



SAFETY DATA SHEET

PRODUCT NAME

QROP COMPLEX TOP K 12-6-24

Document Code / Version:

148_01_US

Date of issue:

July 2015

1. PRODUCT AND COMPANY IDENTIFICATION

Product identifier Qrop Complex Top K 12-6-24
NPK 12-6-24

Recommended uses:

Industrial use for the formulation of fertilizers.
Professional end-use as fertilizer.

Restrictions on uses:

None

Manufacturer

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

Serious Eye Damage, Cat. 1

Causes serious eye damage

Label elements

Hazard pictograms



Signal word

DANGER

Hazard Statements

Causes serious eye damage

Precautionary Statements

Wear eye protection. Wash hands thoroughly after handling.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Immediately call a poison center or doctor/physician.

Other hazards

None

Classification of the relevant ingredients of the mixture in accordance with 29CFR §1910.1200

Single superphosphate

Serious eye damage, cat. 1

Ammonium nitrate

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

3. COMPOSITION/INFORMATION ON INGREDIENTS

This product is to be considered as a mixture/preparation

Substance name	CAS No	EC No	Concentration
Single superphosphate	8011-76-5	232-379-5	25 - 15
Ammonium nitrate	6484-52-2	6484-52-2	5 - 1

Contains additionally some or all of the following: nitrate salts, phosphate salts, ammonium salts, coating materials, urea, secondary nutrients and micronutrients.

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.



SAFETY DATA SHEET

PRODUCT NAME

Document Code / Version:

Date of issue:

QROP COMPLEX TOP K 12-6-24

148_01_US

July 2015

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 soap and 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.

Immediately call a POISON CENTER or doctor/physician.

In case of ingestion

Rinse mouth and drink plenty of water. Do not induce vomiting.

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 No significant signs or symptoms indicative of any adverse health hazard are expected to occur as a result of inhalation exposure.

In case of skin contact Not expected to present a significant skin hazard under anticipated conditions of normal use.

In case of eye contact Causes serious eye damage

In case of ingestion Ingestion of large amounts may cause: Gastrointestinal disturbances

Indication of any immediate medical attention and special treatment needed

Thermal decomposition generates toxic vapours.

5. FIRE FIGHTING MEASURES

Extinguishing media

Suitable extinguishing media: Spray water for small fires. For large fires flood with abundant water.

Unsuitable material: CO₂, foam, sand.

Specific hazards arising from the chemical

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

Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries.

Thermal decomposition products: Mainly nitrous oxides (NO_x), ammonia.

Protective equipment and precautions for firefighters

The product is not flammable. May accelerate the burning of other combustible materials. Wear a self-contained breathing apparatus and chemical protective clothing. Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Spill should be handled by trained cleaning personnel properly equipped with respiratory and eye protection.

Environmental precautions

Do not allow to enter into surface water or drains. Ensure waste is collected and contained. Notify authorities if product enters sewers or public waters.

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



SAFETY DATA SHEET

PRODUCT NAME

Document Code / Version:

Date of issue:

QROP COMPLEX TOP K 12-6-24

148_01_US

July 2015

7. HANDLING AND STORAGE

Precautions for Safe Handling

Avoid generation of dust. Provide adequate ventilation. Wear personal protective equipment. Ensure prompt removal from eyes, skin and clothing. Wash hands and other exposed areas with mild soap and water before eat, drink or smoke and when leaving work. Keep away from food, drink and animal feeding stuffs.

Conditions for safe storage, including any incompatibilities

Keep/store only in original container. Store in a well-ventilated place. Keep container tightly closed. Store and use away from heat, sparks, open flame or any other ignition source.

Avoid: Organic materials, reducing agents, acids, alkalis, oxidizing agents, chlorides, nitrites, metallic powders and substances containing metals such as copper, nickel, cobalt, zinc and their alloys.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Occupational exposure limits

No specific occupational exposure limits for ingredients.

Engineering controls

Provide adequate ventilation to keep airborne concentrations/dust level below exposure limits.

Personal Protective Equipment

Eye/face protection

Tightly sealed safety goggles. Face protection if direct exposure occurs.

Skin Protection

Protective clothing (long sleeved overall) and chemically resistant gloves (Nitrile rubber, chloroprene rubber, butyl rubber or other suitable gloves, breakthrough time: 480 min).

Respiratory Protection

Wear respiratory protection, where airborne concentrations or dust level are expected to exceed exposure limits.

General Hygiene Considerations

Avoid contact with eyes and skin. Wash hands and other exposed areas with mild soap and water before eat, drink or smoke and when leaving work. Have eye-wash facilities immediately available. Do not eat, drink or smoke when using this product. Do not allow to enter into surface water or drains.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Solid, granules.
Colour	Red-Brownish.
Odour	Light
Odour Threshold	No data available
pH value	4.9 (10%)
Melting point / freezing range	Decomposes below melting point.
Boiling temperature / boiling range	Decomposition before boiling.
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
Vapour density	No data available
Relative Density	1.03
Solubility	Not available for the mixture
Partition coefficient n-octanol /water	Not applicable
Auto Ignition temperature (AIT)	Not applicable
Decomposition temperature	> 130 °C
Viscosity	Not applicable



SAFETY DATA SHEET

PRODUCT NAME

QROP COMPLEX TOP K 12-6-24

Document Code / Version:

148_01_US

Date of issue:

July 2015

Explosive properties

Not explosive

Oxidising properties

Not oxidizer

Other information

None

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

Heat, open flame, prevent contamination.

Incompatible materials

Organic materials, reducing agents, acids, alkalis, oxidizing agents, chlorides, nitrites, metallic powders and substances containing metals such as copper, nickel, cobalt, zinc and their alloys.

