

Safety Data Sheet

according to Regulation (EC) No 1907/2006, Article 31,
as modified by Regulation (EU) No 2015/830

Edition 2 Revision N° 1

Revision: %\$/ /2017

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

1.1. Product identifier

Mixture identification:

Trade name: T-REX CLEANER

Trade code: M408503PLL005000RX

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

Recommended use:

Digital printing ink

Uses advised against:

All those who are not listed in the recommended uses

1.3. Details of the supplier of the safety data sheet

Company:

Lüscher-Tschudi GmbH

Oberdorfstrasse 61

CH-8853 Lachen

Switzerland

www.luescher-tschudi.com

Competent person responsible for the safety data sheet:

werner@luescher-tschudi.com

1.4. Emergency telephone number

Office +41 71 988 53 54

Mobile +41 79 354 89 93

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

EC regulation criteria 1272/2008 (CLP)

The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP).

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP).

Hazard pictograms:

None

Hazard statements:

None

Precautionary statements:

None

Special Provisions:

EUH210 Safety data sheet available on request.

EUH208 Contains 2-methyl-4-isothiazolin-3-one. May produce an allergic reaction.

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EUH208 Contains 1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one. May produce an allergic reaction.

Special provisions according to Annex XVII of REACH and subsequent amendments:
None

2.3. Other hazards

vPvB Substances: None - PBT Substances: None

Other Hazards:

No other hazards

SECTION 3: Composition/information on ingredients

3.1. Substances

N.A.

3.2. Mixtures

Hazardous components within the meaning of the CLP regulation and related classification:

Qty	Name	Ident. Number	Classification
< 0.05%	2-methyl-4-isothiazolin-3-one	CAS: 2682-20-4 EC: 220-239-6	3.1/3/Oral Acute Tox. 3 H301 3.1/2/Inhal Acute Tox. 2 H330 3.2/1B Skin Corr. 1B H314 3.3/1 Eye Dam. 1 H318 4.1/A1 Aquatic Acute 1 H400 4.1/C2 Aquatic Chronic 2 H411 3.4.2/1A Skin Sens. 1A H317
< 0.05%	1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one	Index number: 613-088-00-6 CAS: 2634-33-5 EC: 220-120-9	3.1/2/Inhal Acute Tox. 2 H330 3.3/1 Eye Dam. 1 H318 4.1/A1 Aquatic Acute 1 H400 4.1/C2 Aquatic Chronic 2 H411 3.1/4/Oral Acute Tox. 4 H302 3.2/2 Skin Irrit. 2 H315 3.4.2/1 Skin Sens. 1 H317

Note: Upper limit is not included into the range. The full wording of hazard (H) phrases is given in section 16 of the sheet.

SECTION 4: First aid measures

4.1. Description of first aid measures

Contact with skin:

Wash with plenty of water and soap.

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Contact with eyes:

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Swallowing:

Do not under any circumstances induce vomiting. OBTAIN A MEDICAL EXAMINATION IMMEDIATELY.

Inhalation:

Remove casualty to fresh air and keep warm and at rest.

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

None

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

Treatment:

None

SECTION 5: Firefighting measures

5.1. Extinguishing media

Recommended extinguishers:

Water, CO₂, Foam, Chemical powders, according to the materials involved in the fire.

Extinguishing media which must not be used for safety reasons:

None in particular.

5.2. Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases.

5.3. Advice for firefighters

Use suitable breathing apparatus .

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment.

Remove persons to safety.

See protective measures under point 7 and 8.

6.2. Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

Retain contaminated washing water and dispose it.

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

Suitable material for taking up: absorbing material, organic, sand

6.3. Methods and material for containment and cleaning up

Wash with plenty of water.

6.4. Reference to other sections

See also section 8 and 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.

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Do not eat or drink while working.
Adopt good working practices, so that the product is not released into the environment.
See also section 8 for recommended protective equipment.

7.2. Conditions for safe storage, including any incompatibilities

Keep away from food, drink and feed.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Adequately ventilated premises.

7.3. Specific end use(s)

None in particular

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No occupational exposure limit available

DNEL Exposure Limit Values

N.A.

PNEC Exposure Limit Values

N.A.

8.2. Exposure controls

Eye protection:

Not needed for normal use. Anyway, operate according good working practices.

Protection for skin:

No special precaution must be adopted for normal use.

Protection for hands:

Not needed for normal use.

Respiratory protection:

Not needed for normal use.

