PRODUCT NAME

PRIMERAONE 15-5-25

Product Code:

NL.2150525TURF_106_01.0_USA

Date of issue:

October 2018

1. PRODUCT AND COMPANY IDENTIFICATION

Product identifier

PrimeraOne 15-5-25

Recommended uses:

Fertilizer end-use, preparation of fertilizers mixtures.

Dry fertilizer for mixing with water for foliar and soil applications.

Restrictions on uses:

None

Supplier

SQM North America

2727 Paces Ferry Rd, Building Two, Suite 1425

Atlanta, GA 30339

Company Telephone/Fax

(770) 916 9400 / (770) 916 9404

Emergency Telephone Number

(800) 424 9300 (CHEMTREC)

2. HAZARDS IDENTIFICATION

Classification of the mixture

Classification of the chemical in accordance with 29CFR §1910.1200

Hazard classes and Hazard categories

Hazard statements

Oxidizing solid, Cat. 3

May intensify fire; oxidizer

Eye irritant, Cat. 2

Causes serious eye irritation

Label elements

Hazard pictograms





Signal word

WARNING

Hazard Statements

May intensify fire; oxidizer

Causes serious eye irritation

Precautionary Statements

Keep away from heat. Keep/Store away from clothing/flammable/reducing/combustible materials.

Take any precaution to avoid mixing with flammable / combustible / reducing materials.

Wear protective gloves / protective clothing / eye protection.

Wash hands thoroughly after handling.

In case of fire: use any suitable mean for extinguishing surrounding fire. Spray water for small fires. For large fires flood with abundant water.

IF IN EYES: 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.

Dispose of contents/container according to local/state/federal regulations.

Other hazards

None

3. COMPOSITION/INFORMATION ON INGREDIENTS

This product has to be considered as a mixture/preparation

Substance name CAS No EC No

7757-79-1

EC No Concentration 231-818-8 25% - 70%

Hazard Classification Oxidizing solid, Cat. 3

Potassium nitrate Ammonium nitrate

6484-52-2 229-347-8

10% - 60%

Oxidizing solid, cat. 3; Eye irrit. cat. 2

Perchlorate (CIO₄⁻)

< 0.01%

Iodate (IO3)

< 50 ppm



PRODUCT NAME

PRIMERAONE 15-5-25

Product Code: Date of issue: NL.2150525TURF_106 01.0 USA

October 2018

4. FIRST AID MEASURES

Description of first aid measures

General information

In case of persisting adverse effects consult a physician.

Never give anything by mouth to an unconscious person or a person with cramps.

In case of inhalation

Remove to fresh air and keep at rest in a position comfortable for breathing.

Get medical attention for any breathing difficulty.

In case of skin contact

Wash with plenty of water. If skin irritation occurs: Get medical advice/attention.

In case of 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.

In case of ingestion

Rinse mouth and drink plenty of water. Call a POISON CENTER or doctor/physician if you feel unwell.

Most important symptoms and effects, both acute and delayed

The following symptoms may occur:

In case of inhalation

Irritation to respiratory tract

Delayed lung effects after short term exposure to thermal degradation products

In case of skin contact

May cause redness or irritation

In case of eye contact

Causes serious eye irritation

In case of ingestion

Ingestion of large amounts may cause: gastrointestinal disturbances

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

5. FIRE FIGHTING MEASURES

Extinguishing media

Suitable extinguishing media:

Use any suitable mean for extinguishing surrounding fire. Spray water for small fires.

For large fires flood with abundant water.

Unsuitable material:

None, but attention should be paid to compatibility with chemicals surrounding.

Specific hazards arising from the chemical

Oxidizer. Contact with combustible materials will not cause spontaneous ignition, however, this product will enhance an existing fire.

Thermal decomposition can lead to the escape of toxic/corrosive gases and vapours.

Thermal decomposition products: Nitrous oxides (NOx), nitrites, phosphorus oxides, ammonia and metallic oxides.

Protective equipment and precautions for firefighters

Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (self contained breathing apparatus (SCBA)).

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Provide adequate ventilation. Wear personal protection equipment (Section 8).

Environmental precautions

Do not allow to enter into surface water or drains. Ensure waste is collected and contained.

Methods and material for containment and cleaning up

Take up mechanically, placing in appropriate containers for disposal or recovery.

Unsuitable material for containment/taking up:

Do not absorb in saw-dust or other combustible absorbents.

