MSDS **MATERIAL SAFETY DATA SHEET**	0.1 Product	***ClawFix***
	0.2 Status	Active
	0.3 Version	6.1
	0.4 Version date	17-11-2023

1. Identification of the product and of the company

1.1 Product identification

Product name	*ClawFix*
Trade name	*ClawFix*
Article code	CLAW0250 CLAW0254
Chemical description	Mixture
UFI	YM10-X0T1-Q009-MW09
REACH registration number	-

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

Identified use(s)	Adhesive agent for footbath.
Use(s) advised against	Not identified.

1.3 Details of the supplier of the safety data sheet

Company identification	Name	Hofman Animal Care B.V.
Contact	Address	De Leemkoele 2
	Zip code	7468 DM
	Town	Enter
	Country	The Netherlands
	Telephone	+31 (0)548-545277
	E-mail	info@hofmananimalcare.nl
	Website	www.hofmananimalcare.com

1.4 Emergency telephone number

Emergency telephone number	The Netherlands : National Poisoning Information Center - Bilthoven TEL: +31(0)30/274.88.88 Belgium : Antipoison Center - Brussels TEL: +32(0)70/245.245 (Only for the purpose of informing medical personnel in cases of acute intoxications)

2. Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) no. 1272/2008:
Skin Irrit. 2; Skin corrosion/irritation, category 2; H315
Eye Dam. 1; Serious eye damage/eye irritation, category 1; H318

The full text of the (EU)H-statements can be found in section 16.

Most major adverse effects
Human health : See section 11 for toxicological information.
Physical and chemical hazards : See section 9/10 for physicochemical information.
Potential environmental effects : See section 12 for environmental information.

2.2 Label elements

Labelling according to Regulation (EC) no. 1272/2008:

Hazardous component(s)	Benzenesulfonic acid, C10-13 alkyl derivatives, sodium salts Fatty alcohols, C12-C14, ethoxylated Alcohols, C12-14 (even numbers), ethoxylated < 2.5 EO, sulphates, sodium salts
Hazard pictogram(s)	
Signal word	Danger
Hazard statements	H315 Causes skin irritation. H318 Causes serious eye damage.
Precautionary measures - Prevention - Response	P264 Wash skin thoroughly after handling. P280 Wear protective gloves/protective clothing/eye protection/face protection. P302+P352 IF ON SKIN: Wash with plenty of water. 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/doctor. P332+P313 If skin irritation occurs: Get medical advice/ attention.

2.3 Other hazards

Results of PBT and vPvB assessment	The mixture does not contain any components that can be considered persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.
Endocrine disrupting properties	The mixture does not contain any components believed to have endocrine-disrupting properties according to REACH article 57(f) or Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at level 0.1% or higher.

3. Composition/information on ingredients

3.1	**Substances**	Not relevant (mixture).
3.2	**Mixtures**	Contains:

Name component(s)	weight %	CAS no.	EINECS no.	Index no.	Reach no.	Classification
Benzenesulfonic acid, C10-13 alkyl derivatives, sodium salts	>= 10 - < 20	68411-30-3	270-115-0	-	01-2119489428-22-XXXX	Acute Tox. 4 (oral); H302 Skin Irrit. 2; H315 Eye Dam. 1; H318 Aquatic Chronic 3; H412
Fatty alcohols, C12-C14, ethoxylated	>= 2.5 - < 3	68439-50-9	500-213-3	-	-	Acute Tox. 4 (oral); H302 Eye Dam. 1; H318 Aquatic Chronic 3; H412
Alcohols, C12-14 (even numbers), ethoxylated < 2.5 EO, sulphates, sodium salts	>= 2.5 - < 3	68891-38-3	500-234-8	-	01-2119488639-16-XXXX	Skin Irrit. 2; H315 Eye Dam. 1; H318 Aquatic Chronic 3; H412

The full text of the (EU)H-statements can be found in section 16.

Specific concentration limit, multiplication factor, acute toxicity estimation

Name component(s)	CAS no.	SCL, M-factor, ATE
Benzenesulfonic acid, C10-13 alkyl derivatives, sodium salts	68411-30-3	ATE (oral) = 300.01 mg/kg ATE (dermal) = 2,000.01 mg/kg
Fatty alcohols, C12-C14, ethoxylated	68439-50-9	ATE (oral) = 500 mg/kg ATE (dermal) = 2,000.01 mg/kg
Alcohols, C12-14 (even numbers), ethoxylated < 2.5 EO, sulphates, sodium salts	68891-38-3	SCL: Eye Irrit. 2; H319; 5 - < 10 % Eye Dam. 1; H318; >= 10 %

The full text of the (EU)H-statements can be found in section 16.

