

SAFETY DATA SHEET

FC50

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

1.1. Product identifier

Trade name

FC50

Product no.

8072

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

Relevant identified uses of the substance or mixture

Cleaning product

Product code (A.I.S.E.)

AISE-P104 / Conditioner (softner/starch). Automatic process.

AISE-P105 / Conditioner (softner/starch). Semi automatic process.

AISE-P106 / Conditioner (softner/starch). Manual process.

Use descriptors (REACH)

Sectors of use	Description
LCS "C"	Consumer uses: Private households (= general public = consumers)
LCS "PW"	Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
Product category	Description
PC 35	Washing and Cleaning Products (including solvent based products)
Process category	Description
PROC 1	Use in closed PROC ess, no likelihood of exposure

EuPCS

PC-DET-2.6 / Rinse agents for laundry (excludes biocidal products)

Uses advised against

None known.

1.3. Details of the supplier of the safety data sheet

Company and address

Protox ApS

Fabriksvej 19

6000 Kolding

Denmark

+45 75 50 40 22

E-mail

info@protox.dk

▼ Revision

04/06/2026

▼ SDS Version

2.0

▼ Date of previous version

28/01/2026 (1.0)

1.4. Emergency telephone number

Contact the poison hotline: +45 82 12 12 12 (24 hour service)

See section 4 "First aid measures".

SECTION 2: Hazards identification

Classified according to Regulation (EC) No. 1272/2008 (CLP).

2.1. Classification of the substance or mixture

Aquatic Chronic 3; H412, Harmful to aquatic life with long lasting effects.

2.2. ▼ Label elements

Hazard pictogram(s)

Not applicable.

Signal word

Not applicable.

Hazard statement(s)

Harmful to aquatic life with long lasting effects. (H412)

Precautionary statement(s)

General

Not applicable.

Prevention

Avoid release to the environment. (P273)

Response

Not applicable.

Storage

Not applicable.

Disposal

Dispose of contents/container in accordance with local regulation. (P501)

▼ Hazardous substances

Contains no substances that need to be listed on the label.

Additional labelling

▼ Labelling of contents according to Detergents Regulation (EC) No 648/2004 (applicable to packaging of detergents sold to the general public)

< 5%

- Cationic surfactants
- Non-ionic surfactants
- Soap
- Preservation agent (BENZISOTHIAZOLINONE)
- Preservation agent (METHYLISOTHIAZOLINONE)

2.3. Other hazards

Additional warnings

This mixture/product does not contain any substances known to fulfil the criteria for PBT and vPvB classification.

This product does not contain any substances considered to be endocrine disruptors in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2023/707.

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable. This product is a mixture.

3.2. ▼ Mixtures

Product/substance	Identifiers	% w/w	Classification	Note
ALCOHOLS, C12-14, ETHOXYLATED, PROPOXYLATED	CAS No.: 68439-51-0 EC No.: 614-484-1 REACH: Polymer Index No.:	3-5%	Aquatic Chronic 3, H412	[19]

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

citric acid	CAS No.: 77-92-9 EC No.: 201-069-1 REACH: 01-2119457026-42-xxxx Index No.: 607-750-00-3	1-3%	Eye Irrit. 2, H319 STOT SE 3, H335
Quaternary ammonium compounds, di-C8-10-alkyldimethyl, chlorides	CAS No.: 68424-95-3 EC No.: 270-331-5 REACH: 01-2120769330-57-XXXX Index No.:	<1%	Acute Tox. 4, H302 Acute Tox. 3, H311 Skin Corr. 1B, H314 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410 (M=1)
1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one	CAS No.: 2634-33-5 EC No.: 220-120-9 REACH: 01-2120761540-60-xxxx Index No.: 613-088-00-6	<0.0001%	Acute Tox. 4, H302 (450.0 mg/kg bw) Skin Irrit. 2, H315 Skin Sens. 1A, H317 (C ≥ 0.036%) Eye Dam. 1, H318 Acute Tox. 2, H330 Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410 (M=1)
2-methylisothiazol-3(2H)-one	CAS No.: 2682-20-4 EC No.: 220-239-6 REACH: 01-2120764690-50-XXXX Index No.: 613-326-00-9	<0.0001%	EUH071 Acute Tox. 3, H301 Acute Tox. 3, H311 Skin Corr. 1B, H314 Skin Sens. 1A, H317 (C ≥ 0.0015%) Eye Dam. 1, H318 Acute Tox. 2, H330 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410 (M=1)

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

Other information

[19] UVCB = Unknown or variable composition, complex reaction products or of biological materials

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. 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

Upon breathing difficulties or irritation of the respiratory tract: Bring the person into fresh air and stay with him/her.

