



AQUA KEM GREEN CONCENTRATED

Safety data sheet

According to regulation (EU) 2015/830, 2020/878 (Annex II of the REACH Regulation)

Reference number: 30640

Issue date: 12/21/2022 Revision date: 12/14/2022 Replaces version from: 3/21/2019 Version: 1.2

SECTION 1: Identification of the substance or mixture and of the company

1.1. Product identifier

Product shape	: Mixture
Trade name	: AQUA KEM GREEN CONCENTRATED
UFI	: 55RQ-PTPK-S80Q-DKFP
Product Code	: 30640-TBV
Product Type	: Sanitary additive for the waste tank of mobile toilets.

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

Intended for the general public	
Main use category	: Consumer use
Use of the substance/mixture	: Sanitary additive for the waste tank of mobile toilets.
Function or use category	: Cleaning/detergents and additives, odorants

1.2.2. Uses advised against

Limitations of application	: Use only for the purposes for which the product is intended
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1.3. Details of the supplier providing the safety data sheet

Manufacturer

Theftford BV

Nijverheidsweg 29

PO Box 169

NL – 4879 AP Etten-Leur

The Netherlands

T +31(0)765042200 - F +31(0)765042300

ChemSupport@thetford.eu - www.thetford-europe.com

Email address of the competent person responsible for the SDS: sds@thetford.eu

1.4. Emergency number

Emergency number	: Theftford BV : +31 (0)76 5042200 (Available during office hours)
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SECTION 2: Potential Hazards

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Serious eye damage/eye irritation, Category 1 Wording of H and EUH statements: see section 16

H318

Harmful physical-chemical, health and environmental effects

No further information available

2.2. Marking elements

Labeling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)



GHS05

Signal word (CLP)

: Danger

Contains

: calcium nitrate; Bronopol (INN); 2-Bromo-2-nitropropane-1,3-diol

Hazard statements (CLP)

: H318 - Causes serious eye damage.

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According to regulation (EU) 2015/830, 2020/878 (Annex II of the REACH Regulation)

Safety instructions (CLP)	: P101 - If medical advice is needed, have container or label at hand. P102 - Keep out of reach of children. P280 - Wear eye protection. P305+P351+P338+P310 - IF IN EYES: Rinse cautiously with water for several minutes. If possible, remove any contact lenses. Continue rinsing. Call a doctor immediately.
EUH sentences	: EUH208 - Contains isoeugenol(97-54-1). Can cause allergic reactions.
Child-resistant closure	: Not applicable
Tactile danger warning	: Not applicable

2.3. Other dangers

Does not contain PBT/vPvB substances \geq 0.1%, assessed according to REACH Annex XIII

component	
Bronopol (INN); 2-Bromo-2-nitropropane-1,3-diol (52-51-7)	This substance/mixture does not meet the PBT criteria of the REACH Regulation, Annex XIII.

The mixture does not contain any substances listed due to endocrine disrupting properties in accordance with REACH Article 59(1) or has been prepared in accordance with the criteria of Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 determined that it does not contain any substances with endocrine-disrupting properties in a concentration of at least 0.1%.

SECTION 3: Composition/information on ingredients

3.1. substances

Not applicable

3.2. Mixtures

Surname	Product identifier %		Classification according to Regulation (EC) No. 1272/2008 [CLP]
Calcium nitrate	CAS No.: 10124-37-5 EC No.: 233-332-1	10 – 20	Acute Tox. 4 (Oral), H302 Eye Dam. 1, H318
Bronopol (INN); 2-Bromo-2-nitropropane-1,3-diol	CAS No.: 52-51-7 EC No.: 200-143-0 EC Index No.: 603-085-00-8	1 – 2.5	Acute Tox. 3 (Oral), H301 Acute Tox. 4 (Dermal), H312 Acute Tox. 3 (inhalation), H331 Skin irritation. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 2, H411
Isoeugenol	CAS No.: 97-54-1 EC No.: 202-590-7	0.01 – 0.05	Acute Tox. 4 (Oral), H302 Skin Sens. 1A, H317

Text of H and EUH statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First aid measures in general	: Never give anything orally to an unconscious person. If you feel unwell, seek medical advice (show this label if possible).
First aid measures after inhalation	: Ensure breathing of fresh air. Let the affected person rest.
First aid measures after skin contact	: Remove affected clothing and treat all affected skin areas with mild detergent Wash off soap and water, rinse with warm water.

