SAFETY DATA SHEET

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

1.1. Product identifier

Trade name

Bio-Clean Drivhusrens

Product no.

REACH registration number

Not applicable

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

Relevant identified uses of the substance or mixture

PC35 Washing and cleaning products

Uses advised against

The full text of any mentioned and identified use categories are given in section 16

1.3. Details of the supplier of the safety data sheet

Company and address

Pro-Ino ApS

Bollegade 44

9330 Dronninglund

Tlf 26183517

Contact person

Jens Hansen

E-mail

Tekkoplex@gmail.com

SDS date

2017-08-09

SDS Version

4.0

1.4. Emergency telephone number

Contact The National Poisons Information Service (dial 111, 24 h service). See section 4 "First aid measures".

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Not classified according to Regulation (EC) No. 1272/2008 (CLP)

2.2. Label elements

Hazard pictogram(s)

Signal word

Hazard statement(s)

Safety statement(s)

General Prevention Response Storage Disposal

Identity of the substances primarily responsible for the major health hazards

2.3. Other hazards

Additional labelling

Safety data sheet available on request. (EUH210)

Additional warnings

VOC

SECTION 3: Composition/information on ingredients

▼3.1/3.2. Substances/Mixtures

Poly(oxy-1,2-ethanediyl), alpha-tridecyl-omega-hydroxy-, branched NAME:

IDENTIFICATION NOS.: CAS-no: 69011-36-5 EC-no: - REACH-no: 02-2119552461-55-0000

CONTENT: 2.5 - <5%

CLP CLASSIFICATION: Acute Tox. 4, Eye Dam. 1

H302, H318

NAME: urinstof

IDENTIFICATION NOS.: CAS-no: 57-13-6 EC-no: 200-315-5

CONTENT: 1 - <2.5% CLP CLASSIFICATION:

NAMF: Alanine, N,N,-bis(carbxymethyl)-, trisodium salt

IDENTIFICATION NOS.: CAS-no: 164462-16-2 EC-no: 423-270-5 REACH-no: 01-0000016977-53

CONTENT: CLP CLASSIFICATION: Met. Corr. 1 H290

NAME: Alkyl ether sulfate C12-14, sodium salt

CAS-no: 68891-38-3 EC-no: 500-234-8 REACH-no: 01-2119488639-16 **IDENTIFICATION NOS.:**

2119488639-16 CONTENT: 1 - < 2.5%

CLP CLASSIFICATION: Skin Irrit. 2, Eye Dam. 1, Aquatic Chronic 3

H315, H318, H412

(*) See full text of H-phrases in section 16. Occupational exposure limits are listed in section 8, if these are available.

Other information

ATEmix(inhale, vapour) > 20 ATEmix(inhale, dust/mist) > 20 ATEmix(inhale, dust/mist) > 20000 ATEmix(dermal) > 2000 ATEmix(oral) > 2000 Eye Cat. 2 Sum = Sum(Ci/S(G)CLi) = 0.4584 - 0.6876Skin Cat. 2 Sum = Sum(Ci/S(G)CLi) = 0.0952 - 0.1428

N chronic (CAT 4) Sum = Sum(Ci/(M(chronic)i*25)*0.1*10^CAT4) = 0,038016 - 0,057024

Detergent:

< 5%: NON-IONIC SURFACTANTS, UREA, TRISODIUM DICARBOXYMETHYL ALANINATE, ANIONIC SURFACTANTS

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

In the case of accident: Contact a doctor or casualty department – take the label or this safety data sheet. The doctor can contact The National Poisons Information Service (dial 111, 24 h service). Contact a doctor if in doubt about the injured person's condition or if the symptoms persist. Never give an unconscious person water or other drink.

Inhalation

Bring the person into fresh air and stay with him.

Immediately remove contaminated clothing and shoes. Ensure that skin, which has been exposed to the material, is washed thoroughly with soap and water. Skin cleanser can be used. DO NOT use solvents or thinners.

▼Eye contact

Remove contact lenses. Flush eyes immediately with plenty of water or isotonic water (20-30°C) for at least 15 minutes and continue until irritation stops. Make sure to flush under the upper and lower eyelids. If irritation continues, contact a doctor. Continue flushing during transport.

Ingestion

Provide plenty of water for the person to drink and stay with him/her. In case of malaise, seek medical advice immediately and bring the safety data sheet or label from the product. Do not induce vomiting, unless recommended by the doctor. Have the victim lean forward with head down to avoid inhalation of- or choking on vomited material.