Other information

None

PRODUCT NAME

PRIMERAONE 15-5-25

Product Code:

NL.2150525TURF_106_01.0_USA

Date of issue: October 2018

HANDLING AND STORAGE

Precautions for Safe Handling

Avoid generation of dust. Provide adequate ventilation. Wear personal protective equipment. Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. Keep away from flammable, combustible, strong acids, strong alkalis and reducing substances.

Conditions for safe storage, including any incompatibilities

Keep/store only in original container. Store in a well-ventilated place. Keep container tightly closed.

Do not store together with:

Flammable substance, reducing agents, strong acids, strong alkalis, empty wood

pallets.

Perchlorate containing product - Special handling may apply. See www.dtsc.ca.gov/hazardouswaste/perchlorate and Section 15 for more information regarding California State regulations.

EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Occupational exposure limits

Potassium nitrate

Ammonium nitrate

OSHA

PEL

Not Established

Not Established

STEL/ceiling

Not Established

Not Established

ACGIH (2012 TLVs® and BEIs®)

TWA

Not Established STEL/ceiling Not Established Not Established Not Established

Engineering controls

Use exhaust ventilation to keep airborne concentrations below exposure limits.

Personal Protective Equipment

Eye/face protection

Chemical goggles required all the time.

Skin Protection

Vapour density

Relative Density

Nitrile rubber gloves, over 0.11 mm thickness, > 480 min breakthrough time and

protective clothes, recommended.

Respiratory Protection

Wear respiratory protection, where airborne concentrations are expected to exceed

exposure limits

No data available

No data available

General Hygiene Considerations

Avoid contact with eyes and skin. Wash handsthoroughly after handling. Do not eat, drink or smoke when using this product.

PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance Solid, crystalline powder

Colour Blue Odour **Odourless Odour Threshold** No applicable pH value No data available Melting point / freezing range No data available Boiling temperature / boiling range Not applicable Flash point Not applicable Vapourisation rate / Evaporation rate No data available Flammable solids Not flammable **Explosion limits (LEL, UEL)** Not applicable Vapour pressure No data available

Solubility > 100 g/L at 20°C/68°F (water)

3 of 8



PRODUCT NAME

PRIMERAONE 15-5-25

Product Code:

NL.2150525TURF_106_01.0_USA

Date of issue: October 2018

Partition coefficient n-octanol /water

Auto Ignition temperature (AIT)

Decomposition temperature

Viscosity

Explosive properties
Oxidising properties

Other information

None

Not applicable

Not applicable

No data available

Not applicable

Not explosive

Oxidizer

10. STABILITY AND REACTIVITY

Reactivity

No hazardous reaction when handled and stored according to provisions.

Chemical stability

Stable under normal storage and temperature conditions.

Possibility of hazardous reactions

None identified

Conditions to avoid

Keep away from flammable, combustible, strong acids, strong alkalis, reducing materials, and empty pallets.

Incompatible materials

Flammable, combustible and reducing substances under specifc conditions.

Flammable, combustible, strong acids, strong alkalis and reducing substances under specific conditions. These incompatible materials shall not include approved packaging materials, pallets, or other dunnage (NFPA 400/2016, Hazardous Materials Code, item 15.3.5.2.1.1).

Hazardous decomposition products

Thermal decomposition products:

Nitrous oxides (NOx), nitrites, phosphorus oxides, ammonia and metallic oxides.

11. TOXICOLOGICAL INFORMATION

The following information mostly refers to the major component of the product.

Likely routes of exposure (inhalation, ingestion, skin and eye contact)

Eye contact, skin contact and inhalation. Exposure by ingestion is not expected to occur through normal industrial or agricultural use.

Symptoms related to the physical, chemical and toxicological characteristics

May be irritant to the respiratory tract. Causes serious eye irritation. May cause redness or irritation to the skin. Ingestion of large amounts may cause gastrointestinal disturbances. May cause delayed lung effects after short term exposure to thermal degradation products.

Information on toxicological effects from short and long term exposure

There is no data for the mixture itself.

Acute toxicity

Acute oral toxicity

LD50:

Acute Toxicity Estimate for the mixture

> 2000 mg/kg bw

(additivity formula)

Acute dermal toxicity

LD50:

Acute Toxicity Estimate for the mixture

>2000 mg/kg bw

(additivity formula)

Acute inhalation toxicity

LC50:

Acute Toxicity Estimate for the mixture

Does not contain acutely toxic ingredients/impurities.