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First aid measures after eye contact : Rinse gently with water for a few minutes. Possibly existing contact lenses remove if possible. Continue rinsing. Call a POISON CENTER/doctor immediately.

First aid measures after ingestion : Rinse mouth. DO NOT induce vomiting. Call for emergency medical help.

4.2. Most important acute and delayed symptoms and effects

Symptoms/effects after eye contact : Causes serious eye damage.

4.3. Indications of immediate medical attention or special treatment

No further information available

SECTION 5: Firefighting measures

5.1. Extinguishing agent

Suitable extinguishing agents : Foam. Dry extinguishing powder. Carbon dioxide. Water spray jet. Sand.
Unsuitable extinguishing agents : Do not use a strong jet of water.

5.2. Special hazards arising from the substance or mixture

No further information available

5.3. Advice for firefighting

Deletion instructions : Use a water spray or mist to cool exposed containers. At the Use caution when fighting chemical fires. Avoid (prevent) extinguishing water from entering the environment.
Protection when fighting fires : Do not enter the fire compartment without adequate protective equipment, including respiratory protection enter.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. Non-emergency trained staff

Emergency measures : Evacuate bystanders.

6.1.2. emergency services

protective gear : Provide cleaning staff with appropriate protection.
Emergency measures : Ventilate the environment.

6.2. Environmental protection measures

Prevent entry into sewers and public waters. If the liquid ends up in sewers or public waters, the authorities must be notified.

6.3. Methods and materials for containment and cleaning up

Cleaning procedures : Resolve spills as soon as possible with inert solids such as clay or Soak up diatomaceous earth. Collect spills. Store away from other materials.

6.4. Reference to other sections

See Section 8. Exposure controls and personal protection.

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According to regulation (EU) 2015/830, 2020/878 (Annex II of the REACH Regulation)

SECTION 7: Handling and storage

7.1. Protective measures for safe handling

Protective measures for safe handling : Hands before eating, drinking or smoking and when leaving the workplace and wash other exposed areas of the body with mild soap and water. Equip the process area with good ventilation to avoid the formation of fumes.

Hygiene measures : Wash hands thoroughly after use.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store only in the original container in a cool, well-ventilated place, away from: Direct sunlight, heat sources. Keep container closed when not in use.

Incompatible products : Strong bases. Strong acids.

Incompatible materials : Ignition sources. Direct sunlight.

7.3. Specific end uses

Aqua Kem Green Concentrated reduces unpleasant odors. Reduces gas formation and keeps the waste tank clean.

SECTION 8: Exposure controls/personal protection

8.1. Parameters to monitor

8.1.1 National occupational exposure limits and biological limits

No further information available

8.1.2. Recommended monitoring procedures

No further information available

8.1.3. Released air contaminants

No further information available

8.1.4. DNEL and PNEC values

No further information available

8.1.5. Control banding

No further information available

8.2. Limitation and monitoring of exposure

8.2.1. Appropriate technical control devices

No further information available

8.2.2. Personal protective equipment

Personal protective equipment:

Avoid unnecessary exposure.

Personal protective equipment - symbol(s):



8.2.2.1. Eye and face protection

Eye protection:

Safety glasses or safety glasses

8.2.2.2. skin protection

Hand protection:

Wearing safety gloves.

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According to regulation (EU) 2015/830, 2020/878 (Annex II of the REACH Regulation)

8.2.2.3. Respiratory protection

Respiratory protection:

Wear a suitable mask

8.2.2.4. Thermal hazards

No further information available

8.2.3. Limiting and monitoring environmental exposure

Other Information:

Do not eat, drink or smoke while using.

