessary personnel.

#### 6.2. Environmental precautions

Avoid release to the environment.

#### 6.3. Methods and material for containment and cleaning up

For containment : Collect spillage.

Methods for cleaning up : Mechanically recover the product. Minimize generation of dust. Gather the product and place it in

a spare container that has been suitably labeled.

Other information : Dispose of materials or solid residues at an authorized site.

#### 6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection". For further information refer to section 13.

### **SECTION 7: Handling and storage**

#### 7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Do not breathe dust. Avoid contact with skin and

eyes.

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice. Always wash hands after

handling the product. Do not eat, drink or smoke when using this product. Wash contaminated

clothing before reuse.

### 7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Comply with applicable regulations.

Storage conditions : Store in dry, cool, well-ventilated area. Protect from moisture. Keep out of reach of children.

: Refer to the detailed list of incompatible materials in section 10 Stability/Reactivity.

Storage temperature : Store at ambient temperature

Information on mixed storage : Keep away from food, drink and animal feeding stuffs.

Special rules on packaging : Keep only in original container. Store in a closed container.

Packaging materials : Store always product in container of same material as original container.

#### **SECTION 8: Exposure controls/personal protection**

### 8.1. Control parameters

Incompatible products

Calcium carbonate	(1317-65-3)
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#### **USA - OSHA - Occupational Exposure Limits**

Local name Calcium Carbonate (Limestone; Marble)

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Calcium carbonate (1317-65-3)	Calcium carbonate (1317-65-3)		
OSHA PEL TWA	15 mg/m³ (Total dust)		
	5 mg/m³ (Respirable fraction)		
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1		
Calcium sulphate, dihydrate (10101-41-4)			
USA - ACGIH - Occupational Exposure Limits			
Local name	Calcium sulfate, the diihydrate		
ACGIH OEL TWA	10 mg/m³ (I - Inhalable particulate matter)		
Remark (ACGIH)	TLV® Basis: Nasal symptoms		
Regulatory reference	ACGIH 2024		
USA - OSHA - Occupational Exposure Limits			
Local name	Calcium sulfate		
OSHA PEL TWA	15 mg/m³ (Total dust)		
	5 mg/m³ (Respirable fraction)		
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1		
Potassium chloride (7447-40-7)			
USA - OSHA - Occupational Exposure Limits			
Local name	Total Dust (Inert or Nuisance Dust)		
OSHA PEL TWA	10 mg/m³ (dust)		
	50 mppcf		
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-3 Mineral Dusts		
Ammonium nitrate (6484-52-2)			
USA - OSHA - Occupational Exposure Limits			
OSHA PEL TWA	25 ppm Ammonia		
OSHA PEL STEL	35 ppm Ammonia		
OSHA PEL (Ceiling)	25 ppm Ammonia		
USA - NIOSH - Occupational Exposure Limits			
NIOSH REL (TWA)	25 ppm Ammonia		
NIOSH REL (STEL)	35 ppm Ammonia		
NIOSH REL (Ceiling)	25 ppm Ammonia		

### 8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station. Local exhaust and general ventilation must be

adequate to meet exposure standards.

Environmental exposure controls : Assure that emissions are compliant with all applicable air pollution control regulations. Comply

with applicable regulations. Avoid release to the environment.

### 8.3. Individual protection measures/Personal protective equipment

### Personal protective equipment:

Wear recommended personal protective equipment.

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Hand protection:

Protective gloves

#### Eye protection:

Safety glasses with side guards should be worn to prevent injury from airborne particles and/or other eye contact with this product. Safety glasses

Туре	Field of application	Characteristics
Safety goggles	Dust	With side shields

#### Skin and body protection:

Protective clothing

Type

Gloves

#### Respiratory protection:

Where excessive dust may result, wear approved mask

Device	Filter type	Condition
Dust mask	Type P2	Dust protection

#### Personal protective equipment symbol(s):







#### Other information:

See Heading 7: 7.1. Precautions for safe handling.

### **SECTION 9: Physical and chemical properties**

#### 9.1. Information on basic physical and chemical properties

Physical state : Solid
Appearance : Granulate.
Color : Gray brown
Odor : Odorless
Odor threshold : No data available

pH : 6 pH solution concentration : 10 %

Melting point : No data available
Freezing point : Not applicable
Boiling point : No data available
Flash point : Not applicable
Relative evaporation rate (butyl acetate=1) : No data available

Flammability (solid, gas) : In case of excessive dust production : Dust may form flammable and explosive mixture with air.

Vapor pressure : No data available Relative vapor density at 20°C : No data available Relative density : No data available

Solubility : Soluble.

Partition coefficient n-octanol/water (Log Pow) : No data available
Auto-ignition temperature : Not applicable
Decomposition temperature : No data available
Viscosity, kinematic : Not applicable
Viscosity, dynamic : No data available

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Explosion limits : Not applicable

Explosive properties : Product is not explosive. Oxidizing properties : Non oxidizing material.