Skin contact

Remove contaminated clothing and shoes immediately. Ensure to wash exposed skin thoroughly with water and soap. Skin cleanser can be used. DO NOT use solvents or thinners.

Eye contact

If in eyes: Flush eyes with water or saline water (20-30 °C) for at least 5 minutes. Remove contact lenses. Seek medical assistance and continue flushing during transport.

Ingestion

If the person is conscious, rinse the mouth with water and stay with the person. Never give the person anything to drink.

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 person lean forward with head down to avoid inhalation of or choking on vomited material.

Burns

Not applicable.

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

None known.

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

Treat symptomatically.

Information to medics

Bring this safety data sheet or the label from this product.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Not applicable.

5.2. Special hazards arising from the substance or mixture

Fire will result in dense smoke. Exposure to combustion products may harm your health. 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.

If the product is exposed to high temperatures, e.g. in the event of fire, dangerous decomposition compounds are produced. These are:

Nitrogen oxides (NO_x)

Carbon oxides (CO / CO₂)

5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective clothing to prevent contact. Upon direct exposure contact the chemical emergency services on 72 85 20 00 (24 h service) in order to obtain further advice.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation, especially in confined areas.

Contaminated areas may be slippery.

6.2. Environmental precautions

Avoid discharge to lakes, streams, sewers, etc. In the event of leakage to the surroundings, contact local environmental authorities.

6.3. Methods and material for containment and cleaning up

Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations.

Wherever possible cleaning should be performed with normal cleaning agents. Avoid use of solvents.

6.4. Reference to other sections

See section 13 "Disposal considerations" on handling of waste.

See section 8 "Exposure controls/personal protection" for protective measures.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

It is recommended to install waste collection trays in order to prevent emissions to the waste water system and surrounding environment.

Smoking, drinking and consumption of food is not allowed in the work area.

See section 8 "Exposure controls/personal protection" for information on personal protection.

7.2. Conditions for safe storage, including any incompatibilities

Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

Recommended storage material

Keep only in original packaging.

Storage conditions

> 0°C

Incompatible materials

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

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

2,2',2''-nitrilotriethanol

Long term exposure limit (8 hours) (mg/m³): 3,1

Long term exposure limit (8 hours) (ppm): 0,5

Short term exposure limit (15 minutes) (mg/m³): 6,2

Short term exposure limit (15 minutes) (ppm): 1

Statutory order 1356 on exposure limits for substances and mixtures (19/11/2025)

▼ DNEL

1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one

Duration:	Route of exposure:	DNEL:
Long term – Systemic effects - General population	Dermal	345 µg/kg bw/day
Long term – Systemic effects - Workers	Dermal	966 µg/kg bw/day
Long term – Systemic effects - General population	Inhalation	1.2 mg/m ³
Long term – Systemic effects - Workers	Inhalation	6.81 mg/m ³

2-methylisothiazol-3(2H)-one

Duration:	Route of exposure:	DNEL:
Long term – Local effects - General population	Inhalation	21 µg/m ³
Long term – Local effects - Workers	Inhalation	21 µg/m ³
Short term – Local effects - General population	Inhalation	43 µg/m ³
Short term – Local effects - Workers	Inhalation	43 µg/m ³
Long term – Systemic effects - General population	Oral	27 µg/kg bw/day
Short term – Systemic effects - General population	Oral	53 µg/kg bw/day

▼ PNEC

1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one

Route of exposure:	Duration of Exposure:	PNEC:
Freshwater		4.03 µg/L
Freshwater sediment		49.9 µg/kg
Intermittent release (freshwater)		1.1 µg/L
Intermittent release (marine water)		110 ng/L
Marine water		403 ng/L
Marine water sediment		4.99 µg/kg
Sewage treatment plant		1.03 mg/L
Soil		3 mg/kg

2-methylisothiazol-3(2H)-one

Route of exposure:	Duration of Exposure:	PNEC:
Freshwater		3.39 µg/L
Intermittent release (freshwater)		3.39 µg/L
Intermittent release (marine water)		3.39 µg/L

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

Marine water	3.39 µg/L
Sewage treatment plant	230 µg/L
Soil	47.1 µg/kg

8.2. Exposure controls

Compliance with the given occupational exposure limits values should be controlled on a regular basis.

General recommendations

Smoking, drinking and consumption of food is not allowed in the work area.

Exposure scenarios

There are no exposure scenarios implemented for this product.

Exposure limits

Professional users are subjected to the legally set maximum concentrations for occupational exposure. See occupational hygiene limit values above.

Appropriate technical measures

The formation of vapours must be kept at a minimum and below current limit values (see above). Installation of a local exhaust system if normal air flow in the work room is not sufficient is recommended. Ensure eyewash and emergency showers are clearly marked.

