



# Qrop KS

## Safety Data Sheet

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

Date of issue: 04/01/2019

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Supersedes: 04/01/2015

Version: 2.1

### SECTION 1: Identification

#### 1.1. Identification

Product form : Mixture  
Trade name : Qrop KS  
Product code : 140\_USA  
Other means of identification : Qrop KS  
Qrop KS  
Qrop KS 12-0-46  
Qrop KN 12-0-46

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

Use of the substance/mixture : Industrial uses: Uses of substances as such or in preparations at industrial sites  
Fertilizers  
Restrictions on use : Food/feedstuff additives, Water treatment chemicals

#### 1.3. Supplier

##### Supplier

SQM North America  
2727 Paces Ferry Rd, Building Two, Suite 1425  
Atlanta, GA 30339 - United States  
T (770) 916 9400 - F (700) 916 9404  
[product\\_safety@sqm.com](mailto:product_safety@sqm.com); [spn-northamerica@sqm.com](mailto:spn-northamerica@sqm.com); [ind-northamerica@sqm.com](mailto:ind-northamerica@sqm.com); [www.sqm.com](http://www.sqm.com)

#### 1.4. Emergency telephone number

Emergency number : For Chemical Emergency Call CHEMTREC 24hr/day 7days/week  
  
Within USA and Canada: 1-800-424-9300  
Outside USA and Canada: +1 703-741-5970  
(collect calls accepted)

### SECTION 2: Hazard(s) identification

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

##### GHS-US classification

Reproductive toxicity Category 1B May damage fertility or the unborn child

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

##### GHS US labeling

Hazard pictograms (GHS US) :



Signal word (GHS US) : Danger  
Hazard statements (GHS US) : May damage fertility or the unborn child  
Precautionary statements (GHS US) : Obtain special instructions before use.  
Do not handle until all safety precautions have been read and understood.  
Wear protective gloves/protective clothing/eye protection/face protection.  
If exposed or concerned: Get medical advice/attention.  
Store locked up.  
Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation

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

Other hazards not contributing to the classification : None.

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

Not applicable

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### SECTION 3: Composition/Information on ingredients

#### 3.1. Substances

Not applicable

#### 3.2. Mixtures

Name	Product identifier	%	GHS-US classification
Boric Acid	(CAS-No.) 10043-35-3	<= 0.29	Repr. 1B, H360

### SECTION 4: First-aid measures

#### 4.1. Description of first aid measures

- First-aid measures general : IF exposed or concerned: Get medical advice/attention. Never give anything by mouth to an unconscious person.
- First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a poison center or a doctor.
- First-aid measures after skin contact : Wash skin with plenty of water. If skin irritation occurs: Get medical advice/attention.
- 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 : Call a poison center/doctor/physician if you feel unwell.

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

- Symptoms/effects after inhalation : Irritation of the respiratory tract. Thermal decomposition can lead to the release of irritating gases and vapors. Delayed adverse effects possible.
- Symptoms/effects after skin contact : May cause moderate irritation.
- Symptoms/effects after eye contact : May cause slight irritation.
- Symptoms/effects after ingestion : May cause stomach cramps and vomiting.

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

Place under medical observation. Treat symptomatically.

### SECTION 5: Fire-fighting measures

#### 5.1. Suitable (and unsuitable) 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 extinguishing media : Use extinguishing media appropriate for surrounding fire.

#### 5.2. Specific hazards arising from the chemical

- Fire hazard : May intensify fire; oxidizer.
- Reactivity in case of fire : thermal decomposition may produce : Nitrogen oxides. Potassium oxides. potassium nitrite.

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

- Precautionary measures fire : Do not approach fire except upwind and only with proper skin and respiratory protection (supplied air only).
- Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

### SECTION 6: Accidental release measures

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

##### 6.1.1. For non-emergency personnel

- Emergency procedures : Ventilate spillage area. No open flames, no sparks, and no smoking.

##### 6.1.2. For emergency responders

- Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

#### 6.2. Environmental precautions

Do not allow into drains or water courses.

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

- Methods for cleaning up : Mechanically recover the product. Notify authorities if product enters sewers or public waters. Do not absorb with saw-dust or any other combustible absorbent material.
- Other information : Dispose of materials or solid residues at an authorized site.

