

Safety Data Sheet

According to Regulation (EU) 2015/830 (REACH Annex II)

SDS Ref.: 30260

Date of issue: 23-10-2018 Revision date: 9-5-2018 Supersedes: 21-9-2016 Version: 15.0

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Mixture
 Trade name : AQUA KEM BLUE SACHETS
 Product code : 30260-TBV
 Type of product : Additive for the waste-holding 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 general public
 Main use category : Consumer use
 Use of the substance/mixture : Additive for the waste-holding tank of mobile toilets.
 Function or use category : Cleaning/washing agents and additives, Odour agents

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Manufacturer

Thetford BV
 Nijverheidsweg 29
 P.O. Box 169
 4879 AP Etten-Leur - The Netherlands
 T +31(0)765042200 - F +31(0)765042300
ChemSupport@thetford.eu - www.thetford-europe.com
 E-mail address of competent person responsible for the SDS : sds@thetford.eu

1.4. Emergency telephone number

Emergency number : Thetford B.V. : +31 (0)76 5042200 (Reachable during office hours)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Acute toxicity (oral), Category 4 H302
 Skin corrosion/irritation, Category 2 H315
 Serious eye damage/eye irritation, Category 1 H318
 Hazardous to the aquatic environment — Acute Hazard, Category 1 H400
 Hazardous to the aquatic environment — Chronic Hazard, Category 3 H412
 Full text of H statements : see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

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

Hazard pictograms (CLP) :



GHS05

GHS07




GHS09

Signal word (CLP) : Danger
 Hazardous ingredients : 2-BROMO-2-NITROPROPANE-1,3-DIOL
 Hazard statements (CLP) : H302 - Harmful if swallowed.
 H315 - Causes skin irritation.
 H318 - Causes serious eye damage.
 H410 - Very toxic to aquatic life with long lasting effects.
 Precautionary statements (CLP) : P102 - Keep out of reach of children.
 P264 - Wash hands thoroughly after handling.
 P270 - Do not eat, drink or smoke when using this product.
 P273 - Avoid release to the environment.
 P301+P312 - IF SWALLOWED: Call a doctor if you feel unwell.
 EUH-statements : EUH208 - Contains Eucalyptol(470-82-6). May produce an allergic reaction.
 Extra phrases : Do not open sachets or handle with wet hands!.

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Child-resistant fastening	: Not applicable
Tactile warning	: Applicable
Labelling according to: exemption for packages of a capacity of 125ml or less	
Hazard pictograms (CLP)	:    GHS05 GHS07 GHS09
Signal word (CLP)	: Danger
Hazardous ingredients	: 2-BROMO-2-NITROPROPANE-1,3-DIOL
Hazard statements (CLP)	: H302 - Harmful if swallowed. H318 - Causes serious eye damage. H412 - Harmful to aquatic life with long lasting effects.
Precautionary statements (CLP)	: P102 - Keep out of reach of children. P264 - Wash hands thoroughly after handling. P270 - Do not eat, drink or smoke when using this product. P301+P312 - IF SWALLOWED: Call a doctor if you feel unwell. P273 - Avoid release to the environment.
EUH-statements	: EUH208 - Contains Eucalyptol(470-82-6). May produce an allergic reaction.
Extra phrases	: Do not open sachets or handle with wet hands!.

2.3. Other hazards

Other hazards not contributing to the classification : None under normal conditions.

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
2-BROMO-2-NITROPROPANE-1,3-DIOL	(CAS-No.) 52-51-7 (EC-No.) 200-143-0 (EC Index-No.) 603-085-00-8	10 - 20	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 3 (Inhalation:dust,mist), H331 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 2, H411
Eucalyptol	(CAS-No.) 470-82-6 (EC-No.) 207-431-5	0,1 - 1	Flam. Liq. 3, H226 Skin Sens. 1, H317

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation	: Not applicable (do not open sachets). In case of an accident (broken sachets), go into fresh air. If rapid recovery does not occur, obtain medical attention.
First-aid measures after skin contact	: Remove contaminated clothing and shoes. Flush with plenty of water. Seek medical attention if irritation develops.
First-aid measures after eye contact	: In case of eye contact, immediately rinse with clean water for 10-15 minutes. Seek medical advice.
First-aid measures after ingestion	: Rinse mouth. If swallowed, seek medical advice immediately and show this container or label.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects after inhalation	: May cause respiratory irritation.
Symptoms/effects after skin contact	: Causes skin irritation.
Symptoms/effects after eye contact	: Causes serious eye damage.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

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According to Regulation (EU) 2015/830 (REACH Annex II)

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray. Foam. Carbon dioxide. Dry powder.