4. First aid measures

4.1 Description of first aid measures

General	Remove contaminated clothing immediately.
First aid measures in case of inhalation	Move to fresh air after inadvertent inhalation of vapours. If breathing is irregular or stopped, apply artificial respiration. If unconscious apply stable side position and call for medical aid. If symptoms, consult doctor.
First aid measures in case of skin contact	After contact with skin, wash immediately with plenty of water. If symptoms, consult a doctor.
First aid measures in case of eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 5 minutes. Immediately consult an ophthalmologist. Go to an eye hospital if possible.
First aid measures in case of ingestion	Clean mouth with water and then drink plenty of water. Never let an unconscious person drink (or eat). Put someone lying on their back and vomiting in a stable side position. Call a doctor immediately.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms : See section 11 for more detailed information on health effects and symptoms.
Effects : See section 11 for more detailed information on health effects and symptoms.

4.3	**Indication of any immediate medical attention and special treatment needed**
Treat symptomatically. No further information available.	
5.	**Firefighting measures**
5.1	**Extinguishing media**
Suitable extinguishing media	Use extinguishing agents suitable for local conditions and environment.
Unsuitable extinguishing media	Strong water jet.
5.2	**Special hazards arising from the substance or mixture**
Special exposure hazards	It can develop toxic pyrolysis products during incomplete combustion.
Hazardous combustion products	Carbon monoxide, carbon dioxide (CO2).
5.3	**Advice for firefighters**
Special protective equipment	In case of fire, wear compressed air mask. Wear personal protective clothing.
Special procedures	Collect contaminated firefighting water separately. It must not drain into the sewage system.
6.	**Accidental release measures**
6.1	**Personal precautions, protective equipment and emergency procedures**
Personal precautions	Use personal protective equipment. Keep unprotected persons away. Ensure adequate ventilation. Avoid contact with eyes and skin. Do not inhale vapours or spray mist.
6.2	**Environmental precautions**
Environmental precautions	Do not drain into surface water or the sewerage system. Avoid infiltration into the soil.
6.3	**Methods and material for containment and cleaning up**
Methods for cleaning up	Absorb with liquid-binding material (sand, mountain flour, acid binder, universal binder). Store in suitable and closed containers for disposal. Use mechanical handling equipment. Store in suitable and closed containers for disposal.
Further information	Handle absorbed material as described in the section "Disposal".
6.4	**Reference to other sections**
Emergency contact details	See section 1.
Personal protection	See section 8.
Removal of the waste product	See section 13.
7.	**Handling and storage**
7.1	**Precautions for safe handling**
Handling	Keep in tightly closed container. Ensure adequate ventilation. Avoid formation of aerosol. Use personal protective equipment. Avoid contact with eyes, skin and clothing. Do not inhale vapours or spray mist. Eye showers should be available nearby in case of emergency.

Hygienic measures	Keep away from food, drink and animal feeding stuffs. Do not smoke, eat or drink in the workplace. Wash hands before each work break and at the end of the working day. Remove all soiled clothing immediately.
7.2	**Conditions for safe storage, including any incompatibilities**
Storage	Store tightly closed in a dry and cool place. Store in a well-ventilated place.
Specific demands for storage rooms or vessels	Store in original container.
Advice for mixed storage	Keep away from food, drink and animal feed.
Protection against fire and explosion	Normal measures for preventive fire protection.
Packaging material	There is no information available.
Unsuitable packaging material	There is no information available.
7.3	**Specific end use(s)**
No further relevant information available.	
8. Exposure controls/personal protection	
8.1	**Control parameters**
Occupational exposure limits	The product contains no ingredients for which exposure limits have been established.
Biological limit values	There is no information available.