Assessment / classification:

Based on available data for the ingredients of the mixture, the classification criteria are not met.



PRODUCT NAME

PRIMERAONE 15-5-25

Product Code:

NL.2150525TURF_106_01.0_USA

Date of issue: October 2018

Irritant and corrosive effects

Irritation to the skin

Result

Method

Potassium nitrate

non-irritant.

Equivalent/similar to OECD guideline 404

Ammonium nitrate Assessment / classification: non-irritant.

Equivalent/similar to OECD guideline 404

Based on available data for the ingredients of the mixture, the classification criteria are not met.

Irritation to eyes

Result

Method

Potassium nitrate Ammonium nitrate **Not-irritating**

OECD Guideline 405

Irritating (cat. 2)

OECD Guideline 405

Assessment / classification:

Based on available data for ingredients of the mixture, this product is classified and

labelled as Eye irritant, Cat. 2.

Respiratory or skin sensitisation

Skin sensitization

Result

Method

Main ingredients

not sensitizing. not sensitizing. **OECD Guideline 429 OECD Guideline 429**

Ammonium nitrate Respiratory sensitisation

No information available.

Assessment / classification:

Based on available data for the ingredients of the mixture, the classification criteria

are not met.

Genetic effects

The product does not contain ingredients classified as germ cell mutagens.

Bacterial (Ames Test)

Chromosomal aberrations

Mutation in mammalian cells

Main ingredients

negative

negative

negative

Assessment / classification:

Based on available data for the ingredients of the mixture, the classification criteria

are not met.

Reproductive toxicity

Adverse effects on sexual function and fertility/developmental toxicity

OECD guideline 422.

Main ingredients

No adverse effects on fertility/development (NOAEL >1500 mg/kg bw).

Assessment / classification:

Based on available data for the ingredients of the mixture, the classification criteria

are not met.

Specific target organ toxicity (single exposure)

The product does not contain relevant ingredients classified as Target Organ Toxicant.

Practical experience / human evidence

Main ingredients

No relevant effect have been observed after single exposure to potassium nitrate.

Assessment / classification:

Based on available data for the ingredients of the mixture, the classification criteria

are not met.

Specific target organ toxicity (repeated exposure)

The product does not contain relevant ingredients classified as Target Organ Toxicant.

Organs affected:

Guideline

Main ingredients

None

OECD 422

Assessment / classification:

No effects (NOAEL >1500 mg/kg bw) Based on available data for the ingredients of the mixture, the classification criteria

are not met.

Aspiration hazard

Physicochemical data and toxicological information does not indicate an aspiration hazard.

Assessment / classification:

Based on available data for the ingredients of the mixture, the classification criteria

are not met.

Carcinogenicity

International Agency for Research on Cancer (IARC)

No component of this product present at levels ≥0.1% is identified as

probable, possible or confirmed human carcinogen by IARC.

National Toxicology Program (NTP)

No component of this product present at levels ≥0.1% is identified as

known or anticipated carcinogen by NTP.





PRODUCT NAME

PRIMERAONE 15-5-25

Product Code:

NL.2150525TURF_106_01.0_USA

Date of issue:

October 2018

29 CFR part 1910, subpart Z

No component of this product present at levels ≥0.1% is identified as

carcinogen or potencial carcinogen by OSHA.

California Proposition 65

No component of this product present at levels ≥0.1% is identified as

carcinogen by California Prop.65.

WHO (2003) Nitrate in drinking water

No association between nitrate exposure in humans and the risk of

cancer

Assessment / classification:

Based on available data for the ingredients of the mixture, the classification criteria

are not met.

Other Toxicological Information

This product contains trace amounts of naturally-occurring perchlorate and iodate. Like other goitrogenic substances, perchlorate may affect iodine uptake by thyroid under specific conditions.

12. ECOLOGICAL INFORMATION

There is no data for the mixture itself. The following information mostly refers to the major component of the product.

Ecotoxicity

Aquatic Toxicity

Toxicity estimate for the mixture (summation method)

96-h L(E)C50

>100 mg/L

Fish

Algae

24-h E(E)C50

>100 mg/L

Daphnia magna (fresh water flea).