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### 6.4. Reference to other sections

For further information refer to section 13.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

- Additional hazards when processed : Perchlorate containing product - Special handling may apply. See [www.dtsc.ca.gov/hazardouswaste/perchlorate](http://www.dtsc.ca.gov/hazardouswaste/perchlorate) and section 15 for more information regarding California State regulations.
- Precautions for safe handling : Avoid dust formation. Ensure good ventilation of the work station. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Wear personal protective equipment.
- Hygiene measures : Do not eat, drink or smoke when using this product. Separate working clothes from town clothes. Launder separately. Always wash hands after handling the product. Handle in accordance with good industrial hygiene and safety practice.

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

- Technical measures : Containers which are opened should be properly resealed and kept upright to prevent leakage.
- Storage conditions : Keep only in the original container in a cool, well ventilated place away from : Heat sources, flames or sparks.
- Incompatible materials : Flammable or combustible materials. Reducing agents. strong acids.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

Qrop KS		
ACGIH	ACGIH TWA (mg/m <sup>3</sup> )	Not established
ACGIH	ACGIH Ceiling (mg/m <sup>3</sup> )	Not established
OSHA	OSHA PEL (STEL) (mg/m <sup>3</sup> )	Not established
OSHA	OSHA PEL (Ceiling) (mg/m <sup>3</sup> )	Not established
Boric Acid (10043-35-3)		
DNEL	DNEL	27440 mg/kg bodyweight/day DNEL/DMEL (Workers)
ACGIH	ACGIH TWA (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup> inhalable dust
ACGIH	ACGIH STEL (mg/m <sup>3</sup> )	6 mg/m <sup>3</sup> inhalable dust
OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	Not established
OSHA	OSHA PEL (STEL) (ppm)	Not established

### 8.2. Appropriate engineering controls

- Appropriate engineering controls : Ensure good ventilation of the work station. Local exhaust is recommended where dust may occur.
- Environmental exposure controls : Do not allow to enter drains or water courses.

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

#### Hand protection:

Nitrile-rubber protective gloves

#### Eye protection:

Safety glasses

#### Skin and body protection:

Wear suitable protective clothing

#### Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

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### SECTION 9: Physical and chemical properties

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

Physical state	: Solid
Appearance	: Granulate.
Color	: pink
Odor	: odorless
Odor threshold	: Not applicable
pH	: (No data available specific to the product)
Melting point	: 335 °C / 635°F (Published data)
Freezing point	: Not applicable
Boiling point	: Not applicable
Flash point	: Not applicable
Relative evaporation rate (butyl acetate=1)	: (No data available specific to the product)
Flammability (solid, gas)	: Non flammable.
Vapor pressure	: Negligible vapor pressure at ambient conditions
Vapor pressure at 50 °C	: Not applicable
Relative vapor density at 20 °C	: Not applicable
Relative density	: Not applicable
Solubility	: Water: > 100 g/l 25°C / 77°F
Log Pow	: Not applicable Not applicable
Auto-ignition temperature	: Not applicable
Decomposition temperature	: (No data available specific to the product)
Viscosity, kinematic	: No data available
Viscosity, dynamic	: Not applicable
Explosion limits	: Not applicable Not applicable Lower explosive limit (LEL): Not applicable
Explosive properties	: Not explosive.
Oxidizing properties	: Non oxidizing material.

#### 9.2. Other information

Bulk density	: 1260 - 1330 kg/m <sup>3</sup>
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### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport. May intensify fire; oxidizer.

#### 10.2. Chemical stability

The product is stable at normal handling and storage conditions.

#### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

#### 10.4. Conditions to avoid

Avoid contact with : hot surfaces. flames or sparks. Ignition sources. Do not store together with empty wood pallets.

#### 10.5. Incompatible materials

Flammable, combustible, strong acids and strong reducing agents 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).

#### 10.6. Hazardous decomposition products

Thermal decomposition can lead to the release of irritating gases and vapors. Thermal decomposition generates : Nitrogen oxides. Potassium oxides. potassium nitrite.

