

Safety data sheet

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According to Regulation (EC) No. 1907/2006 annex II and EC/2020/878

Frame and Hive Cleaner Pro

Date of issue: 2025-03-07

Version: 11

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

1.1 Product identifier	Frame and Hive Cleaner Pro MQ10-F0GE-Y00Y-9TUT
1.2 Relevant identified uses of the substance or mixture and uses advised against	Cleaning agent for washing beekeeping equipment. For professional beekeeping only.
1.3 Details of the supplier of the safety data sheet Address	Beekeepers Chemicals AS Høvreveien 6, 1712 Grålum
Telephone	+47 970 50 150
Website/E-mail	www.beekeepchem.com / info@beekeepchem.com
1.4 Emergency telephone number	For poison information call, NHS 111 (England), NHS 24 (Scotland) or NHS Direct (Wales), in emergencies call 999.

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification CLP (1272/2008/EC)

Skin corrosion/irritation, Hazard Category 1: H314

Serious eye damage/eye irritation, Hazard Category 1: H318

Specific target organ toxicity — Single exposure, Hazard Category 3: H335

2.2 Label elements

Pictogram



Signal Word: Danger

Containing substances

2-Aminoethanol, Disodium metasilicate, Potassium hydroxide

Hazard statement Code(s)

H314 Causes severe skin burns and eye damage.

H335 May cause respiratory irritation

Precautionary statements

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P261 Avoid breathing fume/ spray

P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER or doctor/physician.

2.3 Other hazards

This product is not considered to contain any substances that meet the criteria for classification as PBT or vPvB substances.

Does not contain an endocrine disruptor (EDC) in a concentration of $\geq 0.1\%$.

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SECTION 3: Composition/information on ingredients

3.2 Mixtures

Components	CAS-No EC-No Reg-No	Conc. %	Hazard Class & Category Code*	Hazard statement Code(s)*
2-Aminoethanol **	141-43-5 205-483-3 01-2119486455-28-xxxx	5 - 10	Acute Tox. 4 Acute Tox. 4 Skin Corr. 1B Acute Tox. 4 STOT Single 3 Aquatic Chronic 3	H302 H312 H314 H332 H335 H412
2-(2-Butoxietoxi)Ethanol	112-34-5 203-961-6 01-2119475104-44-xxxx	5 - 10	Eye Irrit. 2	H319
Disodium metasilicate	10213-79-3 229-912-9 01-2119449811-37-0003	5 - 10	Met. Corr. 1 Skin Corr. 1B STOT SE 3	H290 H314 H335
Potassium hydroxide *** 019-002-00-8	1310-58-3 215-181-3 01-2119487136-33-xxxx	1 - <2	Met. Corr. 1 Acute Tox. 4 Skin Corr. 1A	H290 H302 H314

* The full text of Risk phrases and Hazard statement Codes are listed under heading 16.

** SCL / Specific concentration limits

STOT SE 3; H335: $C \geq 5\%$

** SCL / Specific concentration limits

Eye Irrit. 2; H319: $0,5\% \leq C < 2\%$

Skin Corr. 1A; H314: $C \geq 5\%$

Skin Corr. 1B; H314: $2\% \leq C < 5\%$

Skin Irrit. 2; H315: $0,5\% \leq C < 2\%$

The classification is based on information from the chemical supplier and <http://echa.europa.eu/> (Databases)

Ingredients not listed are classified as non-hazardous or at a concentration below reportable levels.

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SECTION 4: First aid measures

4.1 Description of first aid measures

General information

Never give fluids or induce vomiting if patient is unconscious.

In all cases of doubt, or when symptoms persist, seek medical advice.

Keep person warm and calm

Inhalation

Fresh air. Contact a doctor if symptoms persist.

Skin contact

Immediately, take off all contaminated clothing wash with soap and water and rinse the skin thoroughly. Burns should be treated by a doctor.

Eye contact

Important! Rinse immediately with water for at least 15 minutes. Hold eyelids apart. Remove contact lenses, if present and easy to do. Continue rinsing. Go to hospital or eye specialist. If possible, continue to rinse during transport.

Ingestion

Rinse mouth with water and drink several glasses of water. Do not provoke vomiting unless directed by medical personnel. Seek medical treatment.

4.2 Most important symptoms and effects, both acute and delayed

Inhalation: Might be irritating to the respiratory system.

Skin contact: May cause chemical burns with blisters, sores or burns which may be difficult to heal.

Eye contact: Give severe pain and irritation. May severely injure the eyes.

Ingestion: Highly corrosive in the mouth, throat and gastrointestinal tract.
Symptoms burning pain, vomiting and stomach pains. Vomiting may aggravate the injury.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1 Extinguishing media

Water spray, fog or mist, foam, powder or carbon dioxide.