DNELs

Relevant DNELs of components of the mixture						
Name of agent	**Cas no**	**End-point**	**Threshold level**	**Route of exposure**	**Used in**	**Exposure time**
Benzenesulfonic acid, C10-13 alkyl derivatives, sodium salts	68411-30-3	DNEL	170 mg/kg bw/day	Dermal	Workers	Long-term - systemic effects
		DNEL	12 mg/m³	Inhalation	Workers	Long-term - systemic effects
		DNEL	12 mg/m³	Inhalation	Workers	Long-term - local effects
		DNEL	0.85 mg/kg bw/day	Oral	Consumers	Long-term - systemic effects
		DNEL	85 mg/kg bw/day	Dermal	Consumers	Long-term - systemic effects
		DNEL	3 mg/m³	Inhalation	Consumers	Long-term - systemic effects
		DNEL	3 mg/m³	Inhalation	Consumers	Long-term - local effects
Alcohols, C12-14 (even numbers), ethoxylated < 2.5 EO, sulphates, sodium salts	68891-38-3	DNEL	2,750 mg/kg bw/day	Dermal	Workers	Long-term - systemic effects
		DNEL	175 mg/m³	Inhalation	Workers	Long-term - systemic effects
		DNEL	1,650 mg/kg bw/day	Dermal	Consumers	Long-term - systemic effects
		DNEL	52 mg/m³	Inhalation	Consumers	Long-term - systemic effects
		DNEL	15 mg/kg bw/day	Oral	Consumers	Long-term - systemic effects

PNECs

Relevant PNECs of components of the mixture				
Name of substance	**Cas no**	**End-point**	**Threshold level**	**Environmental compartment**
Benzenesulfonic acid, C10-13 alkyl derivatives, sodium salts	68411-30-3	PNEC	0.268 mg/l	Fresh water
		PNEC	0.0268 mg/l	Marine water
		PNEC	0.0167 mg/l	Intermittent release
		PNEC	8.1 mg/kg dry weight	Freshwater sediments
		PNEC	8.1 mg/kg dry weight	Marine sediments
		PNEC	3.43 mg/l	Sewage treatment
Alcohols, C12-14 (even numbers), ethoxylated < 2.5 EO, sulphates, sodium salts	68891-38-3	PNEC	0.24 mg/l	Fresh water
		PNEC	0.024 mg/l	Marine water
		PNEC	0.071 mg/l	Intermittent release
		PNEC	10,000 mg/l	Sewage treatment
		PNEC	5.45 mg/kg dry weight	Freshwater sediments
		PNEC	0.545 mg/kg dry weight	Marine sediments
		PNEC	0.946 mg/kg dry weight	Soil

8.2	**Exposure controls**
Engineering measures	See protective measures in sections 7 and 8.
Personal protection equipment	
Eye / face protection	Safety dust goggles.
Skin protection	Wear personal protective clothing.
Hand protection	Protective gloves according to EN 374. Observe regulations on permeability and soak time, as supplied by the glove supplier. Also consider specific local conditions of use, such as risk of cuts, abrasion and contact time. Safety gloves should be replaced when worn. Material : butyl rubber. Breakthrough time : > 480 min. Glove thickness : 0.7 mm.
Respiratory protection	If ventilation is inadequate, wear suitable respiratory protection. When aerosol or mist is formed, use suitable respiratory protection. Breathing protection according to EN 141. Filter type A for organic gases and vapours. Filter type: A, brown.
Thermal hazards	There is no information available.
Environmental exposure controls	Do not drain into surface water or the sewerage system. Avoid infiltration into the soil.

9. Physical and chemical properties

9.1	**Information on basic physical and chemical properties**
Physical state	Liquid.
Colour	Pale yellow.
Odour	Nearly odourless.
Odour threshold	Not available.
Melting / freezing point	Approximately -5 °C.
Boiling point / range (1013 hPa)	Not available.
Flammability	Not available.
Explosion limits	Upper explosion limit: not available. Lower explosion limit: not available.
Flash point	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Self-accelerating decomposition temperature	Not available.
pH	8 - 9. Concentration: 100 %.

Dynamic viscosity	200 - 250 mPa.s (20 °C).
Kinematic viscosity	Not available.
Flow time	Not available.
Solubility	Not available.
Decomposition rate	Not available.
Partition coefficient n-octanol/water	Not available.
Dispersion stability	Not available.
Vapour pressure	Not available.
Density or relative density	Density: 1.03 - 1.04 g/cm^3. Relative density: not available.
Bulk density	Not available.
Relative vapour density	Not available.
Particle characteristics	Not available.
9.2	**Other information**
Other information	No further relevant information available.
10. Stability and reactivity	
10.1	**Reactivity**
Reactivity	Reacts with strong acids and oxidising agents.
10.2	**Chemical stability**
Stability	Stable under recommended storage conditions.
10.3	**Possibility of hazardous reactions**
Hazardous reactions	Nothing known.
10.4	**Conditions to avoid**
Conditions to avoid	There is no information available.
10.5	**Incompatible materials**
Materials to avoid	There is no information available.
10.6	**Hazardous decomposition products**
Hazardous decomposition products	There is no information available.