Burns

Not applicable

V4.2. Most important symptoms and effects, both acute and delayed

Nothing special

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

Nothing special

Information to medics

Bring this safety data sheet.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Recommended: alcohol-resistant foam, carbonic acid, powder, water mist. Waterjets should not be used, since they can spread the fire.

5.2. Special hazards arising from the substance or mixture

If the product is exposed to high temperatures, e.g. in the event of fire, dangerous catabolic substances are produced. These are: Nitrogen oxides. Carbon oxides. Fire will result in dense black smoke. Exposure to combustion products may harm your health. Fire fighters should wear appropriate protection equipment. Closed containers, which are exposed to fire, should be cooled with water. Do not allow fire-extinguishing water to enter the sewage system and nearby surface waters.

▼5.3. Advice for firefighters

No specific requirements.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

No specific requirements.

6.2. Environmental precautions

No specific requirements.

6.3. Methods and material for containment and cleaning up

Use sand, sawdust, earth, vermiculite, diatomaceous earth to contain and collect non-combustible absorbent materials and place in container for disposal, according to local regulations. To the extent possible cleaning is performed with normal cleaning agents. Avoid use of solvents.

6.4. Reference to other sections

See section on "Disposal considerations" in regard of handling of waste. See section on 'Exposure controls/personal protection' for protective measures.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Smoking, storage of tobacco, consumption and storage of food or liquids are not allowed in the workrooms. See section on 'Exposure controls/personal protection' for information on personal protection.

7.2. Conditions for safe storage, including any incompatibilities

Always store in containers of the same material as the original container. Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

Storage temperature

No data available.

7.3. Specific end use(s)

This product should only be used for applications quoted in section 1.2

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

OEL

No substances are listed in The Control of Substances Hazardous to Health Regulations with an occupational exposure limit.

VDNEL / PNEC

PNEC (Alanine, N,N,-bis(carbxymethyl)-, trisodium salt): > 200 mg/l

Exposure: Activated Sludge Plant

Remarks: EC 50 0,5 h

PNEC (Poly(oxy-1,2-ethanediyl), alpha-tridecyl-omega-hydroxy-, branched): >10.000 mg/l

Exposure: Activated Sludge Plant Duration of Exposure: Single

PNEC (Alkyl ether sulfate C12-14, sodium salt): >100 mg/l

Exposure: Activated Sludge Plant Remarks: EC0, OECD 209

8.2. Exposure controls

Control is unnecessary if the product is used as intended.

General recommendations

Smoking, eating and drinking are not allowed in the work premises

Exposure scenarios

In the event exposure scenarios are appended to the safety data sheet, the operational conditions and risk management measures in these shall be complied with.

Exposure limits

Occupational exposure limits have not been defined for the substances in this product.

Appropriate technical measures

Apply standard precautions during use of the product. Avoid inhalation of gas or dust.

Hygiene measures

In between use of the product and at the end of the working day all exposed areas of the body must be washed thoroughly. Always wash hands, forearms and face.

Measures to avoid environmental exposure

No specific requirements.

Individual protection measures, such as personal protective equipment



Generally

Use only CE marked protective equipment.

Respiratory Equipment

No specific requirements.

Skin protection

No specific requirements.

Hand protection

Recommended: Nitrile rubber. Breakthrough time: > 480 minutes (Class 6)

Eye protection

No specific requirements.

SECTION 9: Physical and chemical properties

▼9.1. Information on basic physical and chemical properties

Form Liquid Colour Clear Odour Pleasant

Odour threshold (ppm)

No data available.

pH 9,8

Viscosity (40°C) No data available.

Density (g/cm³) 1,02

Phase changes

Melting point (°C)

Boiling point (°C)

Vapour pressure

Decomposition temperature (°C)

Evaporation rate (n-butylacetate = 100)

No data available.

No data available.

No data available.

No data available.

Data on fire and explosion hazards

Flash point (°C)

Ignition (°C)

Auto flammability (°C)

Explosion limits (% v/v)

No data available.

No data available.

No data available.

No data available.

Explosive properties

Solubility

Solubility in water

n-octanol/water coefficient

9.2. Other information

Solubility in fat (g/L) pH=8 i 1% opl.

No data available.

No data available.

Soluble

No data available.