5.2 Special hazards arising from the substance or mixture

In case of fire, harmful gases may be formed. Avoid breathing gas/smoke.

5.3 Advice for firefighters

Wear a self-contained breathing apparatus and protective clothing.

Additional information

Cool endangered containers with water in case of fire.

Move containers from fire area if it can be done without risk.

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SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment.

Ensure adequate ventilation.

Avoid contact with skin and eyes.

Do not breathe vapor / mist.

6.2 Environmental precautions

Prevent concentrated product from being flushed into surface water or sewage systems.

6.3 Methods and material for containment and cleaning up

Re-use product if possible. Smaller spills can be wiped up with cloth. Don't forget protective gloves! Remove spillage with absorbent material (eg sand, soil or vermiculite)

6.4 Reference to other sections

For handling and storage, see section 7.

For personal protection, see section 8.

For disposal of spillage, see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Use personal protective equipment.

Avoid contact with skin and eyes.

Provide eyewash station.

Ensure adequate ventilation. Do not breathe vapor / mist.

Follow proper handling instructions.

Normal precautions taken when handling chemicals should be observed.

Do not eat or drink during work – no smoking.

7.2 Conditions for safe storage, including any incompatibilities

Store the product tightly closed in a dry, cool and well-ventilated area.

7.3 Specific end use(s)

-

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Preventive measures

Provide adequate ventilation Provide eyewash station.

Swedish limit values or limit values according to the European commission:

Substance	CAS-No	Level limit value	Short time value	Note
2-Aminoethanol	141-43-5	1 ppm 2,5 mg/m ³	3 ppm 7,5 mg/m ³	H
Diethylene glycol monoethyl ether acetate	112-34-5	15 ppm 110 mg/m ³	30 ppm 220 mg/m ³	H,V
Potassium hydroxide - inhalable dust	1310-58-3	1 mg/m ³	-	-

Explanation note:

H: The substance can be readily absorbed through the skin. V: Indicative short-term exposure limit value

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SECTION 8: Exposure controls/personal protection

DNEL

2-Aminoethanol (141-43-5)	Long-term exposure - Workers Systemic effects, dermal: 1 mg/kg body weight/day Long-term exposure - Workers Systemic effects, inhalation: 3.3 mg/kg body weight/day Long-term exposure - Workers Local effects, inhalation: 3.3 mg/kg body weight/day Long-term exposure - Consumers Systemic effects, dermal: 0.24 mg/kg body weight/day Long-term exposure - Consumers Systemic effects, inhalation: 2 mg/kg body weight/day Long-term exposure - Consumers Local effects, inhalation: 2 mg/kg body weight/day Long-term exposure - Consumers Systemic effects, oral: 3.75 mg/kg body weight/day
2-(2-Butoxyethoxy)Ethanol (112-34-5)	Long-term exposure - Workers Systemic effects, Dermal: 83 mg/kg Long-term exposure - Workers Local effects, inhalation: 67.5 mg/m ³ Long-term exposure - Consumers Systemic effects, Oral: 5 mg/kg Long-term exposure - Consumers Systemic effects, Dermal: 50 mg/kg Long-term exposure - Consumers Local effects, Inhalation: 40.5 mg/m ³
Sodium disodium metasilicate (10213-79-3)	Long-term exposure – Workers Systemic effects, Inhalation: 6.22 mg/m ³ Long-term exposure – Workers Systemic effects, Dermal: 1.49 mg/kg bw/d Long-term exposure – Consumers Systemic effects, Oral: 0.74 mg/kg Long-term exposure – Consumers Systemic effects, Inhalation: 1.55 mg/m ³ Long-term exposure – Consumers Systemic effects, Dermal: 0.74 mg/kg bw/d

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SECTION 8: Exposure controls/personal protection (...)

PNEC

2-Aminoethanol (141-43-5)	0,085 mg/l	Freshwater
2-Aminoethanol (141-43-5)	0,0085 mg/l	Saltwater
2-Aminoethanol (141-43-5)	0,025 mg/l	Intermittent release
2-Aminoethanol (141-43-5)	0,425 mg/kg	Sediment (Freshwater)
2-Aminoethanol (141-43-5)	0,0425 mg/kg	Sediment (Saltwater)
2-Aminoethanol (141-43-5)	0,035 mg/kg	Soil
2-Aminoethanol (141-43-5)	100 mg/l	STP
2-(2-Butoxyethoxy)Ethanol (112-34-5)	1.1 mg/l	Freshwater
2-(2-Butoxyethoxy)Ethanol (112-34-5)	11 mg/l	Intermittent release
2-(2-Butoxyethoxy)Ethanol (112-34-5)	0,11 mg/l	Saltwater
2-(2-Butoxyethoxy)Ethanol (112-34-5)	4,4 mg/kg	Sediment (Freshwater)
2-(2-Butoxyethoxy)Ethanol (112-34-5)	0,44 mg/kg	Sediment (Saltvatten)
2-(2-Butoxyethoxy)Ethanol (112-34-5)	400 mg/l	STP
2-(2-Butoxyethoxy)Ethanol (112-34-5)	0,32 mg/kg	Soil
Sodium disodium metasilicate (10213-79-3)	7,5 mg/l	Freshwater
Sodium disodium metasilicate (10213-79-3)	1 mg/l	Saltwater
Sodium disodium metasilicate (10213-79-3)	7,5 mg/l	Intermittent release
Sodium disodium metasilicate (10213-79-3)	1000 mg/l	STP