5.2. Special hazards arising from the substance or mixture

Fire hazard : In case of fire, product can produce hazardous vapours and fumes.

5.3. Advice for firefighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

Other information : The product is not flammable.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Clear up any spilled product immediately. In case of broken sachets, do not breath dust and wear suitable protective clothing, gloves and eye / face protection. In case of insufficient ventilation wear suitable respiratory equipment.

6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.

Emergency procedures : Ventilate area.

6.2. Environmental precautions

Prevent any contamination of surface water or groundwater by the undiluted product. Product should be treated (biological waste water treatment) before entering surface waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Collect the spilled product (mechanical) and avoid dust and store in a container. Next, rinse the contaminated surface with water and leave it to dry. Dispose of in accordance with the procedure set out in section 13.

6.4. Reference to other sections

Exposure controls and personal protection. See also sections 8 and 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Avoid contact with skin and eyes.

Hygiene measures : Wash hands immediately after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store at temperatures below 40°C. Keep away from food, drink and animal feedingstuffs. Store away from alkalines, metals and oxidizing agents.

7.3. Specific end use(s)

Aqua Kem Blue Sachets is an additive for the holding tank of your mobile toilet. It reduces and masks unpleasant smells. Helps to prevent gas build up. Keeps your tank clean.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Exposure controls

Personal protective equipment:

Avoid all unnecessary exposure.

Hand protection:

Wear protective gloves.

Eye protection:

Chemical goggles or 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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According to Regulation (EU) 2015/830 (REACH Annex II)

Consumer exposure controls:

Read the instructions for use before handling and dispensing this product.

Other information:

Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Solid
Appearance	: Granular solid.
Colour	: Blue.
Odour	: Pine.
Odour threshold	: No data available
pH	: 4 - 6 (10%)
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: > 100 °C
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: Non flammable.
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density	: 1,05 - 1,15 g/ml
Solubility	: Water: 100 %
Log Pow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

9.2. Other information

VOC content	: 0,3 %
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SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Stable up to 50°C. At an average temperature of 30°C, Aqua Kem Blue Sachets can be kept for several years. After a few years, there might be a slight reduction in strength.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

See section 7.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

According to process conditions, hazardous decomposition products may be generated. Carbon monoxide. Carbon dioxide. Nitrogen oxides.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	: Oral: Harmful if swallowed.
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified

ATE CLP (oral)	1528,975 mg/kg bodyweight
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2-BROMO-2-NITROPROPANE-1,3-DIOL (52-51-7)

LD50 oral rat	305 mg/kg
LD50 dermal rat	> 2000 mg/kg

Skin corrosion/irritation	: Causes skin irritation. pH: 4 - 6 (10%)
Additional information	: Causes skin irritation.
Serious eye damage/irritation	: Causes serious eye damage. pH: 4 - 6 (10%)
Additional information	: Causes serious eye damage.
Respiratory or skin sensitisation	: Not classified
Additional information	: Based on available data, the classification criteria are not met
Germ cell mutagenicity	: Not classified
Additional information	: Based on available data, the classification criteria are not met
Carcinogenicity	: Not classified
Additional information	: Based on available data, the classification criteria are not met

2-BROMO-2-NITROPROPANE-1,3-DIOL (52-51-7)

NOAEL (chronic, oral, animal/male, 2 years)	7 mg/kg bodyweight
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Reproductive toxicity	: Not classified
Additional information	: Based on available data, the classification criteria are not met
STOT-single exposure	: Not classified
Additional information	: Based on available data, the classification criteria are not met
STOT-repeated exposure	: Not classified
Additional information	: Based on available data, the classification criteria are not met
Aspiration hazard	: Not classified
Additional information	: Based on available data, the classification criteria are not met
Potential adverse human health effects and symptoms	: Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - water	: Very toxic to aquatic life.
Acute aquatic toxicity	: Very toxic to aquatic life.
Chronic aquatic toxicity	: Harmful to aquatic life with long lasting effects.