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

Acute toxicity (oral)	: Not classified
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Acute toxicity (dermal) : Not classified  
 Acute toxicity (inhalation) : Not classified

Qrop KS	
LD50 oral rat	> 2000 mg/kg body weight (OECD 405 method)
LD50 dermal rat	> 5000 mg/kg body weight (OECD 402 method)

Boric Acid (10043-35-3)	
LD50 oral rat	3765 mg/kg body weight (OECD 401 method) / EU B.1
LD50 dermal rabbit	> 2000 mg/kg body weight FIFRA (40 CFR 163)
LC50 inhalation rat (mg/l)	> 2.03 mg/l (OECD 403 method)

Skin corrosion/irritation : Not classified  
 pH: (No data available specific to the product)

Serious eye damage/irritation : Not classified  
 pH: (No data available specific to the product)

Respiratory or skin sensitization : Not classified

Germ cell mutagenicity : Not classified (No mutagenic effect. Reverse Mutation Assays. (OECD 479 method))

Carcinogenicity : Not classified (No carcinogenic effect)

Qrop KS	
IARC group	Not listed
National Toxicology Program (NTP) Status	Not listed

Boric Acid (10043-35-3)	
NOAEL (chronic,oral,animal/male,2 years)	1150 mg/kg body weight (OECD 451 method)
IARC group	Not listed
National Toxicology Program (NTP) Status	Not listed

Reproductive toxicity : May damage fertility or the unborn child.

Specific target organ toxicity – single exposure : Not classified

Specific target organ toxicity – repeated exposure : Not classified

Qrop KS	
NOAEL (subacute,oral,animal/male,28 days)	1500 mg/kg body weight (OECD 422 method)
NOAEL (subacute,oral,animal/female,28 days)	1500 mg/kg body weight

Boric Acid (10043-35-3)	
NOAEL (oral, rat, 90 days)	100.1 mg/kg bodyweight/day

Aspiration hazard : Not classified

Viscosity, kinematic : No data available

Likely routes of exposure : Inhalation. Skin and eye contact.

Symptoms/effects after inhalation : Irritation of the respiratory tract. Thermal decomposition can lead to the release of irritating gases and vapors. Delayed adverse effects possible.

Symptoms/effects after skin contact : May cause moderate irritation.

Symptoms/effects after eye contact : May cause slight irritation.

Symptoms/effects after ingestion : May cause stomach cramps and vomiting.

Other 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.

## 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.

Qrop KS	
LC50 fish 1	1336 mg/l
EC50 Daphnia 1	489 mg/l
EC50 other aquatic organisms 1	> 1100 algae
NOEC chronic fish	58 mg/l

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Qrop KS	
NOEC chronic algae	1700 mg/l
Boric Acid (10043-35-3)	
LC50 fish 1	423 - 4147 mg/l (Published data)
EC50 Daphnia 1	257 - 7871 mg/l (Published data)
NOEC chronic fish	16.5 mg/l (Published data)
NOEC chronic crustacea	32.4 mg/l (Published data)
NOEC chronic algae	22.9 mg/l (Published data)

### 12.2. Persistence and degradability

Qrop KS	
Persistence and degradability	Contains no substances known to be hazardous to the environment.
Boric Acid (10043-35-3)	
Persistence and degradability	Contains no substances known to be hazardous to the environment.

### 12.3. Bioaccumulative potential

Qrop KS	
Log Pow	Not applicable
Log Kow	Not applicable
Bioaccumulative potential	Low bioaccumulation potential. Information on basic physical and chemical properties.
Boric Acid (10043-35-3)	
Log Pow	-1.09 22°C, pH: 7.5 (Method: UE A.8)
Bioaccumulative potential	Not potentially bioaccumulable. Material highly soluble in water.

### 12.4. Mobility in soil

Qrop KS	
Ecology - soil	Expected to be highly mobile in soil.
Boric Acid (10043-35-3)	
Ecology - soil	Soluble in water. Product adsorbs little onto the soil.

### 12.5. Other adverse effects

Other information : May cause eutrophication at very low concentration.