SECTION 10: Stability and reactivity

10.1. Reactivity

No data available

10.2. Chemical stability

The product is stable under the conditions, noted in the section "Handling and storage".

▼ 10.3. Possibility of hazardous reactions

Nothing special

10.4. Conditions to avoid

Do not expose to any forms of heat (e.g. solar radiation). May lead to excess pressure.

10.5. Incompatible materials

Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

10.6. Hazardous decomposition products

The product is not degraded when used as specified in section 1.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

Substance	Species	Test	Route of exposure	Result
Alkyl ether sulfate C12-14, so	Rat	LD50	Oral	>5000 mg/l
Alkyl ether sulfate C12-14, so	Rat	LD50	Dermal	>5000 mg/l
Alanine, N,N,-	Rat	LD50	Oral	> 4000 mg/kg
bis(carbxymethyl	Rat	LD50	Dermal	> 4000 mg/kg
Alanine, N,N,-	Rabbit	LC50	Oral	> 5 mg/l
bis(carbxymethyl	Rat	LD50	Dermal	8471 mg/kg
Alanine, N,N,-	Rat	LD50	Oral	14300 mg/kg
bis(carbxymethyl	Rat	LD50	Oral	500-2000 mg/kg

urinstof urinstof

Poly(oxy-1,2-ethanediyl), alph...

▼Skin corrosion/irritation

Data on substance: Poly(oxy-1,2-ethanediyl), alpha-tridecyl-omega-hydroxy-, branched

Test: OECD Guideline 404

Organism: Rabbit Result: Not irritating

Data on substance: Alkyl ether sulfate C12-14, sodium salt

Test: OECD Guideline 404

Organism: Rabbit Result: Irritation

Data on substance: urinstof **Serious eye damage/irritation**

Data on substance: Alkyl ether sulfate C12-14, sodium salt

Test: OECD Guideline 404

Organism: Rabbit Result: Irritation

Data on substance: urinstof

Data on substance: Poly(oxy-1,2-ethanediyl), alpha-tridecyl-omega-hydroxy-, branched

Test: OECD Guideline 404

Organism: Rabbit Result: Irritating

Respiratory or skin sensitisation

No data available. Data on substance: Alkyl ether sulfate C12-14, sodium salt

Organism: Mouse Result: No sensitisation Germ cell mutagenicity

Data on substance: Alkyl ether sulfate C12-14, sodium salt

No adverse effect observed.

Data on substance: Alanine, N,N,-bis(carbxymethyl)-, trisodium salt

No adverse effect observed.

Data on substance: urinstof No adverse effect observed.

Data on substance: Poly(oxy-1,2-ethanediyl), alpha-tridecyl-omega-hydroxy-, branched

No adverse effect observed.

Carcinogenicity

Data on substance: Alkyl ether sulfate C12-14, sodium salt

No adverse effect observed.

Data on substance: Alanine, N,N,-bis(carbxymethyl)-, trisodium salt

No adverse effect observed.

Data on substance: urinstof No adverse effect observed.

Data on substance: Poly(oxy-1,2-ethanediyl), alpha-tridecyl-omega-hydroxy-, branched

No adverse effect observed.

Reproductive toxicity

Data on substance: Alkyl ether sulfate C12-14, sodium salt

No adverse effect observed.

Data on substance: Alanine, N,N,-bis(carbxymethyl)-, trisodium salt

No adverse effect observed.

Data on substance: urinstof No adverse effect observed.

Data on substance: Poly(oxy-1,2-ethanediyl), alpha-tridecyl-omega-hydroxy-, branched

No adverse effect observed.

STOT-single exposure

No data available.

STOT-repeated exposure

No data available.

Aspiration hazard

Data on substance: Alkyl ether sulfate C12-14, sodium salt

No adverse effect observed. Data on substance: urinstofData on substance: Poly(oxy-1,2-ethanediyl), alpha-tridecyl-omega-hydroxy-, branched

No adverse effect observed.