11. Toxicological information	
11.1	**Information on hazard classes as defined in Regulation (EC) No. 1272/2008**
Acute toxicity: inhalation	Based on available data, the classification criteria are not met. *Benzenesulfonic acid, C10-13 alkyl derivatives, sodium salts* Scientific study not necessary *Fatty alcohols, C12-C14, ethoxylated* No data available. *Alcohols, C12-14 (even numbers), ethoxylated < 2.5 EO, sulphates, sodium salts* No data available.
Acute toxicity: dermal	Based on available data, the classification criteria are not met. *Benzenesulfonic acid, C10-13 alkyl derivatives, sodium salts* LD50: > 2,000 mg/kg; rat; Guideline test OECD 402. *Fatty alcohols, C12-C14, ethoxylated* LD50: < 2,000 mg/kg (rat; value according to literature). *Alcohols, C12-14 (even numbers), ethoxylated < 2.5 EO, sulphates, sodium salts* LD50: >2,000 mg/kg (rat; Guideline test OECD 402; value according to literature).
Acute toxicity: oral	Acute toxicity estimates: > 2,000 mg/kg (Calculation Method). Based on available data, the classification criteria are not met. *Benzenesulfonic acid, C10-13 alkyl derivatives, sodium salts* LD50: > 300 - 2,000 mg/kg (rat, male and female; Guideline test OECD 401). Target organs: gastrointestinal tract. *Fatty alcohols, C12-C14, ethoxylated* Harmful if swallowed. *Alcohols, C12-14 (even numbers), ethoxylated < 2.5 EO, sulphates, sodium salts* LD50: 4,100 mg/kg (rat; Guideline test OECD 401).
Skin corrosion / irritation	Causes skin irritation. *Benzenesulfonic acid, C10-13 alkyl derivatives, sodium salts* Causes skin irritation (rabbit; Guideline test OECD 404). *Fatty alcohols, C12-C14, ethoxylated* No skin irritation (rabbit). *Alcohols, C12-14 (even numbers), ethoxylated < 2.5 EO, sulphates, sodium salts* Causes skin irritation (rabbit; Guideline test OECD 404).
Serious eye damage / irritation	Causes serious eye damage. *Benzenesulfonic acid, C10-13 alkyl derivatives, sodium salts* Causes serious eye damage (rabbit; Guideline test OECD 405). *Fatty alcohols, C12-C14, ethoxylated* Causes serious eye damage (rabbit). *Alcohols, C12-14 (even numbers), ethoxylated < 2.5 EO, sulphates, sodium salts* Causes serious eye damage (rabbit; Guideline test OECD 405).

Respiratory or skin sensitisation	Based on available data, the classification criteria are not met. *Benzenesulfonic acid, C10-13 alkyl derivatives, sodium salts* Does not cause skin sensitisation. (Maximalisation test; guinea pig; Guideline test OECD 406). *Fatty alcohols, C12-C14, ethoxylated* Not sensitising (Maximisation test; value according to literature). *Alcohols, C12-14 (even numbers), ethoxylated < 2.5 EO, sulphates, sodium salts* Not sensitising (maximisation test; guinea pig; Guideline test OECD 406).
Germ cell mutagenicity	Based on available data, the classification criteria are not met. *Benzenesulfonic acid, C10-13 alkyl derivatives, sodium salts* In vitro tests showed no mutagenic effects. In vivo tests showed no mutagenic effects. *Fatty alcohols, C12-C14, ethoxylated* Based on available data; classification criteria not met. In vitro tests showed no mutagenic effects. In vivo tests did not reveal mutagenic effects. *Alcohols, C12-14 (even numbers), ethoxylated < 2.5 EO, sulphates, sodium salts* In vitro tests showed no mutagenic effects. Result: negative (bacterial reverse mutation test; Guideline test OECD 471). Result: negative (in vitro gene mutation test in mammalian cells; Guideline test OECD 476). In vivo tests showed no mutagenic effects. Result: negative (test for chromosomal aberrations in mammalian bone marrow cells; Guideline test OECD 475).
Carcinogenicity	Based on available data, the classification criteria are not met. *Benzenesulfonic acid, C10-13 alkyl derivatives, sodium salts* The substance has no genotoxic effects so carcinogenic potential is not expected to show. *Fatty alcohols, C12-C14, ethoxylated* Based on available data; classification criteria not met. *Alcohols, C12-14 (even numbers), ethoxylated < 2.5 EO, sulphates, sodium salts* According to column 2 of Annex VII - X of Regulation (EC) No 1907/2006, the test for this property of the substance does not need to be conducted.
Reproductive toxicity	Based on available data, the classification criteria are not met. *Benzenesulfonic acid, C10-13 alkyl derivatives, sodium salts* Based on available data; classification criteria not met. NOAEL Parent: 350 mg/kg body weight. NOAEL F1: 350 mg/kg body weight. (Rat; oral; Guideline test OECD 416; group contemplation). *Fatty alcohols, C12-C14, ethoxylated* Based on available data; classification criteria not met. NOAEL parent: >250 mg/kg bw/day. NOAEL F1: <250 mg/kg bw/day. (Two-generation reproductive toxicity study; rat; value according to literature).