8.2 Exposure controls

General protective and hygiene measures

Avoid contact with skin and eyes.

Do not eat or drink during work – no smoking.

Ensure adequate ventilation.

Do not breathe vapor / mist.

Normal precautions taken when handling chemicals should be observed.

Personal protective equipment

Always consult a competent person/supplier when selecting personal protective equipment.

Respiratory protection

In case of insufficient ventilation or if the concentration exceeds workplace limits a respirator fit for purpose must be used. (Gasfilter A+Particle filter P3)

Hand protection

Use chemical-resistant protective gloves (e.g. PVC, Chloroprene rubber).

When selection gloves, several parameters must be taken into account, usage, handling time, breakthrough time.etc

After washing hands replace lost skin fat by fat containing skin creams.

Eye protection

Wear tightly fitting protective goggles.

Body protection

Chemical resistant working clothes should be used.

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SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state:	Liquid
Colour:	Not determined
Odour	Not determined
Melting point/freezing point	Not determined
Boiling point or initial boiling point and boiling range	Not determined
Flammability	Not determined
Lower and upper explosion limit	Not determined
Flash point	Not determined
Auto-ignition temperature	Not determined
Decomposition temperature	Not determined
pH	~13,7
Kinematic viscosity	Not determined
Solubility	Not determined
Partition coefficient n-octanol/water (log value)	Not determined
Vapour pressure	Not determined
Density and/or relative density	1,07-1,09 g/ml
Relative vapour density	Not determined
Particle characteristics	Not relevant. The product is a liquid.

9.2 Other information

No specific.

SECTION 10: Stability and reactivity

10.1 Reactivity

Stable under recommended storage and handling conditions.

10.2 Chemical stability

Stable under recommended storage and handling conditions.

10.3 Possibility of hazardous reactions

No known under recommended storage and handling conditions.

10.4 Conditions to avoid

No known.

10.5 Incompatible materials

Strong acids and strong oxidizing agents.

10.6 Hazardous decomposition products

No hazardous decompositions products known.

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SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

See also section 4. (Most important symptoms and effects, both acute and delayed)

Irritating/corrosive properties

Causes severe skin burns and eye damage according to CLP.

Acute toxicity

Not classified as acutely toxic according to CLP.

Toxicology data

Toxicology data about this preparation is not available.

Toxicology data for the containing components:

2-Aminoethanol (141-43-5)	LD ₅₀ Oral Rat: 1515 mg/kg LD ₅₀ Dermal kanin: 2504 mg/kg
2-(2-Butoxyethoxy)Ethanol (112-34-5)	LD ₅₀ Oral Rat: 5600 mg/kg LD ₅₀ Dermal Rabbit: 2700 mg/kg
Potassium hydroxide (1310-58-3)	LD ₅₀ Oral Rabbit: 333 mg/kg
Sodium disodium metasilicate (10213-79-3)	LD ₅₀ Oral Rat: 1152 – 1349 mg/kg bw LC ₅₀ Inhalation Rat: >2,06 g/m ³ LD ₅₀ Dermal Rat: >5000 mg/kg bw NOAEL Oral Rat: 227 mg/kg bw/d

STOT-single exposure -repeated exposure

May cause respiratory irritation

Routes of exposure

Inhalation, eyes and skin. (Ingestion)

Allergenic potential

This product is not classified as allergenic by inhalation or skin contact.

Carcinogenicity, mutagenicity and toxicity for reproduction

This product is not classified as carcinogen, mutagen and toxic for reproduction.

Aspiration hazard

No

11.2 Information on other hazards

Does not contain an endocrine disruptor (EDC) in a concentration of $\geq 0.1\%$.

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SECTION 12: Ecological information

This product is not classified as dangerous for the environment.

Do not flush into surface water or sanitary sewer system.

12.1 Toxicity

Toxicology data about this preparation is not available.