Thermal Hazards:

None

Environmental exposure controls:

None

Appropriate engineering controls:

None

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties	Value	Method:	Notes:
Appearance:	liquid	--	--
Colour:	--	--	--
Odour:	mild	--	--
Odour threshold:	not available	--	--
pH:	7 - 9	--	@ 25 °C
Melting point / freezing point:	not available	--	--
Initial boiling point and	> 100°C / 212	--	--

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boiling range:	°F		
Flash point:	> 130 °C / 266 °F	--	--
Evaporation rate:	not available	--	--
Solid/gas flammability:	not applicable	--	Not applicable, it's a liquid
Upper/lower flammability or explosive limits:	not available	--	--
Vapour pressure:	not available	--	--
Vapour density:	not available	--	--
Relative density:	1.055 - 1.059	--	@ 25 °C
Solubility in water:	soluble	--	--
Solubility in oil:	not available	--	--
Partition coefficient (n-octanol/water):	not available	--	--
Auto-ignition temperature:	not available	--	--
Decomposition temperature:	not available	--	--
Viscosity:	1 - 3 cPs	--	@ 25 °C
Explosive properties:	not applicable	Regulation (EC) No 1907/2006, Annex VII, Column 2, point 7.11	no chemical groups associated with explosive properties
Oxidizing properties:	not applicable	Regulation (EC) No 1907/2006, Annex VII, Column 2, point 7.13	the product is incapable of reacting exothermically with combustible materials

9.2. Other information

Properties	Value	Method:	Notes:
Miscibility:	miscible	--	--
Fat Solubility:	not available	--	--
Conductivity:	not available	--	--

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions

10.2. Chemical stability

Stable under normal conditions

10.3. Possibility of hazardous reactions

None

10.4. Conditions to avoid

Stable under normal conditions.

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10.5. Incompatible materials

None in particular.

10.6. Hazardous decomposition products

None.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological information of the product:

T-REX CLEANER

a) acute toxicity

Not classified

Based on calculation method, the classification criteria are not met

b) skin corrosion/irritation

Not classified

Based on calculation method, the classification criteria are not met

c) serious eye damage/irritation

Not classified

Based on calculation method, the classification criteria are not met

d) respiratory or skin sensitisation

Not classified

Based on calculation method, the classification criteria are not met

e) germ cell mutagenicity

Not classified

Based on calculation method, the classification criteria are not met

f) carcinogenicity

Not classified

Based on calculation method, the classification criteria are not met

g) reproductive toxicity

Not classified

Based on calculation method, the classification criteria are not met

h) STOT-single exposure

Not classified

Based on calculation method, the classification criteria are not met

i) STOT-repeated exposure

Not classified

Based on calculation method, the classification criteria are not met

j) aspiration hazard

Not classified

Based on calculation method, the classification criteria are not met

Toxicological information of the main substances found in the product:

N.A.

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicological information of the product:

T-REX CLEANER

Not classified for environmental hazards

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Based on calculation method, the classification criteria are not met
Ecotoxicological information of the main substances found in the product:

2-methyl-4-isothiazolin-3-one - CAS: 2682-20-4

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish 6 mg/l - Duration h: 96 - Notes: Oncorhynchus mykiss

Endpoint: NOEC - Species: Fish 2.38 mg/l - Notes: 28 d / Pimephales promelas

b) Aquatic chronic toxicity:

Endpoint: EC50 - Species: Daphnia 1.68 mg/l - Duration h: 48 - Notes: Daphnia magna

Endpoint: NOEC - Species: Daphnia 0.55 mg/l - Notes: 21 d / Daphnia magna

e) Plant toxicity:

Endpoint: EC50 - Species: Algae 0.157 mg/l - Duration h: 72 - Notes:

Pseudokirchneriella subspicata

Endpoint: NOEC - Species: Algae 0.03 mg/l - Duration h: 72 - Notes:

Pseudokirchneriella subspicata

1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one - CAS: 2634-33-5

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish 1.6 mg/l - Duration h: 96 - Notes: Oncorhynchus mykiss

Endpoint: NOEC - Species: Fish 0.21 mg/l

b) Aquatic chronic toxicity:

Endpoint: EC50 - Species: Daphnia 3.27 mg/l - Duration h: 48 - Notes: Daphnia magna

Endpoint: NOEC - Species: Daphnia 1.2 mg/l - Notes: 21 d / Daphnia magna

e) Plant toxicity:

Endpoint: EC50 - Species: Algae 0.11 mg/l - Duration h: 72 - Notes: Selenastrum

capricornutum

12.2. Persistence and degradability

2-methyl-4-isothiazolin-3-one - CAS: 2682-20-4

Biodegradability: Readily biodegradable - Test: N.A. - Duration: N.A. - %: N.A. - Notes:
N.A.