	Alcohols, C12-14 (even numbers), ethoxylated < 2.5 EO, sulphates, sodium salts Based on available data; classification criteria not met. NOAEL parent: >300 mg/kg bw/day. NOAEL F1: <300 mg/kg bw/day (Two-generation reproductive toxicity study; rat; oral; Guideline test OECD 416).
Teratogenicity	There is no information available. *Benzenesulfonic acid, C10-13 alkyl derivatives, sodium salts* NOAEL teratog. : 300 mg/kg body weight (rat; oral: 20 days). *Fatty alcohols, C12-C14, ethoxylated* NOAEL maternal: 50 mg/kg bw/day (second-generation study: rat; orally; value according to literature). NOAEL maternal: 250 mg/kg bw/day (second-generation study: rat; dermal; value according to literature). *Alcohols, C12-14 (even numbers), ethoxylated < 2.5 EO, sulphates, sodium salts* Based on available data; classification criteria not met. NOAEL: 1,000 mg/kg bw/day (prenatal developmental toxicity study; rat; oral: 10 days; Guideline test OECD 414).
Specific target organ toxicity – single exposure	Based on available data, the classification criteria are not met. *Benzenesulfonic acid, C10-13 alkyl derivatives, sodium salts* The substance or mixture is not classified as specific target organ toxic, single exposure. *Fatty alcohols, C12-C14, ethoxylated* The substance or mixture is not classified as specific target organ toxic, single exposure. *Alcohols, C12-14 (even numbers), ethoxylated < 2.5 EO, sulphates, sodium salts* The substance or mixture is not classified as specific target organ toxic, single exposure.
Specific target organ toxicity – repeated exposure	Based on available data, the classification criteria are not met. *Benzenesulfonic acid, C10-13 alkyl derivatives, sodium salts* The substance or mixture is not classified as specific target organ toxic, repeated exposure. *Fatty alcohols, C12-C14, ethoxylated* The substance or mixture is not classified as specific target organ toxic, repeated exposure. *Alcohols, C12-14 (even numbers), ethoxylated < 2.5 EO, sulphates, sodium salts* The substance or mixture is not classified as specific target organ toxic, repeated exposure.
Aspiration hazard	No information available. *Benzenesulfonic acid, C10-13 alkyl derivatives, sodium salts* Not applicable. *Fatty alcohols, C12-C14, ethoxylated* Not applicable. *Alcohols, C12-14 (even numbers), ethoxylated < 2.5 EO, sulphates, sodium salts* No classification for toxicity by aspiration.
Repeated-dose toxicity	No information available.

	Benzenesulfonic acid, C10-13 alkyl derivatives, sodium salts NOAEL: 125 mg/kg. LOAEL: 250 mg/kg; (Rat; oral: 28 days; target organs: blood, liver, heart, thymus). NOAEL: 40 mg/kg. LOAEL: 115 mg/kg. (Rat; tube feeding: 6 months; target organs: blood, kidney). *Fatty alcohols, C12-C14, ethoxylated.* NOAEL: 50 mg/kg bw/day (rat; oral:24 months; target organs: heart, liver, kidney; symptoms: increase in relative organ weights; value according to literature). *Alcohols, C12-14 (even numbers), ethoxylated < 2.5 EO, sulphates, sodium salts* NOAEL: >225 mg/kg/day (rat; oral: 90 days; Guideline test OECD 408; target organs: liver, gastrointestinal tract; value according to literature).
11.2	**Information on other hazards**
Other hazards	No further relevant information available.
12. Ecological information	
12.1	**Toxicity**
Acute (aquatic) toxicity	Based on available data, the classification criteria are not met.
Chronic (aquatic) toxicity	Based on available data, the classification criteria are not met. *Alcohols, C12-14 (even numbers), ethoxylated < 2.5 EO, sulphates, sodium salts* Harmful to aquatic life with long lasting effects.