SECTION 9: Physical and chemical properties

9.1. Information on the basic physical and chemical properties

state of aggregation	: Fluid
Color	: Dark green.
Odor	: citrus fruits.
Odor threshold	: Not available
melting point	: Not available
freezing point	: γ 0
boiling point	: γ 100 °C
Flammability	: Non-flammable.
Explosion limits	: Not available
lower explosion limit	: Not available
Upper explosion limit	: Not available
Flash point	: Not available
Ignition temperature	: Not available
Decomposition temperature	: Not available
pH value	: 3.1 – 4.3
Viscosity, kinematic	: Not available
Viscosity, dynamic	: 300 – 400 mPa.s
solubility	: Water: 100%
Partition coefficient n-octanol/water (Log Kow):	Not available
Vapor pressure	: Not available
Vapor pressure at 50°C	: Not available
Density: 1.123 – 1.143 g/cm ³	
relativ density	: Not available
Relative vapor density at 20°C	: Not available
Particle properties	: Not applicable

9.2. Other Information

9.2.1. Information about physical hazard classes

No further information available

9.2.2. Other safety-related parameters

VOC content : 0.003%

SECTION 10: Stability and reactivity

10.1. Reactivity

No further information available

10.2. Chemical stability

Stable up to 50°C. At an average temperature of 30°C, Aqua Kem Green Concentrated has a shelf life of several years. After several years it may lose some of its performance.

10.3. Possibility of dangerous reactions

Not fixed.

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According to regulation (EU) 2015/830, 2020/878 (Annex II of the REACH Regulation)

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Dangerous decomposition products

Smoke. Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information

11.1. Information on the hazard classes within the meaning of Regulation (EC) No. 1272/2008

Acute toxicity (Oral) : Not rated
 Acute toxicity (Dermal) : Not rated
 Acute toxicity (inhalation) : Not rated

Calcium nitrate (10124-37-5)

LD50 oral rat	300 – 2000 mg/kg body weight Animal: rat, Animal sex: female, Guideline: OECD Guideline 423 (Acute Oral toxicity - Acute Toxic Class Method), Guideline: EU Method B.1 tris (Acute Oral Toxicity - Acute Toxic Class Method) , Guideline: EPA OPPTS 870.1100 (Acute Oral Toxicity), Guideline: other:Japanese Ministry of Agriculture, Forestry and Fisheries (JMAFF), 12 Nousan, Notification No 8147, November 2000, including the most recent partial revisions
LD50 Dermal Rat	> 2000 mg/kg body weight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal toxicity)

Bronopol (INN); 2-Bromo-2-nitropropane-1,3-diol (52-51-7)

LD50 oral rat	305 mg/kg
LD50 Dermal Rat	> 2000 mg/kg body weight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal toxicity)
LC50 Inhalation - Rat	ÿ 0.588 mg/l air Animal: rat

Isoeugenol (97-54-1)

LD50 orally	1560 mg/kg body weight
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Corrosion/irritation to skin : Not rated
 pH value: 3.1 - 4.3
 Additional information : Based on available data, the classification criteria are not met
 Serious eye damage/irritation : Causes serious eye damage.
 pH value: 3.1 - 4.3
 Respiratory/skin sensitization : Not rated
 Additional information : Based on available data, the classification criteria are not met
 Germ cell mutagenicity : Not rated
 Additional information : Based on available data, the classification criteria are not met
 Carcinogenicity : Not rated
 Additional information : Based on available data, the classification criteria are not met

Bronopol (INN); 2-Bromo-2-nitropropane-1,3-diol (52-51-7)

NOAEL (chronic, oral, animal/male, 2 years)	7 mg/kg body weight
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Reproductive toxicity : Not rated
 Additional information : Based on available data, the classification criteria are not met
 Specific target organ toxicity in a single event : Not rated
 Exposure
 Additional information : Based on available data, the classification criteria are not met

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According to regulation (EU) 2015/830, 2020/878 (Annex II of the REACH Regulation)

Bronopol (INN); 2-Bromo-2-nitropropane-1,3-diol (52-51-7)	
Specific target organ toxicity in a single event Exposure	May irritate the respiratory tract.
Specific target organ toxicity with repeated Exposure	: Not rated
Additional information	: Based on available data, the classification criteria are not met

Calcium nitrate (10124-37-5)	
NOAEL (oral, rat, 90 days)	ÿ 1000 mg/kg body weight Animal: rat, Guideline: OECD Guideline 407 (Repeated Dose 28-Day Oral Toxicity in Rodents), Guideline: EU Method B.7 (Repeated Dose (28 Days) Toxicity (Oral))

Bronopol (INN); 2-Bromo-2-nitropropane-1,3-diol (52-51-7)	
LOAEL (oral, rat, 90 days)	20 mg/kg body weight Animal: dog
Danger of aspiration	: Not rated
Additional information	: Based on available data, the classification criteria are not met