Apply standard precautions during use of the product. Avoid inhalation of vapours.

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. Pay special attention to hands, forearms and face.

Measures to avoid environmental exposure

Keep damming materials near the workplace. If possible, collect spillage during work.

Individual protection measures, such as personal protective equipment

Generally

In the event the work process is within scope of the Danish statutory order on work with code numbered products (Work Inspectorate Order no. 302/1993), then personal protection equipment shall be selected as set out herein. If applicable, please refer to the code number of this product in section 15.

Use only CE marked protective equipment.

Respiratory Equipment

Type	Class	Colour	Standards
No specific requirements			

Skin protection

Recommended	Type/Category	Standards
No specific requirements.	-	-

Hand protection

Work situation	Material	Glove thickness (mm)	Breakthrough time (min.)	Standards
When there is risk of splash- / intermittent exposure	Latex	0.4	-	EN374-2, EN388



Eye protection

Work situation	Type	Standards
When there is risk of splash- / intermittent exposure	Safety glasses with side shields.	EN166



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state

Liquid

Colour

Colourless

Odour / Odour threshold

Characteristic

pH

9

Density (g/cm³)

1.001 (20 °C)

Kinematic viscosity

No data available

Particle characteristics

Not applicable

Phase changes

Melting point/Freezing point (°C)

No data available

Softening point/range (°C)

Does not apply to liquids.

Boiling point (°C)

No data available

Vapour pressure

No data available

Relative vapour density

No data available

Decomposition temperature (°C)

No data available

Data on fire and explosion hazards

Flash point (°C)

No data available

Flammability (°C)

The material is not combustible.

Auto-ignition temperature (°C)

No data available

Lower and upper explosion limit (% v/v)

No data available

Solubility

Solubility in water

Completely soluble

n-octanol/water coefficient (LogKow)

No data available

Solubility in fat (g/L)

No data available

9.2. Other information

Sensitivity to shock

No

Evaporation rate (n-butylacetate = 100)

No data available

Other physical and chemical parameters

No data available.

Oxidizing properties

Not applicable

SECTION 10: Stability and reactivity

10.1. Reactivity

No data available.

10.2. Chemical stability

The product is stable under the conditions, noted in section 7 "Handling and storage".

10.3. Possibility of hazardous reactions

None known.

10.4. Conditions to avoid

None known.

10.5. Incompatible materials

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

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

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

▼ Acute toxicity

Based on available data, the classification criteria are not met.

▼ Skin corrosion/irritation

Based on available data, the classification criteria are not met.

▼ Serious eye damage/irritation

Based on available data, the classification criteria are not met.

▼ Respiratory sensitization

Based on available data, the classification criteria are not met.

▼ Skin sensitisation

Based on available data, the classification criteria are not met.

▼ Germ cell mutagenicity

Based on available data, the classification criteria are not met.

▼ Carcinogenicity

Based on available data, the classification criteria are not met.

▼ Reproductive toxicity

Based on available data, the classification criteria are not met.

▼ STOT-single exposure

Based on available data, the classification criteria are not met.

▼ STOT-repeated exposure

Based on available data, the classification criteria are not met.

▼ Aspiration hazard

Based on available data, the classification criteria are not met.

Symptoms related to the physical, chemical and toxicological characteristics

None known.

11.2. Information on other hazards

Endocrine disrupting properties

This mixture/product does not contain any substances known to have hormone-disrupting properties in relation to health.

Other information

2,2',2''-nitrilotriethanol has been classified by IARC as a group 3.

SECTION 12: Ecological information

12.1. Toxicity

Harmful to aquatic life with long lasting effects.

12.2. ▼ Persistence and degradability

Based on available data, the classification criteria are not met.

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.

12.3. ▼ Bioaccumulative potential

Based on available data, the classification criteria are not met.

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

This mixture/product does not contain any substances known to fulfil the criteria for PBT and vPvB classification.

12.6. Endocrine disrupting properties

This mixture/product does not contain any substances considered to have endocrine-disrupting properties in relation to the environment.

12.7. Other adverse effects

This product contains substances that are toxic to the environment. May result in adverse effects to aquatic organisms.

This product contains substances, which 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.

Commission Regulation (EU) No 1357/2014 of 18 December 2014 on waste.

EWC code

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

Waste group

Gr. H Waste with low energy content

Specific labelling

Not applicable.

Contaminated packing

EWC code

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

Waste group

Gr. H Waste with low energy content

SECTION 14: Transport information

	14.1 UN / ID	14.2 UN proper shipping name	14.3 Hazard class(es)	14.4 PG*	14.5 Env**	Other information:
ADR/A DN/RID	-	-	-	-	-	-
IMDG	-	-	-	-	-	-
IATA	-	-	-	-	-	-

* Packing group

** Environmental hazards

Additional information

Not dangerous goods according to ADR/ADN/RID, IATA and IMDG.