Cas no	Name of substance	Aquatic toxicity	Dosis	h/d	Species	Source
68411-30-3	Benzenesulfonic acid, C10-13 alkyl derivatives, sodium salts	Acute; fish	LC50: 1.67 mg/l	96 h	Lepomis macrochirus	Static test; US-EPA
		Acute: daphnia and other aquatic invertebrates	EC50: 2.9 mg/l	48 h	Daphnia magna	Static test; OECD Test Guideline 202
		Acute: algae	EbC50: 47.3 mg/l	72 h	Scenedesmus subspicatus	88/302/EC
		Acute: algae	NOEC: >4 mg/l	28 d	Elodea canadensis	Value according to literature
		Chronic: fish	NOEC: 0.63 mg/l	196 d	Pimephales Promelas	Flow-through test
		Chronic: fish	NOEC: >0.1 – 1 mg/l	28 d	Lepomis macrochirus (Sunfish)	-
		Chronic: aquatic invertebrates	NOEC: 1.41 mg/l	21 d	Daphnia magna (Large water flea)	OECD Test Guideline 211
68439-50-9	Fatty alcohols, C12-C14, ethoxylated	Acute: fish	LC50: >1 – 10 mg/l	96 h	Cyprinus carpio (Carp)	Flow-through test; Guideline test OECD 203
		Acute: daphnia and other aquatic invertebrates	EC50: >1 – 10 mg/l	48 h	Daphnia magna (Large water flea)	Static test; OECD Test Guideline 202
		Acute: algae	EC50: >1 – 10 mg/l	72 h	Desmodesmus subspicatus (Green algae)	Static test; OECD Test Guideline 201
		Acute: bacteria	EC50: 140 mg/l	-	Activated sludge (respiratory inhibition)	Value according to literature
68891-38-3	Alcohols, C12-14 (even numbers), ethoxylated < 2.5 EO, sulphates, sodium salts	Acute; fish	LC50: 7.1 mg/l	96 h	Danio rerio (zebrafish)	Flow-through test; Guideline test OECD 203
		Acute; fish	LC50: >1 – 10 mg/l	-	Brachydanio rerio	Semi-static test; Guideline test OECD 203
		Acute; daphnia and other aquatic invertebrates	EC50: 7.4 mg/l	48 h	Daphnia (Water fly)	Static test; OECD Test Guideline 202
		Acute; algae	EC50: 27.7 mg/l	72 h	Algae	Growth inhibitor; OECD Test Guideline 201
		Acute; algae	EC50: >10 – 100 mg/l	72 h	Desmodesmus subspicatus (Green algae)	Static test; OECD Test Guideline 201
		Acute: bacteria	EC10: >10,000 mg/l	16 h	Pseudomonas putida	Test for inhibition of cell division; ISO 8192
		Chronic: fish	NOEC: 1 mg/l	45 d	Fish	
		Chronic: aquatic invertebrates	NOEC: 0.27 mg/l	21 d	Daphnia magna (Large water flea)	Reproductive toxicity; OECD test guideline 211. Value according to literature