2-BROMO-2-NITROPROPANE-1,3-DIOL (52-51-7)

EC50 72h algae (1)	0,37 mg/l
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12.2. Persistence and degradability

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Persistence and degradability	The surfactant used in this product shows a biodegradability of > 60 % (readily biodegradable), according to OECD 301 D, Closed Bottle Test (Information of manufacturer). The fragrance is > 60 % biodegradable according to OECD 301D, Closed Bottle Test.
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2-BROMO-2-NITROPROPANE-1,3-DIOL (52-51-7)

Biodegradation	70 - 80 % OECD 301B Ready Biodegradability, CO2 Evolution Test, 28 days
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12.3. Bioaccumulative potential

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Bioaccumulative potential	Not established.
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2-BROMO-2-NITROPROPANE-1,3-DIOL (52-51-7)

Bioaccumulative potential	Low bioaccumulation potential.
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According to Regulation (EU) 2015/830 (REACH Annex II)

12.4. Mobility in soil

2-BROMO-2-NITROPROPANE-1,3-DIOL (52-51-7)

Ecology - soil : No data available.

12.5. Results of PBT and vPvB assessment

Component

2-BROMO-2-NITROPROPANE-1,3-DIOL (52-51-7) : This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

12.6. Other adverse effects

Additional information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product/Packaging disposal recommendations : Product residues should be treated as chemical waste in accordance with government regulations. Rinsed packaging may be used for recycling.

Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

ADR	IMDG	IATA	ADN	RID
Special provision(s) applied : 375	Special provision(s) applied : 969	Special provision(s) applied : A197	Special provision(s) applied : 375	Special provision(s) applied : 375

14.1. UN number

3077

3077

3077

3077

3077

14.2. UN proper shipping name

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (bronopol (INN), 2-bromo-2-nitropropane-1,3-diol(52-51-7))

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (bronopol (INN), 2-bromo-2-nitropropane-1,3-diol(52-51-7))

Environmentally hazardous substance, solid, n.o.s. (bronopol (INN), 2-bromo-2-nitropropane-1,3-diol(52-51-7))

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (bronopol (INN), 2-bromo-2-nitropropane-1,3-diol(52-51-7))

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (bronopol (INN), 2-bromo-2-nitropropane-1,3-diol(52-51-7))

Transport document description

UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (bronopol (INN), 2-bromo-2-nitropropane-1,3-diol(52-51-7)), 9, III, (E)

UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (bronopol (INN), 2-bromo-2-nitropropane-1,3-diol(52-51-7)), 9, III

UN 3077 Environmentally hazardous substance, solid, n.o.s. (bronopol (INN), 2-bromo-2-nitropropane-1,3-diol(52-51-7)), 9, III

UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (bronopol (INN), 2-bromo-2-nitropropane-1,3-diol(52-51-7)), 9, III

UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (bronopol (INN), 2-bromo-2-nitropropane-1,3-diol(52-51-7)), 9, III

14.3. Transport hazard class(es)

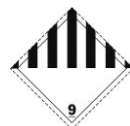
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14.4. Packing group

III

III

III

III

III

14.5. Environmental hazards

Dangerous for the environment : Yes

Dangerous for the environment : Yes
Marine pollutant : Yes

Dangerous for the environment : Yes

Dangerous for the environment : Yes

Dangerous for the environment : Yes

Environmentally hazardous substances derogation applies (quantity of liquids ≤ 5 litres or net mass of solids ≤ 5 kg)

No supplementary information available

14.6. Special precautions for user

Overland transport

Classification code (ADR) : M7

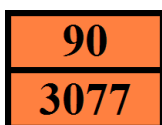
Special provisions (ADR) : 274, 335, 601, 375

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According to Regulation (EU) 2015/830 (REACH Annex II)