11.2. Information about other dangers

11.2.1. Endocrine disrupting properties

No further information available

11.2.2. Other Information

Possible adverse effects on humans and possible symptoms : Based on available data, the classification criteria are not met

SECTION 12: Ecological information

12.1. toxicity

Hazardous to water, short-term (acute) : Not rated
 Hazardous to water, long-term (chronic) : Not rated

Calcium nitrate (10124-37-5)	
LC50 - Fish [1]	1378 mg/l Test organisms (species): Poecilia reticulata
EC50 - Crustaceans [1]	490 mg/l Test organisms (species): Daphnia magna

Bronopol (INN); 2-Bromo-2-nitropropane-1,3-diol (52-51-7)	
EC50 - Crustaceans [1]	1.4 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	0.25 mg/l test organisms (species): Skeletonema costatum
EC50 72h - algae [2]	0.37 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
LOEC (chronic)	0.88 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC (chronic)	0.27 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC chronic fish	21.5 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri) Duration: '49 d'

Isoeugenol (97-54-1)	
EC50 - Other aquatic organisms [1]	7.5 mg/l waterflea

12.2. Persistence and degradability

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Persistence and degradability	Not fixed.

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According to regulation (EU) 2015/830, 2020/878 (Annex II of the REACH Regulation)

Bronopol (INN); 2-Bromo-2-nitropropane-1,3-diol (52-51-7)	
Biodegradation	70 – 80% OECD 301B Ready Biodegradability, CO2 Evolution Test, 28 days

12.3. Bioaccumulative potential

AQUA KEM GREEN CONCENTRATED	
Bioaccumulative potential	Not fixed.

Bronopol (INN); 2-Bromo-2-nitropropane-1,3-diol (52-51-7)	
Bioaccumulative potential	Low bioaccumulation potential.

Isoeugenol (97-54-1)	
Partition coefficient n-octanol/water (Log Pow)	2.1

12.4. Mobility in the ground

Bronopol (INN); 2-Bromo-2-nitropropane-1,3-diol (52-51-7)	
Ecology - soil	No data available.

12.5. Results of the PBT and vPvB assessment

component	
Bronopol (INN); 2-Bromo-2-nitropropane-1,3-diol (52-51-7)	This substance/mixture does not meet the PBT criteria of the REACH Regulation, Annex XIII.

12.6. Endocrine disrupting properties

No further information available

12.7. Other adverse effects

Additional information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product/Packaging Recommendations : Dispose of safely in accordance with local/national regulations.

Waste disposal

Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

According to ADR / IMDG / IATA / ADN / RID

ADDR	IMDG	IATA	ADN	RID
14.1. UN number or ID number				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.2. UN proper shipping name				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.3. Transport hazard classes				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated

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According to regulation (EU) 2015/830, 2020/878 (Annex II of the REACH Regulation)

ADDR	IMDG	IATA	ADN	RID
14.4. Packaging group				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.5. Environmental hazards				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
No additional information available				

14.6. Special precautions for the user

Land transport

Not regulated

Sea transport

Not regulated

Air transport

Not regulated

Inland waterway transport

Not regulated

Rail transport

Not regulated

14.7. Bulk carriage by sea in accordance with IMO instruments

Not applicable

SECTION 15: Legislation

15.1. Safety, health and environmental regulations/legislation specific to the substance or the mixture

15.1.1. EU regulations

REACH Annex XVII (List of Restrictions)

Does not contain any substances listed in REACH Annex XVII (restriction conditions).

REACH Annex XIV (approval list)

Does not contain any substances listed in REACH Annex XIV (authorization list).

REACH candidate list (SVHC)

Does not contain any substances listed on the REACH candidate list

PIC Regulation (Prior Informed Consent)

Does not contain any substances listed on the PIC list (Regulation EU 649/2012 on the export and import of dangerous chemicals).

POP Regulation (Persistent Organic Pollutants)

Does not contain any substances listed on the POP list (EU Regulation 2019/1021 on persistent organic pollutants).

Ozone Regulation (1005/2009)

Does not contain any substances that are listed on the ozone depletion list (EU Regulation 1005/2009 on substances that deplete the ozone layer).

