



Rainbow® Plant Food Sweet Potato 8-4-24

Safety Data Sheet

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

SECTION 1 Identification

1.1. Product identifier

Product form : Mixture
Product name : Rainbow® Plant Food Sweet Potato 8-4-24
Product code : I000084; I000085; I000086

1.2. Other means of identification

No additional information available

1.3. Recommended use of the chemical and restrictions on use

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

1.4. Supplier's details

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

1.5. Emergency phone number

No additional information available

SECTION 2 Hazard Identification

2.1. Classification of the substance or mixture

GHS US classification

Not classified

2.2. Label elements

GHS US labeling

No labeling applicable

2.3. Hazards associated with known or reasonably anticipated uses

No additional information available

2.4. Hazards not otherwise classified

No additional information available

2.5. Unknown acute toxicity

No additional information available

SECTION 3 Composition/information on ingredients

3.1. Substances

Not applicable

Rainbow® Plant Food Sweet Potato 8-4-24

Safety Data Sheet

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

3.2. Mixtures

Name	Common Name (Synonyms)	Product identifier	%	GHS US classification
Potassium chloride	Muriate of Potash / MOP	CAS-No.: 7447-40-7	25 – 50	Not classified
Calcium sulphate, dihydrate		CAS-No.: 10101-41-4	5 – 10	Not classified
Ulexite		CAS-No.: 1319-33-1	1 – 5	Not classified

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

SECTION 4 First aid measures

4.1. Description of necessary 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/effects, acute and delayed

Symptoms/effects	: see section(s) : 2.1/2.3).
Symptoms/effects after inhalation	: Dust of the product, if present, may cause respiratory irritation after an excessive inhalation exposure.
Symptoms/effects after ingestion	: None under normal conditions.

4.3. Indication of immediate medical attention and special treatment needed, if necessary

Other medical advice or treatment	: Treat symptomatically.
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SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media	: water, carbon dioxide (CO ₂), 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.

Rainbow® Plant Food Sweet Potato 8-4-24

Safety Data Sheet

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

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.

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.

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.

Environmental precautions : Avoid release to the environment.

6.2. Methods and materials 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.

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.

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 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.

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

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

Storage temperature : Store at ambient temperature

Specific end uses : see section(s) : 1.2. Relevant identified uses of the substance or mixture and uses advised against).

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

Ulexite (1319-33-1)

USA - ACGIH - Occupational Exposure Limits

ACGIH OEL TWA	2 mg/m ³
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ACGIH OEL STEL	6 mg/m ³
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Rainbow® Plant Food Sweet Potato 8-4-24

Safety Data Sheet

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

Ulexite (1319-33-1)		
USA - OSHA - Occupational Exposure Limits		
OSHA PEL TWA	15 mg/m³ (dust)	
OSHA PEL STEL	5 mg/m³ Respirable Fraction	
USA - NIOSH - Occupational Exposure Limits		
NIOSH REL (TWA)	10 mg/m³	
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	
Calcium sulphate, dihydrate (10101-41-4)		
USA - ACGIH - Occupational Exposure Limits		
Local name	Calcium sulfate, the dihydrate	
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	
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, such as personal protective equipment		
Personal protective equipment:		
Wear recommended personal protective equipment.		
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		
Type	Field of application	Characteristics
Safety goggles	Dust	With side shields
Skin and body protection:		
Protective clothing		

Rainbow® Plant Food Sweet Potato 8-4-24

Safety Data Sheet

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

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. Basic physical and chemical properties

Physical state	: Solid
Appearance	: Granulate.
Color	: Gray
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
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
Explosion limits	: Not applicable
Explosive properties	: Product is not explosive.
Oxidizing properties	: Non oxidizing material.
Particle characteristics	: No data available

9.2. Data relevant with regard to physical hazard classes (supplemental)

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.

Rainbow® Plant Food Sweet Potato 8-4-24

Safety Data Sheet

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

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. Likely routes of exposure

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

Ulexite (1319-33-1)

LD50 oral rat	2260 mg/kg body weight
ATE US (oral)	2260 mg/kg body weight

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

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)

Skin corrosion/irritation	: Not classified (Based on available data, the classification criteria are not met) pH: 6
Serious eye damage/irritation	: Not classified (Based on available data, the classification criteria are not met) pH: 6
Respiratory or skin sensitization	: Not classified (Based on available data, the classification criteria are not met)
Germ cell mutagenicity	: Not classified (Based on available data, the classification criteria are not met)
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 (Based on available data, the classification criteria are not met)
STOT-repeated exposure	: Not classified (Based on available data, the classification criteria are not met)
Aspiration hazard	: Not classified (Based on available data, the classification criteria are not met)

Rainbow® Plant Food Sweet Potato 8-4-24

Safety Data Sheet

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

Rainbow® Plant Food Sweet Potato 8-4-24	
Viscosity, kinematic	Not applicable
Symptoms/effects	: see section(s) : 2.1/2.3).
Symptoms/effects after inhalation	: Dust of the product, if present, may cause respiratory irritation after an excessive inhalation exposure.
Symptoms/effects after ingestion	: None under normal conditions.