Limited quantities (ADR)	: 5kg
Excepted quantities (ADR)	: E1
Packing instructions (ADR)	: P002, IBC08, LP02, R001
Special packing provisions (ADR)	: PP12, B3
Mixed packing provisions (ADR)	: MP10
Portable tank and bulk container instructions (ADR)	: T1, BK1, BK2
Portable tank and bulk container special provisions (ADR)	: TP33
Tank code (ADR)	: SGAV, LGBV
Vehicle for tank carriage	: AT
Transport category (ADR)	: 3
Special provisions for carriage - Packages (ADR)	: V13
Special provisions for carriage - Bulk (ADR)	: VC1, VC2
Special provisions for carriage - Loading, unloading and handling (ADR)	: CV13
Hazard identification number (Kemler No.)	: 90
Orange plates	:



Tunnel restriction code (ADR) : E

Transport by sea

Special provisions (IMDG)	: 274, 335, 966, 967, 969
Limited quantities (IMDG)	: 5 kg
Excepted quantities (IMDG)	: E1
Packing instructions (IMDG)	: P002, LP02
Special packing provisions (IMDG)	: PP12
IBC packing instructions (IMDG)	: IBC08
IBC special provisions (IMDG)	: B3
Tank instructions (IMDG)	: T1, BK1, BK2, BK3
Tank special provisions (IMDG)	: TP33
EmS-No. (Fire)	: F-A
EmS-No. (Spillage)	: S-F
Stowage category (IMDG)	: A
Stowage and handling (IMDG)	: SW23
MFAG-No	: 171

Air transport

PCA Excepted quantities (IATA)	: E1
PCA Limited quantities (IATA)	: Y956
PCA limited quantity max net quantity (IATA)	: 30kgG
PCA packing instructions (IATA)	: 956
PCA max net quantity (IATA)	: 400kg
CAO packing instructions (IATA)	: 956
CAO max net quantity (IATA)	: 400kg
Special provisions (IATA)	: A97, A158, A179, A197
ERG code (IATA)	: 9L

Inland waterway transport

Classification code (ADN)	: M7
Special provisions (ADN)	: 274, 335, 375, 601
Limited quantities (ADN)	: 5 kg
Excepted quantities (ADN)	: E1
Carriage permitted (ADN)	: T* B**
Equipment required (ADN)	: PP, A
Number of blue cones/lights (ADN)	: 0

Rail transport

Classification code (RID)	: M7
Special provisions (RID)	: 274, 335, 375, 601

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According to Regulation (EU) 2015/830 (REACH Annex II)

Limited quantities (RID)	: 5kg
Excepted quantities (RID)	: E1
Packing instructions (RID)	: P002, IBC08, LP02, R001
Special packing provisions (RID)	: PP12, B3
Mixed packing provisions (RID)	: MP10
Portable tank and bulk container instructions (RID)	: T1, BK1, BK2
Portable tank and bulk container special provisions (RID)	: TP33
Tank codes for RID tanks (RID)	: SGAV, LGBV
Transport category (RID)	: 3
Special provisions for carriage – Packages (RID)	: W13
Special provisions for carriage – Bulk (RID)	: VC1, VC2
Special provisions for carriage - Loading, unloading and handling (RID)	: CW13, CW31
Colis express (express parcels) (RID)	: CE11
Hazard identification number (RID)	: 90

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

VOC content : 0,3 %

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Indication of changes:

Section	Changed item	Change	Comments
	Supersedes	Modified	
	Date of issue	Modified	
	Revision date	Modified	
2.1	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Modified	
2.2	Hazard statements (CLP)	Modified	
2.2	EUH-statements	Added	
2.2	Precautionary statements (CLP)	Modified	
3	Composition/information on ingredients	Modified	
11.1	ATE CLP (oral)	Modified	

Data sources : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Other information : None.

Full text of H- and EUH-statements:

Acute Tox. 3 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 3
Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4

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According to Regulation (EU) 2015/830 (REACH Annex II)

Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment — Chronic Hazard, Category 2
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Flam. Liq. 3	Flammable liquids, Category 3
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H331	Toxic if inhaled.
H335	May cause respiratory irritation.
H400	Very toxic to aquatic life.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
EUH208	Contains Eucalyptol(470-82-6). May produce an allergic reaction.

SDS EU (REACH Annex II)

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