Toxicology data for the containing components:

2-Aminoethanol (141-43-5)	LC ₅₀ Fish 96h: 349 mg/l Sp: Cyprinus carpio (Karp) LC ₅₀ Fish 96h: 170 mg/l Sp: Carassius auratus (Guldfisk) EC ₅₀ Daphnia 48h: 65 mg/l Sp: Daphnia magna EC ₅₀ Algae 72h: 2,5 mg/l Sp: Selenastrum capricornutum EC ₅₀ Algae 72h: 22 mg/l Sp: Scenedesmus subspicatus EC ₂₀ Bacteria 30 min: >1000 mg/l Sp: Aktiverat slam EC ₅₀ Bacteria 3h: >1000 mg/l Sp: Aktiverat slam NOEC Daphnia 21 dagar: 0,85 mg/l Sp: Daphnia magna
Potassium hydroxide (1310-58-3)	LC ₅₀ Fish 96h: 75 mg/l Sp: Oncorhynchus mykiss EC ₅₀ Daphnia 48h: 30 mg/l Sp: Daphnia magna
2-(2-Butoxyethoxy)Ethanol (112-34-5)	EC ₅₀ Algae 96h: >100 mg/l LC ₅₀ Fish 96h: 1300 mg/l EC ₅₀ Daphnia 48h: >100 mg/l
Sodium disodium metasilicate (10213-79-3)	LC ₅₀ Fish 96h: 210 mg/l Sp: Brachydanio rerio EC ₅₀ Daphnia 48h: 1700 mg/l Sp: Daphnia magna

12.2 Persistence and degradability

2-Aminoethanol (141-43-5) - Readily biodegradable.

Disodium metasilicate (10213-79-3) - Inorganic, soluble silicates will rapidly depolymerize upon dilution to molecular variants that are indistinguishable from naturally dissolved silicic acid.

2-(2-Butoxyethoxy)Ethanol (112-34-5) - 28d - 89-93% Readily biodegradable

Potassium hydroxide (1310-58-3) - Inorganic

12.3 Bioaccumulative potential

2-Aminoethanol (141-43-5) - Assessed as not bioaccumulative.

Disodium metasilicate (10213-79-3) - Inorganic, the substance has no potential for bioaccumulation.

Potassium hydroxide (1310-58-3) - Log Pow is not applicable for an inorganic compound that dissolves.

12.4 Mobility in soil

Not known.

12.5 Results of PBT and vPvB assessment

This product is not considered to contain any substances that meet the criteria for classification as PBT or vPvB substances.

12.6 Endocrine disrupting properties

Does not contain an endocrine disruptor (EDC) in a concentration of $\geq 0.1\%$.

12.7 Other adverse effects

No known.

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SECTION 13: Disposal considerations

13.1 Waste treatment methods

The product

Dispose of in accordance with local authority requirements.

Hazardous waste.

Avoid releasing product residues into drains or waterways.

EWC code: Depends on area of operation and use,

Disposal of Packaging

Empty and cleaned packaging can be recycled.

SECTION 14: Transport information

14.1 UN number or ID number

1719

14.2 UN proper shipping name

CAUSTIC ALKALI LIQUID, N.O.S. (Disodium metasilicate)

14.3 Transport hazard class(es)

8

14.4 Packing group

III

14.5 Environmental hazards

Marine pollutant: No

14.6 Special precautions for user

-

14.7 Maritime transport in bulk according to IMO instruments

-

LQ

5L

Tunnel restriction code

(E)

SECTION 15: Regulatory information

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

Classification according to Regulation (EC) No. 1907/2006 annex II and EC/2020/878. EH40/2005.

15.2 Chemical safety assessment

No conducted.

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SECTION 16: Other information

The full text of the hazard statements under section 3

H290 May be corrosive to metals.

H302 Harmful if swallowed

H312 Harmful in contact with skin

H314 Causes severe skin burns and eye damage.

H319 Causes serious eye irritation

H332 Harmful if inhaled

H335 May cause respiratory irritation

H412 Harmful to aquatic life with long lasting effects

This information is provided for health and safety assessments by an industrial user. Reference should be made to any relevant local or national health, safety, and environmental legislation.

Revision 1: 2025-03-07

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Sources:

Safety data sheet provided by the manufacturer.

CLP-regulation, www.kemi.se, EH40/2005. www.echa.europa.eu (Databases)

Explanation of abbreviations

ADR: International Carriage of Dangerous Goods by Road

BCF: Bio Concentration Factor

CAS-nr: Chemical Abstracts Service number

DNEL: Derived No Effect Level

EC₅₀: Effect Concentration

EG-nr: A substance number i EINECS, ELINCS or in No-Longer Polymers List.

IMDG: International Maritime Dangerous Goods Code.

LC₅₀: Lethal Concentration

LD₅₀: Lethal Dose

IC₅₀: Median Inhibition Concentration

NOEC: No Observed Effect Concentration

PBT-substance: Persistent, Bio accumulative and Toxic substances.

PNEC: Predicted No Effect Concentration

vPvB-substance: Very persistent and Very Bio accumulative substances.