

Material Safety Data Sheet according to Regulation (EG) No 1907/ 2006

Article 612 – IEC L1

Date of issue: 03.09.2025

Date of revision: -

Version: 1.0

Supersedes: Original version

1. Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name: Artikel 612 – IEC-L1
Synonym: Article 612 – IEC-L1
UFI: 9M00-A0JD-E00N-HEYN
REACH Registration No: -
Product description: Test and reference detergent, liquid

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

Identified uses: Agents for specialized washing and cleaning processes in the manufacture and finishing of textiles. For professional use only.

Uses advised against: -

1.3 Details of the supplier of the safety data sheet

Manufacturer / Supplier:
Swissatest Testmaterialien AG
Mövenstrasse 12
9015 St. Gallen
Switzerland

Telephone 0041 71 311 80 55
E-Mail info@swissatest.ch
Internet www.swissatest.ch

1.4 Emergency telephone number

Tox Info Suisse

Telephone 145

2. Hazards identification

2.1 Classification of the substance or mixture

The product is classified as a hazardous substance based on the calculation method according to Regulation (EC) No. 1272/2008 (CLP Regulation) in its latest valid version.

Skin Irritation (Category 2), H315
Eye Damage (Category 1), H318
Skin Sensitisation (Category 1A), H317

Additional information

none

2.2 Label elements

Labelling elements according to Regulation (EC) No. 1272/2008

Hazard pictograms:



GHS05



GHS07

Signal word: DANGER

Hazard components for labelling:

Contains:

Isotridecanol, ethoxylated, Benzenesulfonic acid, mono-C10-13-alkyl derivs., potassium salts, 2-Methyl-2H-isothiazol-3-one

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Hazard statements:

H315: Causes skin irritation

H318: Causes serious eye damage

H317: May cause an allergic skin reaction.

Precautionary statements:

P261: Avoid breathing vapour /aerosols.

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

P305+351+338: 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.

P362 + P364: Take off contaminated clothing and wash it before reuse.

Additional labeling elements (EU):

EUH208: Contains subtilisin and 1,2-benzisothiazol-3(2H)-one. May produce an allergic reaction.

Ingredients according to 648/2004/EG:

5 - < 15 % non-ionic surfactants

15 - < 30 % soap

15 - < 30 % anionic surfactants

< 5 % polycarboxylates

Conservation agents: 1,2-benzisothiazol-3(2H)-one, 2-methyl-2H-isothiazol-3-one

Enzymes (subtilisin)

2.3 Other hazards

The product contains no components considered to be either persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher. The product does not contain any components with endocrine-disrupting properties at or above 0.1%.

3. Composition/information on ingredients

3.1 Substances

The product is a mixture.

3.2 Mixtures

Ingredient	CAS-N°	EC-N°	Content [wt.%]	Classification according to (EG) N° 1272/2008
Isotridecanol, ethoxylated (≥ 2.5 EO)	69011-36-5	931-138-8	15 - < 20	Acute Tox. (oral), 4, H302; Eye Dam. 1, H318;
Benzenesulfonic acid, mono-C10-13-alkyl derivs., potassium salts	85480-57-5	287-337-9	10 - < 15	Acute Tox. (oral), 4, H302; Skin Irrit. 2, H315; Eye Dam. 1, H318;
Subtilisin	9014-01-1	232-752-2	0.1 - < 1	Skin Irrit. 2, H315; Eye Irrit. 2, H319; Resp. Sens. 1, H334; STOT SE 3, H335; Aquatic Acute 1, H400; Aquatic Chronic 2, H411
1,2-Benzisothiazol-3(2H)-one	2634-33-5	220-120-9	0.005 - < 0.05	Acute Tox. (oral), 4, H302; Skin Irrit. 2, H315; Eye Dam. 1, H318; Skin Sens. 1, H317 Aquatic Acute 1, H400 Aquatic Chronic 2, H411 (SCL [%]) ≥ 0.05: Skin Sens. 1: H317)
2-Methyl-2H-isothiazol-3-one	2682-20-4	220-239-6	0.0015 - < 0.005	Acute Tox. (oral), 3, H301; Acute Tox. (inhalation), 2, H330; Acute Tox. (dermal), 3, H311; Skin Irrit. 2, H315; Eye Dam. 1, H318; Skin Sens. 1A, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410 (SCL [%]) ≥ 0.0015: Skin Sens. 1A: H317)

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SVHC

This preparation does not contain substances of very high concern (SVHC) in a concentration of $\geq 0.1\%$ according to Regulation (EC) 1907/2006, Article 57.