## SECTION 13: Disposal considerations

### 13.1. Disposal methods

Regional legislation (waste)	: U.S. - RCRA (Resource Conservation & Recovery Act) - List for Hazardous Constituents.
Waste treatment methods	: Gather the product and place it in a spare container that has been suitably labeled. This material and its container must be disposed of as hazardous waste. Solid waste exhibiting the characteristic of ignitability has the EPA Hazardous Waste Number of D001 according to the Resource Conservation and Recovery Act (RCRA) 40 CFR 261.
Product/Packaging disposal recommendations	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Additional information	: Perchlorate containing product - Special handling may apply. See <a href="http://www.dtsc.ca.gov/hazardouswaste/perchlorate">www.dtsc.ca.gov/hazardouswaste/perchlorate</a> and section 15 for more information regarding California State regulations.
Ecology - waste materials	: Do not allow to enter drains or water courses.

## SECTION 14: Transport information

### Department of Transportation (DOT)

In accordance with DOT

Not regulated

### Transport by sea

Not regulated

### Air transport

Not regulated

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### SECTION 15: Regulatory information

#### 15.1. US Federal regulations

##### Qrop KS

Listed on the United States TSCA (Toxic Substances Control Act) inventory  
Listed in DHS (Department of Homeland Security) United States - Chemical of Interest (Appendix A to 6CFR part 27)

SARA Section 311/312 Hazard Classes	Physical hazard - Oxidizer (liquid, solid or gas) Health hazard - Reproductive toxicity
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##### Boric Acid (10043-35-3)

SARA Section 311/312 Hazard Classes	Health hazard - Reproductive toxicity
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#### 15.2. International regulations

##### CANADA

##### Qrop KS

Listed on the Canadian DSL (Domestic Substances List)

##### Boric Acid (10043-35-3)

Listed on the Canadian DSL (Domestic Substances List)

##### EU-Regulations

##### Qrop KS

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)- Directive 79/831/EEC, sixth Amendment of Directive 67/548/EEC (dangerous substances)

##### Boric Acid (10043-35-3)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

##### National regulations

##### Qrop KS

Listed on INSQ (Mexican National Inventory of Chemical Substances)  
Listed on KECI (Korean Existing Chemicals Inventory)  
Listed on the AICS (Australian Inventory of Chemical Substances)  
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)  
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory  
Listed on NZIoC (New Zealand Inventory of Chemicals)  
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)  
Listed on the TCSI (Taiwan Chemical Substance Inventory)

##### Boric Acid (10043-35-3)

Listed on INSQ (Mexican National Inventory of Chemical Substances)  
Listed on the AICS (Australian Inventory of Chemical Substances)  
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)  
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory  
Listed on the Korean ECL (Existing Chemicals List)  
Listed on NZIoC (New Zealand Inventory of Chemicals)  
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)  
Listed on CICR (Turkish Inventory and Control of Chemicals)  
Listed on KECI (Korean Existing Chemicals Inventory)

#### 15.3. US State regulations

##### Qrop KS

U.S. - California - Proposition 65 - Other information	California Code of Regulations Title 22 (Health & Safety Code), Chapter 33 : See <a href="http://www.dtsc.ca.gov/hazardouswaste/perchlorate/">http://www.dtsc.ca.gov/hazardouswaste/perchlorate/</a>
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California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

### SECTION 16: Other information

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Data sources : REACH registrations. Information in this safety data sheet is based on actual knowledge in our possession and our experience.

Full text of H-phrases:

H360	May damage fertility or the unborn child
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NFPA 704/2017

NFPA health hazard

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

NFPA fire hazard

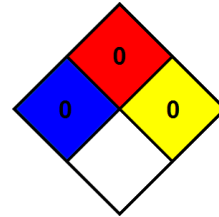
: 0 - Materials that will not burn under typical fire conditions, including intrinsically noncombustible materials such as concrete, stone, and sand.

NFPA reactivity

: 0 - Material that in themselves are normally stable, even under fire conditions.

NFPA specific hazard

: NFPA specific hazard



Indication of changes:

Section	Changed item	Change	Comments
		This sheet has been revised completely (changes were not marked)	
1	Emergency number	updated	
8	DNEL/DMEL (Workers)	Removed	
10	Incompatible materials	updated	NFPA
11	Repeated dose toxicity	updated	Boric Acid
12.1	Ecological information	updated	Boric Acid
15	NFPA (National Fire Protection Association)	updated	Classification
15	Hazardous Product Inventory	updated	

SDS US (GHS HazCom 2012)

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