▼Long term effects

Nothing special

SECTION 12: Ecological information

12.1. Toxicity

Substance	Species	Test	Duration	Result
Alkyl ether sulfate C12-14, so	Fish	LC50	96 h	10-100 mg/l
Alkyl ether sulfate C12-14, so	Daphnia	EC50	48 h	10-100 mg/l
Alkyl ether sulfate C12-14, so	Algae	EC50	72 h	>100 mg/l
Alkyl ether sulfate C12-14, so	Fish	NOEC		1-10 mg/l
Alkyl ether sulfate C12-14, so	Daphnia	NOEC		0,1-1 mg/l
Alanine, N,N,-	Fish	LC50	96 h	> 200 mg/l
bis(carbxymethyl	Crustacean	EC50	48 h	> 200 mg/l
Alanine, N,N,-	Algae	EC50	72 h	> 200 mg/l
bis(carbxymethyl	Fish	LC50	96 h	>6810 mg/l
Alanine, N,N,-	Daphnia	EC50	24 h	>10000 mg/l

According to EC-Regulation 2015/830

bis(carbxymethyl	Algae	EC50	8 days	>10000 mg/l
urinstof	Fish	LC50	96 h	1-10 mg/l
urinstof	Algae	EC50	72 h	1-10 mg/l
urinstof	Daphnia	EC50	48 h	1-10 mg/l
				•

Poly(oxy-1,2-ethanediyl), alph... Poly(oxy-1,2-ethanediyl), alph... Poly(oxy-1,2-ethanediyl), alph...

12.2. Persistence and degradability

Substance	Biodegradability	Test	Result
Alkyl ether sulfate C12-14, so Alanine, N,N,- bis(carbxymethyl urinstof Poly(oxy-1,2-ethanediyl), alph	Yes Yes Yes Yes	Closed Bottle Test No data available DOC Die-Away Test CO2 Evolution Test	>60% No data available >70% >60%

12.3. Bioaccumulative potential

Substance	Potential bloaccumulation	LogPow	BCF
Alkyl ether sulfate C12-14, so Alanine, N,N,- bis(carbxymethyl urinstof Poly(oxy-1.2-ethanediyl), alph	No No No No	0,3 No data available -1,59 No data available	No data available No data available No data available No data available

12.4. Mobility in soil

Alkyl ether sulfate C12-14, so...: Log Koc= 0,31597, Calculated from LogPow (High mobility potential.). urinstof: Log Koc= -1,180721, Calculated from LogPow (High mobility potential.).

▼ 12.5. Results of PBT and vPvB assessment

This mixture/product does not contain any substances considered to meet the criteria classifying them as PBT and/or vPvB.

12.6. Other adverse effects

This product contains substances, which due to poor biodegradability, may cause adverse long-term effects to the aquatic environment,

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product is not covered by regulations on dangerous waste.

Waste

EWC code

20 01 30 detergents other than those mentioned in 20 01 29

Specific labelling

Contaminated packing

No specific requirements.

SECTION 14: Transport information

14.1 - 14.4

Not dangerous goods according to ADR, IATA and IMDG.

ADR/RID

14.1. UN number

14.2. UN proper shipping name

14.3. Transport hazard
class(es)

14.4. Packing group

Notes

Tunnel restriction code

IMDG

UN-no. Proper Shipping Name Class PG* EmS MP** Hazardous constituent -

IATA/ICAO

UN-no. Proper Shipping Name Class PG* -

14.5. Environmental hazards

14.6. Special precautions for user

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

No data available

- (*) Packing group
- (**) Marine pollutant

SECTION 15: Regulatory information

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

Restrictions for application

Demands for specific education

-

Additional information

The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.

Sources

Regulation (EC) No 648/2004 of the European Parliament and of the Council of 31 March 2004 on detergents.

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 (CLP).

EC regulation 1907/2006 (REACH).

15.2. Chemical safety assessment

No

SECTION 16: Other information

Full text of H-phrases as mentioned in section 3

H290 - May be corrosive to metals.

H302 - Harmful if swallowed.

H315 - Causes skin irritation.

H318 - Causes serious eye damage.

H412 - Harmful to aquatic life with long lasting effects.

The full text of identified uses as mentioned in section 1

Additional label elements

Other

In accordance with Regulation (EC) No. 1272/2008 (CLP) the evaluation of the classification of the mixture is based on:

The classification of the mixture in regard of physical hazards has been based on experimental data. It is recommended to hand over this safety data sheet to the actual user of the product. Information in this safety data sheet cannot be used as a product specification.

The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is not necessarily correct for use with other chemicals/products.

A change (in proportion to the last essential change (first cipher in SDS version, see section 1)) is marked with a blue triangle.

The safety data sheet is validated by

According to EC-Regulation 2015/830

CHC
Date of last essential change
(First cipher in SDS version)
2016-10-31
Date of last minor change
(Last cipher in SDS version)
2016-10-31

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