Additional Information:

No further information available.

See Section 16 for wording of H and P statements.

4. First-aid measures

4.1 Description of first aid measures

General instructions:	Remove contaminated clothes and wash them before reuse.
After inhalation:	Move the affected person to fresh air and ensure unhindered breathing. Consult a doctor in case of symptoms.
After skin contact:	Wash skin with water and soap for several minutes. If skin irritation persists, consult a doctor.
After eye contact:	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek immediate medical attention.
After ingestion:	Rinse mouth and give 1-2 glasses of water to drink. Do not induce vomiting. Seek medical attention.

4.2 Most important symptoms and effects, both acute and delayed

After eye and skin contact: Irritation / redness

4.3 Indication of any immediate medical attention and special treatment needed

Symptomatic treatment.

5. Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media: Adapt fire extinguishing measures to the surroundings.

Unsuitable extinguishing media: Water jet.

5.2 Special hazards arising from the substance or mixture

Formation of toxic pyrolysis products.

Formation of hazardous smoke and vapours possible (CO, CO₂).

5.3 Advice for firefighters

In the event of a fire, a self-contained breathing apparatus and a full protective suit should be worn. Do not inhale vapours and fumes. If safe to do so, remove the container from the hazard area.

Collect contaminated extinguishing water and dispose of it in accordance with regulations.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Ensure sufficient ventilation.

Avoid skin and eye contact.

Use personal protective equipment (see chapter 8).

Keep non-protected persons apart.

Advice for emergency responders: Personal protective equipment according to EN 469 is recommended.

6.2 Environmental precautions

Prevent release into sewers, surface water, or groundwater.

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6.3 Methods and material for containment and cleaning up

Absorb spilled product with a binding agent (e.g., universal absorbent, sand, saw dust). Dispose of the product in accordance with Section 13. Clean spill with water.

6.4 Reference to other Sections

For information on safe handling: see Section 7.

For information on personal protective equipment: see Section 8.

For information on disposal: see Section 13.

7. Handling and storage

7.1 Precautions for safe handling

Ensure sufficient ventilation.

Avoid skin and eye contact.

Remove contaminated clothes and wash them before reuse.

Wash hands thoroughly after work and before breaks.

Do not eat, drink, or smoke when using this product.

Observe skin protection plan.

7.2 Conditions for safe storage, including any incompatibilities

Storage: Store in original container. Keep away from food and animal feed.

Advice on storage assembly: Store separately from strong oxidizers (storage class 5) and acids.

Storage class: 8 (corrosive substances)

7.3 Specific end use(s)

Apart from the uses specified in Section 1.2, no other specific uses are identified.

8. Exposure control and personal protection

8.1 Control parameters

8.1.1 Occupational exposure limit values:

Threshold limit values according to SUVA:					
Substance name	CAS-N°	TLV (ppm)	TLV (mg/m ³)	STEL (ppm)	STEL (mg/m ³)
Isotridecanol, ethoxyliert (≥ 2.5 EO)	69011-36-5	-	-	-	-
Benzenesulfonic acid, mono-C10-13-alkyl derivs., potassium salts	85480-57-5	-	-	-	-
Subtilisin	9014-01-1	-	-	-	0.00006
1,2-Menzisothiazol-3(2H)-one	2634-33-5	-	-	-	-
2-Methyl-2H-isothiazol-3-one	2682-20-4	-	-	-	-

8.2 Exposure controls

8.2.1 Appropriate engineering controls:

Ensure adequate ventilation.

Provide appropriate decontamination and cleaning equipment (running water, eye-wash station).

8.2.2 Individual protective measures, personal protective equipment

Eye / face protection

Safety goggles with side protection (EN 166).

Skin protection

Use protective gloves according to EN 374-3. Glove material butyl or nitrile caoutchouc, rubber and neoprene. In case of full contact, use minimum thickness 0.7 mm butyl or nitrile caoutchouc, breakthrough time > 480 min. Please contact the glove supplier for further information on material thickness and penetration time.

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Respiratory protection

Not necessary if sufficient ventilation is provided.

Body protection

Standard work clothing.

General protective and hygiene measures:

Do not eat, drink or smoke during work.

Keep away from drinks, food, and animal feed.

Wash hands before breaks and at the end of work.