14.6. Special precautions for user

Not applicable.

14.7. Maritime transport in bulk according to IMO instruments

No data available.

SECTION 15: Regulatory information

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

Restrictions for application

People under the age of 18 shall not be exposed to this product.

Demands for specific education

No specific requirements.

SEVESO - Categories / dangerous substances

Not applicable.

▼ Labelling of contents according to Detergents Regulation (EC) No 648/2004

< 5%

- Cationic surfactants
- Non-ionic surfactants
- Soap
- Preservation agent (BENZISOTHIAZOLINONE)
- Preservation agent (METHYLISOTHIAZOLINONE)

Regulation on work involving coded products

Code number (1993): 0-4

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

The Danish Working Environment Authority's executive order no. 1713 of 18. Dec 2025 on young people's work. Based on Council Directive 94/33 / EC of 22 June 1994 on the protection of young people at work. Pregnant workers and workers who are breastfeeding (AT Guide A.1.8-6, amended 2024). Regulation (EC) No 648/2004 of the European Parliament and of the Council of 31 March 2004 on detergents. Commission Regulation (EU) No 1357/2014 of 18 December 2014 on waste. Arbejdstilsynets bekendtgørelse nr. 301 af 13. maj 1993 om fastsættelse af kodenumre med senere ændringer. 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 (CLP). Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

15.2. Chemical safety assessment

No

SECTION 16: Other information

Full text of H-phrases as mentioned in section 3

- EUH071, Corrosive to the respiratory tract.
- H301, Toxic if swallowed.
- H302, Harmful if swallowed.
- H311, Toxic in contact with skin.
- H314, Causes severe skin burns and eye damage.
- H315, Causes skin irritation.
- H317, May cause an allergic skin reaction.
- H318, Causes serious eye damage.
- H319, Causes serious eye irritation.
- H330, Fatal if inhaled.
- H335, May cause respiratory irritation.
- H400, Very toxic to aquatic life.
- H410, Very toxic to aquatic life with long lasting effects.
- H412, Harmful to aquatic life with long lasting effects.

The full text of identified uses as mentioned in section 1

LCS "C" = Consumer uses: Private households (= general public = consumers)

LCS "PW" = Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

PROC 1 = Use in closed PROC ess, no likelihood of exposure

PC 35 = Washing and Cleaning Products (including solvent based products)

▼ **Abbreviations and acronyms**

ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway

ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road

ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

CAS = Chemical Abstracts Service

CE = Conformité Européenne (European conformity)

CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]

CSA = Chemical Safety Assessment

CSR = Chemical Safety Report

DMEL = Derived Minimal Effect Level

DNEL = Derived No Effect Level

EC = Effective concentration

ED = Effective dose

EINECS = European Inventory of Existing Commercial chemical Substances

EL = Effective Loading

ErC = Concentration associated with x% growth rate response

ES = Exposure Scenario

EUH statement = CLP-specific Hazard statement

EuPCS = European Product Categorisation System

EWG = European Waste Catalogue

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

GWP = Global warming potential

HP = Hazardous Property code

IARC = International Agency for Research on Cancer (IARC)

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IC = X maximum inhibitory concentration

IMDG = International Maritime Dangerous Goods

LC = Lethal concentration

LCLo = Value is the lowest concentration of a material in air reported to have caused the death of animals or humans

LD = Lethal dose

LOAEC = Lowest Observed Adverse Effect Concentration

LOAEL = Lowest Observed Adverse Effect Level

LOEC = Lowest Observed Effect Concentration

LogKow = logarithm of the n-octanol/water coefficient

LL = Lethal Loading

M = For multiplication factor

MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)

NOAEC = No Observed Adverse Effect Concentration

NOAEL = No Observed Adverse Effect Level

NOEC = No Observed Effect Concentration

NOELR = No Observable Effect Loading Rate

OECD = Organisation for Economic Co-operation and Development

PBT = Persistent, Bioaccumulative and Toxic

PNEC = Predicted No Effect Concentration

RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail

RRN = REACH Registration Number

SCL = A specific concentration limit

SVHC = Substances of Very High Concern

STOT-RE = Specific Target Organ Toxicity - Repeated Exposure

STOT-SE = Specific Target Organ Toxicity - Single Exposure

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

TWA = Time weighted average

UN = United Nations

UVBC = Unknown or variable composition, complex reaction products or of biological materials

VOC = Volatile Organic Compound

vPvB = Very Persistent and Very Bioaccumulative

Additional information

The classification of the substance/mixture in regard of environmental hazards are in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP).

The safety data sheet is validated by

HMJ

Other

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

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.

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.

Country-language: DK-en