12.2	**Persistence and degradability**
Persistence and degradability	**Persistence** *Benzenesulfonic acid, C10-13 alkyl derivatives, sodium salts* Hydrolysis of the substance is not expected due to its structure. Non-significant photolysis. *Fatty alcohols, C12-C14, ethoxylated* No data available. *Alcohols, C12-14 (even numbers), ethoxylated < 2.5 EO, sulphates, sodium salts* No data available. **Biodegradability** *Benzenesulfonic acid, C10-13 alkyl derivatives, sodium salts* > 60 % (aerobic; exposure time: 28 d; OECD Test Guideline 301 B). Readily biodegradable. *Fatty alcohols, C12-C14, ethoxylated* > 60 % (exposure time: 28 d; OECD Test Guideline 301 B). Readily biodegradable. *Alcohols, C12-14 (even numbers), ethoxylated < 2.5 EO, sulphates, sodium salts* 100 % (exposure time: 28 d). Readily biodegradable.
12.3	**Bioaccumulation**
Bioaccumulation	*Benzenesulfonic acid, C10-13 alkyl derivatives, sodium salts* Log Pow 3.32 (Pimephales promelas (American fathead); 192 d; OECD test guideline 305 E). The product has a low potential for bioaccumulation. *Fatty alcohols, C12-C14, ethoxylated* Bioaccumulation is unlikely. *Alcohols, C12-14 (even numbers), ethoxylated < 2.5 EO, sulphates, sodium salts* Log Pow 0.3. BCF: < 3. The product has a low potential for bioaccumulation.
12.4	**Mobility in soil**
Mobility	*Benzenesulfonic acid, C10-13 alkyl derivatives, sodium salts* Has low mobility. Log Koc: 3.4. *Fatty alcohols, C12-C14, ethoxylated* Adsorption to solid soil phase can be expected. Immobile. *Alcohols, C12-14 (even numbers), ethoxylated < 2.5 EO, sulphates, sodium salts* Medium mobility in soil types.

12.5	**Results of PBT and vPvB assessment**
Evaluation	The mixture does not contain any components that can be considered persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher. *Benzenesulfonic acid, C10-13 alkyl derivatives, sodium salts* This substance is not considered to be persistent, bioaccumulative or toxic (PBT). This substance is considered to be neither very persistent nor very bioaccumulative (vPvB). *Fatty alcohols, C12-C14, ethoxylated* This substance is considered to be neither very persistent nor very bioaccumulative (vPvB)., This substance is considered to be neither persistent, bioaccumulative nor toxic (PBT). *Alcohols, C12-14 (even numbers), ethoxylated < 2.5 EO, sulphates, sodium salts* This substance is not considered to be persistent, bioaccumulative nor toxic (PBT)., This substance is not considered to be very persistent nor very bioaccumulative (vPvB).
12.6	**Endocrine disrupting properties**
Endocrine disrupting potential	The mixture does not contain any components believed to have endocrine-disrupting properties according to REACH article 57(f) or Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at level 0.1% or higher. *Benzenesulfonic acid, C10-13 alkyl derivatives, sodium salts* No information available on endocrine disrupting properties for the environment. *Fatty alcohols, C12-C14, ethoxylated* No information available on endocrine disrupting properties for the environment. *Alcohols, C12-14 (even numbers), ethoxylated < 2.5 EO, sulphates, sodium salts* No information available on endocrine disrupting properties for the environment.
12.7	**Other adverse effects**
Additional ecological information	Do not drain into surface water or the sewerage system. Avoid infiltration into soil. *Benzenesulfonic acid, C10-13 alkyl derivatives, sodium salts* Do not allow to enter surface water or sewage system. Avoid infiltration into soil. *Fatty alcohols, C12-C14, ethoxylated* Do not allow to enter surface water or sewage system. Avoid infiltration into soil. *Alcohols, C12-14 (even numbers), ethoxylated < 2.5 EO, sulphates, sodium salts* Do not discharge into surface water or drains. Avoid infiltration into soil.
13.	**Disposal considerations**
13.1	**Waste treatment methods**
Waste from residues / unused products	Disposal together with normal waste is prohibited. Special disposal is required according to local regulations. Do not allow product to enter sewage system. Contact waste disposal service.

European list of waste products	A waste code according to the European Waste Catalogue cannot be assigned for this product, as the intended use dictates the assignment. The waste code is determined in consultation with the regional waste disposal authority.
Removal of contaminated packaging	Empty used packaging thoroughly. Packaging can be reused after thorough cleaning. If reuse is not possible, dispose of according to local regulations.

14. Transport information

14.1	**UN-number**
UN-number	No dangerous good according to ADR/RID/ADN/IMDG/ICAO-IATA regulations.
14.2	**UN proper shipping name**
ADR/RID/ADN name	No dangerous good according to ADR/RID/ADN regulations.
IMDG name	No dangerous good according to IMDG regulations.
IATA name	No dangerous good according to ICAO-IATA regulations.
14.3	**Transport hazard class(es)**
Class	Not applicable.
14.4	**Packing group**
Packing group	Not applicable.
14.5	**Environmental hazards**
Environmentally hazard	Not applicable.
Marine pollutant	Not applicable.
14.6	**Special precautions for user**
Not applicable.	
14.7	**Maritime transport in bulk according to IMO instruments**
Not applicable for product, as supplied.	