VOC Directive (2004/42)

VOC content : 0.003%

Regulation on precursors for explosives (EU 2019/1148)

Contains substances on the list of explosives precursors (Regulation EU 2019/1148 on the marketing and use of starting materials for explosives).

ANNEX II REPORTABLE EXPLOSIVES PREcursors

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According to regulation (EU) 2015/830, 2020/878 (Annex II of the REACH Regulation)

List of substances which, as such or in mixtures or in substances, are subject to the obligation to report suspicious transactions and the loss or theft of significant quantities within 24 hours.

Surname	CAS no.	Combined Nomenclature code (KN)	Combined nomenclature Code for mixtures without ingredients classified under another CN code
Calcium nitrate	10124-37-5	ex 2834 29 80	ex 3824 99 96

See https://ec.europa.eu/home-affairs/system/files/2021-11/list_of_competent_authorities_and_national_contact_points_en.pdf

Drug Precursor Regulation (EC 273/2004)

Does not contain any substances on the list of drug precursors (Regulation EC 273/2004 on the manufacture and placing on the market of certain drugs).

Substances used in the illicit production of narcotic drugs and psychotropic substances) are listed

15.1.2. National regulations

Germany

Water hazard class (WGK)

: WGK 2, clearly hazardous to water (classification according to AwSV, appendix 1).

Storage class (LGK, TRGS 510)

: LGK 12 - Non-flammable liquids.

Collation table

LGK 1	LGK 2A	LGK 2B	LGK 3	LGK 4.1A
LGK 4.1B	LGK 4.2	LGK 4.3	LGK 5.1A	LGK 5.1B
LGK 5.1C	LGK 5.2	LGK 6.1A	LGK 6.1B	LGK 6.1C
LGK 6.1D	LGK 6.2	LGK 7	LGK 8A	LGK 8B
LGK 10	LGK 11	LGK 12	LGK 13	LGK 10-13

Storage not permitted for

: LGK 1, LGK 6.2, LGK 7.

Restricted storage permitted for

: LGK 4.1A, LGK 4.3, LGK 5.1C.

Joint storage permitted for

: LGK 2A, LGK 2B, LGK 3, LGK 4.1B, LGK 4.2, LGK 5.1A, LGK 5.1B, LGK 5.2, LGK 6.1A, LGK 6.1B, LGK 6.1C, LGK 6.1D, LGK 8A, LGK 8B, LGK 10, LGK 11, LGK 12, LGK 13, LGK 10-13.

Major Accident Ordinance (12th BImSchV)

: Not subject to the Major Accident Ordinance (12th BImSchV)

15.2. Chemical safety assessment

A chemical safety assessment was not carried out

SECTION 16: Other information

Change notes			
Section	Changed item	modification	Remarks
	Replaced	Changed	
	Revision date	Changed	
	Issue date	Changed	
2.1	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Changed	
2.2	Hazard pictograms (CLP)	Changed	
2.2	Safety instructions (CLP)	Changed	
2.2	Hazard statements (CLP)	Changed	
11.1	ATE CLP (oral)	Added	

Other Information

: No.

Full text of H and EUH phrases:

Acute Tox. 3 (inhalative)	Acute toxicity (inhalation), category 3
Acute Tox. 3 (Oral)	Acute toxicity (oral), category 3

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Full text of H and EUH phrases:	
Acute Tox. 4 (Dermal)	Acute toxicity (dermal), category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), category 4
Aquatic Acute 1	Acute aquatic hazard, category 1
Aquatic Chronic 2	Chronic aquatic hazard, category 2
EUH208	Contains isoeugenol(97-54-1). Can cause allergic reactions.
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause allergic skin reactions.
H318	Causes serious eye damage.
H331	Toxic if inhaled.
H335	May irritate the respiratory tract.
H400	Very toxic to aquatic organisms.
H411	Toxic to aquatic life with long lasting effects.
Skin irritation. 2	Skin corrosion/irritation, category 2
Skin Sens. 1A	Skin sensitization, category 1A
STOT SE 3	Specific target organ toxicity (single exposure), Category 3, respiratory tract irritation

The classification corresponds

: ATP 12

Safety data sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product only in terms of health, safety and environmental conditions. They should therefore not be construed as a guarantee for specific properties of the product.