72-h E(E)C50

> 100 mg/L

Assessment / classification

Based on available data for the ingredients of the mixture, the classification criteria

are not met.

Persistence and degradability

The product contains mainly inorganic nitrate and phosphate salts. In aqueous solutions, these salts dissociate into their respective ions. Phosphate ions are finally incorporated into the Phosphorus cycle. Under anoxic conditions, denitrification occurs and nitrate is ultimately converted into molecular nitrogen as part of the Nitrogen cycle.

Bioaccumulative potential

Low potential for bioaccumulation based on physicochemical properties of main components.

Mobility in soil

The components of this mixture have a low potential for adsorption. Portion not taken up by plants, can leach to groundwater.

Other adverse effects

Excess nitrate leaching may enrich waters leading to eutrophication.

13. DISPOSAL CONSIDERATIONS

Disposal should be in accordance with applicable federal and state laws.

It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal method in compliance with applicable regulations.

Waste containing nitrates that exhibit the characteristic of ignitability has the EPA Hazardous Waste Number of D001 according to the Resource Conservation and Recovery Act (RCRA) 40 CFR 261.

Perchlorate containing product - Special handling may apply. See www.dtsc.ca.gov/hazardouswaste/perchlorate and Section 15 for more information regarding California State regulations.

14. TRANSPORTATION INFORMATION

US DOT (49CFR part 172)

1477

UN Proper Shipping Name

NITRATES, INORGANIC, N.O.S.

Hazard class

UN-No.

5.1

Packing group

Ш

Hazard label(s) Special marking 5.1 (oxidizer)

Special Provision

IB8; IP3; T1; TP33

PRODUCT NAME

PRIMERAONE 15-5-25

Product Code:

NL.2150525TURF_106_01.0_USA

Date of issue: October 2018

International Maritime Organization (IMDG Code)

UN-No.

1477

UN Proper Shipping Name

NITRATES, INORGANIC, N.O.S.

Hazard class

5.1

Packing group

Ш

Marine pollutant Hazard label(s) No

Special marking

5.1 (oxidizer)

Special marking

No

Special Provision 223
International Civil Aviation Organization (ICAO) and International Air Transport Association (IATA)

UN-No.

1477

UN Proper Shipping Name

NITRATES, INORGANIC, N.O.S.

Hazard class

5.1

Packing group

III

Hazard label

5.1 (oxidizer)

Special marking

No

Special Provision

No

Special handling procedure

None

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

Not applicable

Other special precautions

None

15. REGULATORY INFORMATION

US Federal

SARA Title III Rules

Section 311/312 Hazard Classes

Acute Health Hazard

Yes (Eye irritation)

Chronic Health Hazard

No

Fire Hazard

Yes (Oxidizer)

Release of Pressure

No

Reactive Hazard

No

Section 313 Toxic Chemicals

N511 Nitrate compounds (water dissociable; reportable only when in aqueous solution)

Section 302 Extremely Hazardous Substances (EHS)/CERCLA Hazardous Substances

None ingredient is listed.

DHS - Chemical of Interest (Appendix A to 6CFR Part 27)

Potassium nitrate and ammonium nitrate are listed

NFPA 704/2017: National Fire Protection Association

Health

Special

1

Fire

0

Reactivity

0 OX

US State Regulations

California Proposition 65

None ingredient is listed.

California Code of Regulations Title 22 (Health & Safety

See http://www.dtsc.ca.gov/hazardouswaste/perchlorate/

Code), Chapter 33

Canada

This product has been classified according to the hazard criteria of the 2015 Hazardous Products Regulations (HPR) and the SDS contains all the information required by the HPR.



PRODUCT NAME

PRIMERAONE 15-5-25

Product Code: Date of issue:

NL.2150525TURF_106_01.0_USA

October 2018

Chemical Inventories

United States TSCA
Canada DSL

European Union (EINECS)

Japan (METI)

All ingredients are listed

All ingredients are listed

All ingredients are listed

All ingredients are listed

16. OTHER INFORMATION

This SDS complies with the US 29 CFR part 1910 subpart Z (2012), ANSI Standard Z400.1-2004 and Canadian 2015 Hazardous Products Regulations (HPR)

Data source

REACH Registration Dossiers for major components

Prepared by

Regulatory Affairs Department, SQM

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Date of issue:

October 2018

Supersedes

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Indication of changes

Version 01 (October 2018) New document