Use of skin protection measures in accordance with Suva Information Sheet 44074 is recommended.

8.2.3 Environmental exposure controls

Compliance with local emission limit values must be ensured.

Discharge into air, water, and soil should be avoided.

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state:	Liquid
Colour:	Colourless
Odour:	Characteristic
Odour threshold:	No data available
Melting point:	No data available
Boiling point:	No data available
Self-ignition	Not applicable
Lower / upper explosion limits:	Not applicable
Flashpoint:	No data available
Ignition temperature:	No data available
Decomposition temperature	Not applicable
pH-value (1% in water)	No data available
Kinematic Viscosity:	No data available
Solubility in water:	Soluble
log K _{ow} :	No data available
Vapour pressure:	Not applicable
Vapour density:	not applicable
Density at 20 °C:	No data available
Particle characteristics	No data available

9.2 Other information

None.

10. Stability and reactivity

10.1 Reactivity

The product is stable when used according to the manufacturer's instructions for use (see Section 7).

10.2 Chemical stability

No decomposition when used as intended (see Section 7).

10.3 Possibility of hazardous reactions

The product reacts with acids and strong oxidizers.

10.4 Conditions to avoid

Avoid excessive heat and humidity.

10.5 Incompatible materials

Strong acids, oxidizing agents.

10.6 Hazardous decomposition products

The product will not degrade to unstable products when used according to the instructions for use. In case of fire, toxic smoke gases (CO, CO₂) and pyrolysis products may form.

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11. Toxicological information

11.1 Information on toxicological effects

Acute toxicity

For ingredients (see ECHA online database):

Substance name	CAS-N°	LD ₅₀ oral (test organism)	LD ₅₀ dermal (test organism)	LC ₅₀ inhalation (test organism)
Isotridecanol, ethoxyliert (≥ 2.5 EO)	69011-36-5	LD50 300 – 2'000 mg/kg bw (rat)*	LD50 > 2'000 mg/kg bw (rabbit)*	No data available
Benzenesulfonic acid, mono-C10-13-alkyl derivs., potassium salts	85480-57-5	LD50 1'080 mg/kg bw (rat)*	No data available	No data available
Subtilisin	9014-01-1	LD50 1'728 mg/kg bw (rat)	No data available	No data available
1,2-benzisothiazol-3(2H)-one	2634-33-5	LD50 490 – 670 mg/kg bw (rat)	LD50 2'000 mg/kg bw (rat)	No data available
2-methyl-2H-isothiazol-3-one	2682-20-4	LD50 120 - 327.7 mg/kg bw (rat)	LD50 242 – 2'000 mg/kg bw (rat)	LC50 (4 h) 100 - 422 mg/m ³ air (rat)

*SDB Waschmittel L, Artikelnummer 88042a, wfk Testgewebe GmbH, 01.09.2022.

For product:

ATEX-mix, oral: > 2'000 – 3'000 mg/kg*

Skin corrosion / irritation:

The product is classified. May cause severe skin irritation.

Serious eye damage / eye irritation

The product is classified. May cause serious eye damage.

Respiratory or skin sensitization

The product is classified. The product may cause or produce allergic skin sensitization.

Germ cell mutagenicity

The product is not classified. The product does not contain substances classified as mutagenic.

Carcinogenicity

The product is not classified. The product does not contain substances classified as carcinogenic.

Reproductive toxicity

The product is not classified. The product does not contain substances classified as toxic for reproduction.

Specific target organ toxicity, repeated exposure

The product is not classified. The product does not contain substances classified as, specific target organ toxicant after repeated exposure.

Specific target organ toxicity, single exposure

The product is not classified. The product contains < 2 % of substances classified as, specific target organ toxicant after single exposure.

Aspiration hazard

The product is not classified. The product does not contain any substances classified as aspiration hazard.

11.2 Information on other hazards

Endocrine disruption properties

This mixture does not contain any components with endocrine disrupting properties in concentrations ≥ 0.1 %, as defined in Article 57(f) of the REACH Regulation or in Delegated Regulations (EU) 2017/2100 and (EU) 2023/707. Therefore, no health-relevant effects due to endocrine disrupting properties are present.

Other information

Not known.