### 9.2. Other information

No additional information available

### **SECTION 10: Stability and reactivity**

#### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

### 10.2. Chemical stability

Stable under use and storage conditions as recommended in section 7.

#### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

#### 10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

### 10.5. Incompatible materials

Strong oxidizing agents.

### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced. In case of fire: See Heading 5.

### **SECTION 11: Toxicological information**

#### 11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (dermal) : Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (inhalation) : Not classified (Based on available data, the classification criteria are not met)

Additional information : No experimental study on the product is available. The information given is based on our knowledge of the components and the classification of the product is determined by calculation

Calcium sulphate, dihydrate (10101-41-4)	
LD50 oral rat	> 1581 mg/kg body weight (OECD 420 method)
LC50 Inhalation - Rat	> 2.61 mg/l (OECD 403 method)
Potassium chloride (7447-40-7)	
LD50 oral rat	2600 mg/kg body weight Safety Data Sheet Supplier
ATE US (oral)	2600 mg/kg body weight
Ammonium nitrate (6484-52-2)	
LD50 oral rat	2950 mg/kg (OECD 401 method)
LD50 dermal rat	> 5000 mg/kg (OECD 402 method)
LC50 Inhalation - Rat	> 88.8 mg/m³

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Skin corrosion/irritation : Not classified pH: 6

Ammonium nitrate (	6484-52-2)	
рН		46-76950

Serious eye damage/irritation : Not classified

pH: 6

## Ammonium nitrate (6484-52-2)

рΗ 4.6 - 7.6 95 g/l

Respiratory or skin sensitization : Not classified (Based on available data, the classification criteria are not met) Not classified (Based on available data, the classification criteria are not met) Germ cell mutagenicity Carcinogenicity Not classified (Based on available data, the classification criteria are not met) Reproductive toxicity Not classified (Based on available data, the classification criteria are not met)

STOT-single exposure Not classified

STOT-repeated exposure Not classified (Based on available data, the classification criteria are not met)

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

NOAEL (subacute,oral,animal/male,28 days) ≥ 1500 mg/kg body weight rat - (OECD 422 method)

Not classified (Based on available data, the classification criteria are not met) Aspiration hazard

Viscosity, kinematic Not applicable

Symptoms/effects see section(s): 2.1/2.3). Symptoms/effects after ingestion None under normal conditions.

### **SECTION 12: Ecological information**

### 12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse

effects in the environment.

Do not allow large quantities, as are, to spread into the environment. Do not discharge into Ecology - water

drains or rivers.

## Calcium sulphate, dihydrate (10101-41-4)

LC50 - Fish [1]	> 1970 mg/l Pimephales promelas
EC50 - Crustacea [1]	> 79 mg/l daphnia, (OECD 202 method)

ErC50 algae > 79 mg/l Selenastrum capricornutum, (OECD 201 method)

### Potassium chloride (7447-40-7)

LC50 - Fish [1]	96h 2010 mg/l Lepomis macrocirhus
EC50 - Crustacea [2]	337 – 825 mg/l

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

LC50 - Fish [1]	447 mg/l Cyprinus carpio (Common carp), 48 Hours	
EC50 - Crustacea [1]	490 mg/l 48 Hours, (Results obtained on a similar product)	
ErC50 algae	> 1700 mg/l 10 days, (Results obtained on a similar product)	
NOEC chronic crustacea	555 mg/l 168 Hours, Bullia Digitalis	

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12.2. F	Persist	tence	and d	leg	rada	ability
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Rainbow® Plant Food Onion 6-12-18		
Persistence and degradability	Not established.	
Calcium carbonate (1317-65-3)		
Persistence and degradability	Not established.	
Calcium sulphate, dihydrate (10101-41-4)		
Persistence and degradability	Not established.	
Potassium chloride (7447-40-7)		
Persistence and degradability	Rapidly degradable	
Ammonium nitrate (6484-52-2)		
Persistence and degradability	Not applicable (inorganic substance).	

### 12.3. Bioaccumulative potential

Rainbow® Plant Food Onion 6-12-18			
Bioaccumulative potential	Not established.		
Calcium carbonate (1317-65-3)			
Bioaccumulative potential	Not established.		
Calcium sulphate, dihydrate (10101-41-4)			
Bioaccumulative potential	Bioaccumulation unlikely.		
Potassium chloride (7447-40-7)			
Partition coefficient n-octanol/water (Log Pow)	Not applicable		
Partition coefficient n-octanol/water (Log Kow)	Not applicable		
Bioaccumulative potential	Low bioaccumulation potential. Data sources : Safety Data Sheet Supplier.		
Ammonium nitrate (6484-52-2)			
Bioaccumulative potential	Slightly or not bioaccumulative.		

## 12.4. Mobility in soil

Calcium sulphate, dihydrate (10101-41-4)		
Ecology - soil	Small adsorption.	
Potassium chloride (7447-40-7)		
Ecology - soil Low mobility (soil). Safety Data Sheet Supplier.		