SECTION 12 Ecological information

12.1. Ecotoxicity

Ecology - general	: The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.
Ecology - water	: Do not allow large quantities, as are, to spread into the environment. Do not discharge into drains or rivers.
Hazardous to the aquatic environment, short-term (acute)	: Not classified
Hazardous to the aquatic environment, long-term (chronic)	: Not classified

Potassium chloride (7447-40-7)	
LC50 - Fish [1]	96h 2010 mg/l <i>Lepomis macrochirus</i>
EC50 - Crustacea [2]	337 – 825 mg/l
Calcium sulphate, dihydrate (10101-41-4)	
LC50 - Fish [1]	> 1970 mg/l <i>Pimephales promelas</i>
EC50 - Crustacea [1]	> 79 mg/l <i>daphnia</i> , (OECD 202 method)
ErC50 algae	> 79 mg/l <i>Selenastrum capricornutum</i> , (OECD 201 method)

12.2. Persistence and degradability

Rainbow® Plant Food Sweet Potato 8-4-24	
Persistence and degradability	Not established.
Ulexite (1319-33-1)	
Persistence and degradability	Rapidly degradable
Potassium chloride (7447-40-7)	
Persistence and degradability	Rapidly degradable
Calcium sulphate, dihydrate (10101-41-4)	
Persistence and degradability	Not established.

12.3. Bioaccumulative potential

Rainbow® Plant Food Sweet Potato 8-4-24	
Bioaccumulative potential	Not established.
Potassium chloride (7447-40-7)	
Partition coefficient n-octanol/water (Log Pow)	Not applicable
Partition coefficient n-octanol/water (Log Kow)	Not applicable

Rainbow® Plant Food Sweet Potato 8-4-24

Safety Data Sheet

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

Potassium chloride (7447-40-7)	
Bioaccumulative potential	Low bioaccumulation potential. Data sources : Safety Data Sheet Supplier.

Calcium sulphate, dihydrate (10101-41-4)	
Bioaccumulative potential	Bioaccumulation unlikely.

12.4. Mobility in soil

Potassium chloride (7447-40-7)	
Ecology - soil	Low mobility (soil). Safety Data Sheet Supplier.

Calcium sulphate, dihydrate (10101-41-4)	
Ecology - soil	Small adsorption.

12.5. Other adverse effects

Ozone	: Not classified
Other adverse effects	: May cause eutrophication at very low concentration.
Fluorinated greenhouse gases	: No
Other information	: No other effects known.

SECTION 13 Disposal considerations

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 / TDG / 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

Rainbow® Plant Food Sweet Potato 8-4-24

Safety Data Sheet

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

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. Transport in bulk

Not applicable

14.7. Special precautions for user

DOT

Not regulated

TDG

Not regulated

IMDG

Not regulated

IATA

Not regulated

SECTION 15 Regulatory information

15.1. 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
Ulexite	1319-33-1	Not present	-	
Potassium chloride	7447-40-7	Present	Active	
Calcium sulphate, dihydrate	10101-41-4	Present	Active	

15.2. International regulations

CANADA

Ulexite (1319-33-1)

Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List)

Potassium chloride (7447-40-7)

Listed on the Canadian DSL (Domestic Substances List)

Calcium sulphate, dihydrate (10101-41-4)

Listed on the Canadian DSL (Domestic Substances List)

Rainbow® Plant Food Sweet Potato 8-4-24

Safety Data Sheet

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

EU-Regulations

No additional information available

National regulations

Rainbow® Plant Food Sweet Potato 8-4-24

Ensure all national/local regulations are observed

Potassium chloride (7447-40-7)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

15.3. State regulations

No additional information available

SECTION 16 Other information

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

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

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

Abbreviations and acronyms

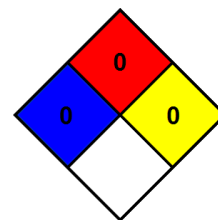
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
LC50	Median lethal concentration
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC50	Median effective concentration
SDS	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	Organization 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

Rainbow® Plant Food Sweet Potato 8-4-24

Safety Data Sheet

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

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.
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.