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12. Ecological information

12.1 Ecotoxicity For ingredients (see Echa online database):

Substance name	CAS-N°	Indicator	Value (median)
Isotridecanol, ethoxyliert (≥ 2.5 EO)	69011-36-5	LC50 (96 h) fish	1 – 10 mg/L*
		EC50 (48 h) aquatic invertebrates	1 – 10 mg/L*
		EC50 (72 h) algae and cyanobacteria	1 – 10 mg/L*
Benzenesulfonic acid, mono-C10-13-alkyl derivs., potassium salts	85480-57-5	No data available	-
Subtilisin	9014-01-1	LC50 (96 h) fish	15.6 mg/L
		EC50 (48 h) aquatic invertebrates	327 µg/L
		EC50 (72 h) algae and cyanobacteria	548 – 9'770 µg/L
1,2-benzisothiazol-3(2H)-one	2634-33-5	LL50 (96 h) fish	2.15 – 22 mg/L
		EL50 (48 h) aquatische invertebrates	2.9 – 2.94 mg/L
		EC50 (72 h) algae and cyanobacteria	70 – 150 µg/L
2-methyl-2H-isothiazol-3-one	2682-20-4	LC50 (72 h) fish	4.77 – 6 mg/L
		EC50 (48 h) aquatic invertebrates	1.6 mg/L
		EC50 (5 d) algae and cyanobacteria	138 – 220 µg/L

*MSDS Waschmittel L, Artikelnummer 88042a, wfk Testgewebe GmbH, 01.09.2022.

For product:

No data are available.

12.2 Persistence and degradability

Isotridecanol, ethoxylated (≥ 2.5 EO; CAS-No. 69011) und benzenesulfonic acid, mono-C10-13-alkyl derivs., potassium salts (CAS-No. 85480-57-5) are readily biodegradable at > 60 % in 28 d and at 85 % in 29 d, respectively. The surfactants contained in the product are biodegradable in accordance with the requirements of Regulation (EC) No 648/2004. Data supporting this property are held at the disposal of the competent authorities of the Member States and will be made available to them upon direct request or at the request of a detergent manufacturer.

12.3 Bioaccumulative potential

No evidence for bioaccumulation.

12.4 Mobility in soil

Absorption coefficient of isotridecanol, ethoxylated (≥ 2.5 EO) at $K_{OC} > 5'000$.

No data available.

12.5 Results of PBT and vPvB assessment

The mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Endocrine disrupting properties

The product does not contain any components with endocrine disrupting properties in concentrations ≥ 0.1 %, as defined in Article 57(f) of the REACH Regulation or in Delegated Regulations (EU) 2017/2100 and (EU) 2023/707. Therefore, no environmentally relevant effects due to endocrine disrupting properties are present.

12.7 Other adverse effects

Water hazard class 2 (self-classification): significantly hazardous to water (according to *MSDS Waschmittel L, Artikelnummer 88042a, wfk Testgewebe GmbH, 01.09.2022).

Avoid release into the environment. Do not discharge undiluted, or in large quantities, into water bodies or the sewage system.

13. Disposal considerations

13.1 Waste treatment methods

Dispose of in accordance with official regulations.

Do not dispose of with household waste. Do not release into the sewage system

Product (pure product, empty and partly emptied containers)

Dispose of as hazardous waste.

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Waste disposal code:

Ordinance on the movement of waste SR 814.610:
20 01 29 [S] detergents containing dangerous substances

Absorbing agents polluted with product:

Dispose of as separate fraction.

Waste disposal code:

Ordinance on the movement of waste SR 814.610:
15 02 03 Absorbents, filter materials, wiping cloths other than those mentioned in 15 02 02.

14. Transport information

The product is not classified as a dangerous good according to transport regulations.

14.1 UN Number

-

14.2 UN proper shipping name

-

14.3 Transport hazard class

ADR / RID / IMDG-Code / IATA-Dangerous Goods Regulations

-

14.4 Packing group

-

14.5 Environmental hazards

Label environmentally hazardous substances

Not applicable

14.6 Special precautions for user

-

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Pollution category (X, Y or Z): -

Ship type (1, 2 or 3) : -

15. Regulatory information

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

Water pollution class according to AwSV:

Water hazard class 2: significantly hazardous to water (according to Waschmittel L, Artikelnummer 88042a, wfk Testgewebe GmbH, 01.09.2022)

Chemicals Ordinance (ChemO) SR 813.11:

Group according to Art. 61 ChemO: None.