### 12.5. Other adverse effects

Other adverse effects : May cause eutrophication at very low concentration.

Other information : No other effects known.

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### **SECTION 13: Disposal considerations**

#### 13.1. Disposal methods

Regional waste regulation : Disposal must be done according to official regulations.

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

Sewage disposal recommendations : Disposal must be done according to official regulations.

Product/Packaging disposal recommendations : Discharging into rivers and drains is forbidden. Disposal must be done according to official

regulations.

Additional information : Do not re-use empty containers.

### **SECTION 14: Transport information**

In accordance with DOT / TMD / IMDG / IATA

#### 14.1. UN number

Not regulated for transport

### 14.2. UN proper shipping name

Proper Shipping Name (DOT) : Not regulated Proper Shipping Name (TDG) : Not regulated Proper Shipping Name (IMDG) : Not regulated Proper Shipping Name (IATA) : Not regulated

### 14.3. Transport hazard class(es)

DOT

Transport hazard class(es) (DOT) : Not regulated

TDG

Transport hazard class(es) (TDG) : Not regulated

IMDG

Transport hazard class(es) (IMDG) : Not regulated

**IATA** 

Transport hazard class(es) (IATA) : Not regulated

#### 14.4. Packing group

Packing group (DOT) : Not regulated Packing group (TDG) : Not regulated Packing group (IMDG) : Not regulated Packing group (IATA) : Not regulated

### 14.5. Environmental hazards

Other information : No supplementary information available.

#### 14.6. Special precautions for user

DOT

Not regulated

**TDG** 

Not regulated

**IMDG** 

Not regulated

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#### IATA

Not regulated

### 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

### **SECTION 15: Regulatory information**

#### 15.1. US Federal regulations

Commercial status of components according to the United States Environmental Protection Agency's Toxic Substances Control Act (TSCA):

Name	CAS-No.	Listing	Commercial status	Flags
Calcium carbonate	1317-65-3	Present	Active	
Calcium sulphate, dihydrate	10101-41-4	Present	Active	
Potassium chloride	7447-40-7	Present	Active	
Ammonium nitrate	6484-52-2	Present	Active	

### 15.2. International regulations

#### **CANADA**

#### Calcium carbonate (1317-65-3)

Listed on the Canadian NDSL (Non-Domestic Substances List)

### Calcium sulphate, dihydrate (10101-41-4)

Listed on the Canadian DSL (Domestic Substances List)

### Potassium chloride (7447-40-7)

Listed on the Canadian DSL (Domestic Substances List)

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

Listed on the Canadian DSL (Domestic Substances List)

#### **EU-Regulations**

No additional information available

#### **National regulations**

#### **Rainbow® Plant Food Onion 6-12-18**

Ensure all national/local regulations are observed

#### Calcium carbonate (1317-65-3)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

### Potassium chloride (7447-40-7)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

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### 15.3. US State regulations

No additional information available

### **SECTION 16: Other information**

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Data sources : Section 1.2, 8.1, 11 & 12 are based on components' Chemical Safety Report and/or datas from

components' supplie.

Training advice : Normal use of this product shall imply use in accordance with the instructions on the packaging.

Full text of hazard classes and H-statements		
H272	May intensify fire; oxidizer	
H319	Causes serious eye irritation	

Abbreviations and acronyms		
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road	
LC50	Median lethal concentration	
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008	
DMEL	Derived Minimal Effect level	
DNEL	Derived-No Effect Level	
EC50	Median effective concentration	
SDS	Safety Data Sheet	
IATA	International Air Transport Association	
IMDG	International Maritime Dangerous Goods	
LD50	Median lethal dose	
LOAEL	Lowest Observed Adverse Effect Level	
NOAEC	No-Observed Adverse Effect Concentration	
NOAEL	No-Observed Adverse Effect Level	
NOEC	No-Observed Effect Concentration	
OECD	Organisation for Economic Co-operation and Development	
PBT	Persistent Bioaccumulative Toxic	
PNEC	Predicted No-Effect Concentration	
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006	
STP	Sewage treatment plant	
vPvB	Very Persistent and Very Bioaccumulative	

NFPA health hazard

: 0 - Materials that, under emergency conditions, would offer no hazard beyond that of ordinary combustible materials.

NFPA fire hazard

: 0 - Materials that will not burn under typical fire conditions, including intrinsically noncombustible materials such as concrete, stone, and sand.

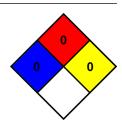
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NFPA reactivity : 0 - Material that in themselves are normally stable, even under fire

conditions.



Hazard Rating

Health : 0 Minimal Hazard - No significant risk to health
Flammability : 0 Minimal Hazard - Materials that will not burn

Physical : 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT

react with water, polymerize, decompose, condense, or self-react. Non-Explosives.

Personal protection : E - Safety glasses, Gloves, Dust respirator

Safety Data Sheet (SDS), USA

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

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