15. Regulatory information

15.1	**Safety, health and environmental regulations/legislation specific for the substance or mixture**
Relevant EU rule(s)	*Benzenesulfonic acid, C10-13 alkyl derivatives, sodium salts* Directive 2012/18/EU (SEVESO III) Annex I: Substance/mixture not subject to this legislation. *Fatty alcohols, C12-C14, ethoxylated* Directive 2012/18/EU (SEVESO III) Annex I: Substance/mixture is not subject to this legislation. *Alcohols, C12-14 (even numbers), ethoxylated < 2.5 EO, sulphates, sodium salts* Directive 2012/18/EU (SEVESO III) Annex I: Substance/mixture is not subject to this legislation.
National regulations	*Netherlands* ABM: B (3).

15.2	**Chemical Safety Assessment**
The chemical safety assessment of substances in this mixture has been carried out. A chemical safety assessment is not required for this substance.	

16. Other information	
Indication of changes (revised safety data sheet	Alignment to regulation. Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU. Adjustment UFI and company name.
Sources of used key data	This information is based on the currently available information (Producer(s)). See also the website: https://echa.europa.eu/information-on-chemicals/registered-substances
(EU)H-statement(s)	H302 Harmful if swallowed. H315 Causes skin irritation. H318 Causes serious eye damage. H412 Harmful to aquatic life with long lasting effects.
Classification procedure	The classification for human health, physical and chemical risks and environmental hazards were derived from a combination of calculation methods and, where available, test data.
List of abbreviations and acronyms	ABM: General Assessment Methodology (aquatic toxicity of substances). Acute Tox.: Acute Toxicity. ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways. ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road. ADR/RID/ADN: Agreements concerning the International Carriage of Dangerous Goods by Road/Rail/Inland Waterways. Aquatic Chronic: Hazardous to the aquatic environment (chronic). ATE: Acute toxicity estimate. BCF: Bio-concentration factor. Bw: Bodyweight. CAS: Chemical Abstracts Service. CLP: Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008. DGR: Dangerous Goods Regulations. DNEL: Derived No Effect Level. DMEL: Derived Minimal Effect Level. EbC50: Concentration resulting in 50% reduction in biomass growth. EC50: Median Effective Concentration. EC-No.: The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digit EC number, an identifier of substances commercially available within the EU (European Union). EINECS: European Inventory of Existing Commercial Chemical Substances. ELINCS: European List of Notified Chemical Substances. Eye Dam.: Serious eye damage. GHS: Globally Harmonized System of Classification and Labelling of Chemicals. IATA: International Air Transport Association (provisions concerning the international carriage of dangerous goods by air). IATA/DGR: Dangerous Goods Regulations (DGR) for the air transport (IATA). IBC-code: International code for the construction and equipment of ships carrying hazardous chemicals in large quantities. ICAO: International Civil Aviation Organization. ICAO-TI: Technical instructions for the safe transport of dangerous goods by air. IMDG: International Maritime Dangerous Goods Code. LC50: Concentration leading to death in 50 % of a test population. LD50: Dose leading to death in 50 % of a test population. LOAEL: Lowest level of a substance at which adverse effects have been observed.

	Log Koc: Organic carbon-water partition coefficient. Log KOW: n-Octanol/water. Log Pow: n-Octanol/water. M-factor: Multiplication factor. NOAEL: Largest concentration or amount at which no observable adverse effects occur in an exposed population. NOEC: No Observed Effect Concentration. OECD: Organisation for Economic Cooperation and Development. PBT: Persistent, Bioaccumulative and Toxic substance. PNEC: Predicted No Effect Concentration. REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006. RID: Regulations concerning the International Carriage of Dangerous Goods by Rail. SCL: Specific concentration limit. Skin Irrit.: Skin irritation. TRGS: Technical regulations for hazardous substances. VOC: Volatile organic compounds. vPvB: Very persistent and very bioaccumulative.
Training recommendations	Workers should be regularly trained on the safe handling of the products based on the information provided in the safety data sheet and local workplace conditions information. National regulations for training workers in the handling of hazardous substances must be observed.

This information is to our knowledge correct and complete on the date of issue of this safety data sheet. The information only concerns the product and does not give any guarantee for the quality and the completeness of the properties of the product, or in case of mixing or using in any other process. It remains the responsibility of the user to assure himself that the information is suitable and complete concerning the special use he makes of the product.
Hofman Animal Care B.V. denies all responsibility for loss or damage resulting from the use of these data.

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