Major Accident Ordinance (MAO) SR 814.012:

Quantity threshold according to MAO: no threshold

Restrictions according to Chemical Risk Reduction Ordinance (ORRChem) 814.81:

Liquid detergent for washing machines (Annex 2.1). Ingredients according to 64812004/EG: 5 - < 15 % non-ionic surfactants, 15 - < 30 % soap, 15 - < 30 % anionic surfactants, < 5 % polycarboxylates, conservation agents: 1,2-benzisothiazol-3(2H)-one, 2-methyl-2H-isothiazol-3-one, enzymes (subtilisin)

VOC-Ordinance (OVOC) SR 814.018:

VOC-content 0%.

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Article 4 paragraph 1bis, Article 4 paragraph 4 of the Youth Employment Protection Ordinance (SR 822.115) and Article 1 lit. f of the EAER Ordinance on Hazardous Work for Young People (SR 822.115.2)

Young people undergoing basic vocational training may only work with this product (substance/preparation) if the relevant training ordinance makes provision for them to do so with a view to enabling them to achieve their training objectives and if the preconditions for the training plan have been met and the applicable age restrictions have been complied with. Young people who are not undergoing any basic vocational training are not permitted to work with this product (substance/preparation). Young people with a Federal vocational education and training (VET) Certificate or a Federal VET Diploma may carry out hazardous work with this product (substance/preparation) within the profession they have learned. Male and female employees who are under 18 years old are classed as young people.

Maternity Protection Ordinance SR 822.111.52:

No restrictions.

15.2 Chemical Safety Assessment

A chemical safety assessment was not carried out for this product.

16. Other information

Changes made since last edition

Original version.

Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par route

AwSV : Verordnung über Anlagen zum Umgang mit wassergefährdenden Stoffen vom 18. April 2017.

CAS: Chemical Abstracts Service

ChemO: Ordinance on Protection against Dangerous Substances and Preparations SR 813.11

CLP: Classification, Labelling and Packaging of Chemicals

EC: effect concentration

ECHA: European Chemicals Agency

FOEN: Federal Office for the Environment

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

IATA: International Air Transport Association

IMDG: International Maritime Code for Dangerous Goods

LC: lethal concentration

LD: lethal dose

MAC: maximum admissible concentration at workplace

MAO: Ordinance on Protection against Major Accidents SR 814.012

OVOC: Ordinance on the Incentive Tax on Volatile Organic Compounds SR 814.018

PBT: persistent, bioaccumulative, toxic

REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer

vPvB: very persistent, very bioaccumulative

VOC: volatile organic compounds

ORRChem: Ordinance on the Reduction of Risks relating to the Use of Certain Particularly Dangerous Substances, Preparations and Articles SR 814.81

STEL: Short term exposure limit

Key literature references and sources of data

IUCLID: International Uniform Chemical Information Database, ECHA.

Gestis Online Database

SUVA Maximum Workplace Concentration Database

MSDS: wfk Wollwaschmittel 2020, Art. 88038, Version 3, 13.05.2022.

Methods in accordance with article 9 of Regulation (EC) No 1272/2008 [CLP] applied for the evaluation of hazard information for substances and mixtures:

Additivity principle according to Annex 1, 3.3.3.3; Calculation methods according to Annex 1, 2.6.4.3.

Full text of Statements referred to under Sections 2 – 15:

H301: Toxic if swallowed.

H302: Harmful if swallowed.

H311: Toxic in contact with skin.

H315: Causes skin irritation

H318: Causes serious eye damage

H319: Causes serious eye irritation

H317: May cause an allergic skin reaction.

H330: Fatal if inhaled.

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H335: May cause respiratory irritation

H400: Very toxic to aquatic life.

H410: Very toxic to aquatic life with long lasting effects

H411: Toxic to aquatic life with long lasting effects.

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

P305+351+338: 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.

P362 + P364: Take off contaminated clothing and wash it before reuse.

EUH208: Contains subtilisin and 1,2-benzisothiazol-3(2H)-one. May produce an allergic reaction.

Training instructions

Employees must be regularly trained in the safe handling of the products based on the information in the safety data sheet and the local conditions of the workplace. National regulations on the training of employees in the handling of hazardous substances must be observed.

Further information

The information in this Safety Data Sheet is based on our current knowledge and complies with national and EU regulations. However, we have no control over the specific working conditions of the user. The user is responsible for ensuring compliance with all applicable legal requirements. The information in this Safety Data Sheet describes the safety requirements of our product and does not constitute a guarantee of product properties.