Hazardous decomposition products

Thermal decomposition products: Mainly nitrous oxides (NO_x), ammonia.

11. TOXICOLOGICAL INFORMATION

The following information mostly refers to the major components of the product and to the ingredients which contribute to the classification of the mixture.

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

Causes serious eye damage. No significant signs or symptoms indicative of any adverse health hazard are expected to occur as a result of inhalation exposure. Not expected to present a significant skin hazard under anticipated conditions of normal use.

Ingestion of large amounts may cause gastrointestinal disturbances

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

> 5000 mg/kg pc

(additivity formula)

Acute inhalation toxicity

LC50:

Acute Toxicity Estimate for the mixture

Does not contain acutely toxic ingredients.

Assessment / classification:

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

Irritant and corrosive effects

Irritation to the skin

Result

Single superphosphate

non-irritant.

Ammonium nitrate

non-irritant.

Assessment / classification:

Based on available data, the classification criteria are not met

Irritation to eyes

Result

Method

Single superphosphate

non irritant

In vitro

Irreversible effects on the eye.

In vivo

Ammonium nitrate

Eye irritant (Category 2)

Assessment / classification:

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



SAFETY DATA SHEET

PRODUCT NAME

QROP COMPLEX TOP K 12-6-24

Document Code / Version:

148_01_US

Date of issue:

July 2015

labelled as cat. 1, irreversible eye effects.

Respiratory or skin sensitisation

Skin/Respiratory sensitization

There is no data for the mixture as a whole. No ingredient is classified as sensitizer to skin/respiratory tract.

Assessment / classification:

Based on available data, 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
negative	negative	negative

Main ingredients

Assessment / classification:

Based on available data, the classification criteria are not met

Reproductive toxicity

The product does not contain ingredients classified as toxic to reproduction..

Assessment / classification:

Based on available data, the classification criteria are not met

Specific target organ toxicity (single exposure)

There is no data for the mixture as a whole.

No relevant effect have been observed after single exposure to ingredients.

Assessment / classification:

Based on available data, the classification criteria are not met

Specific target organ toxicity (repeated exposure)

There is no data for the mixture as a whole.

No relevant effect have been observed after repeated exposure to ingredients.

Assessment / classification:

Based on available data, 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, the classification criteria are not met

Carcinogenicity

International Agency for Research on Cancer (IARC)

The product does not contain ingredients classified as carcinogens.

National Toxicology Program (NTP)

The product does not contain ingredients classified as carcinogens.

29 CFR part 1910, subpart Z

The product does not contain ingredients classified as carcinogens.

California Proposition 65

The product does not contain ingredients classified as carcinogens.

WHO (2011) Nitrate and nitrite in drinking water

No association between nitrate exposure in humans and the risk of cancer

Assessment / classification:

Based on available data, the classification criteria is not met

Other Toxicological Information

None

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 (additivity formula)

48-h LC50	> 300 mg/L	Fish
48-h LC50	> 250 mg/L	<i>Daphnia sp</i> (fresh water flea).
72-h LC50	> 100 mg/L	Algae

Assessment / classification

Based on available data, the classification criteria are not met

Persistence and degradability

No data available

Bioaccumulative potential

The product does not show any bio-accumulation phenomena.

Mobility in soil

No data available



SAFETY DATA SHEET

PRODUCT NAME**QROP COMPLEX TOP K 12-6-24**

Document Code / Version:

148_01_US

Date of issue:

July 2015

Other adverse effects

Excess nutrient 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.

This product is not listed as a dangerous waste in the Resource Conservation and Recovery Act (RCRA) 40 CFR 261.

14. TRANSPORTATION INFORMATION**US DOT (49CFR part 172)**

UN-No.	Non dangerous good
UN Proper Shipping Name	Not applicable
Hazard class	Not applicable
Packing group	Not applicable
Hazard label(s)	Not applicable
Special marking	No
Special Provision	No

International Maritime Organization (IMDG Code)

UN-No.	Non dangerous good
UN Proper Shipping Name	Not applicable
Hazard class	Not applicable
Packing group	Not applicable
Marine pollutant	No
Hazard label(s)	Not applicable
Special marking	No

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

UN-No.	Non dangerous good
UN Proper Shipping Name	Not applicable
Hazard class	Not applicable
Packing group	Not applicable
Hazard label	Not applicable
Special marking	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
Chronic Health Hazard	No
Fire Hazard	No
Release of Pressure	No
Reactive Hazard	No



SAFETY DATA SHEET

PRODUCT NAME

QROP COMPLEX TOP K 12-6-24

Document Code / Version:

148_01_US

Date of issue:

July 2015

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.

NFPA 704/2012: National Fire Protection Association

Health	2
Fire	0
Reactivity	0
Special	None

US State Regulations

California Proposition 65

None ingredient is listed.

Chemical Inventories

United States TSCA

All ingredients are listed

Canada DSL

All ingredients are listed

European Union (EINECS)

All ingredients are listed

Japan (METI)

All ingredients are listed

16. OTHER INFORMATION

This SDS complies with 29 CFR part 1910 subpart Z (2012) and ANSI Standard Z400.1-2004

Data source	Main ingredients, REACH Registration Dossiers and manufacturer information.		
Prepared by	Regulatory Affairs Department, SQM		
E-mail	product_safety@sqm.com spn-northamerica@sqm.com		
Date of issue:	July 2015	Supersedes	-

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall SQM be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if SQM has been advised of the possibility of such damages.

Indication of changes

Version 1 (July 2015) New document.