12.3. Bioaccumulative potential

N.A.

12.4. Mobility in soil

N.A.

12.5. Results of PBT and vPvB assessment

vPvB Substances: None - PBT Substances: None

12.6. Other adverse effects

None

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force.

Dispose of waste product or used containers according to local regulations.

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

SECTION 14: Transport information

Not classified as dangerous in the meaning of transport regulations.

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14.1. UN number

ADR-UN number: not applicable
IATA-Un number: not applicable
IMDG-Un number: not applicable

14.2. UN proper shipping name

ADR-Shipping Name: NONAPPLICABILE
IATA-Shipping Name: NONAPPLICABILE
IATA-Technical name: not applicable
IMDG-Shipping Name: NONAPPLICABILE
IMDG-Technical name: not applicable

14.3. Transport hazard class(es)

ADR-Label: not applicable
IATA-Label: not applicable
IMDG-Label: not applicable

14.4. Packing group

ADR-Packing Group: not applicable
IATA-Packing group: not applicable
IMDG-Packing group: not applicable

14.5. Environmental hazards

ADR-Environmental Pollutant: No
IMDG-Marine pollutant: No

14.6. Special precautions for user

ADR-Tunnel Restriction Code: not applicable
IATA-Passenger Aircraft: not applicable
IATA-Cargo Aircraft: not applicable
IMDG-Page: not applicable
IMDG-EMS: not applicable
IMDG-MFAG: not applicable

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

No

SECTION 15: Regulatory information

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

Dir. 98/24/EC (Risks related to chemical agents at work)
Dir. 2000/39/EC (Occupational exposure limit values)
Regulation (EC) n. 1907/2006 (REACH)
Regulation (EC) n. 1272/2008 (CLP)
Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013
Regulation (EU) 2015/830
Regulation (EU) n. 286/2011 (ATP 2 CLP)
Regulation (EU) n. 618/2012 (ATP 3 CLP)
Regulation (EU) n. 487/2013 (ATP 4 CLP)
Regulation (EU) n. 944/2013 (ATP 5 CLP)
Regulation (EU) n. 605/2014 (ATP 6 CLP)
Regulation (EU) n. 2015/1221 (ATP 7 CLP)

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

Restrictions related to the product:

No restriction.

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Restrictions related to the substances contained:

No restriction.

Volatile Organic compounds - VOCs = 0.20 %

Volatile Organic compounds - VOCs = 2.00 g/Kg

Volatile CMR substances = 0.00 %

Halogenated VOCs which are assigned the risk phrase R40 = 0.00 %

Where applicable, refer to the following regulatory provisions :

Directive 2012/18/EU (Seveso III)

Regulation (EC) nr 648/2004 (detergents).

Dir. 2004/42/EC (VOC directive)

Provisions related to directive EU 2012/18 (Seveso III):

Seveso III category according to Annex 1, part 1

None

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for the mixture.

SECTION 16: Other information

Full text of phrases referred to in Section 3:

H301 Toxic if swallowed.

H330 Fatal if inhaled.

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage.

H400 Very toxic to aquatic life.

H411 Toxic to aquatic life with long lasting effects.

H317 May cause an allergic skin reaction.

H302 Harmful if swallowed.

H315 Causes skin irritation.

Hazard class and hazard category	Code	Description
Acute Tox. 2	3.1/2/Inhal	Acute toxicity (inhalation), Category 2
Acute Tox. 3	3.1/3/Oral	Acute toxicity (oral), Category 3
Acute Tox. 4	3.1/4/Oral	Acute toxicity (oral), Category 4
Skin Corr. 1B	3.2/1B	Skin corrosion, Category 1B
Skin Irrit. 2	3.2/2	Skin irritation, Category 2
Eye Dam. 1	3.3/1	Serious eye damage, Category 1
Skin Sens. 1	3.4.2/1	Skin Sensitisation, Category 1
Skin Sens. 1A	3.4.2/1A	Skin Sensitisation, Category 1A
Aquatic Acute 1	4.1/A1	Acute aquatic hazard, category 1
Aquatic Chronic 2	4.1/C2	Chronic (long term) aquatic hazard, category 2

This safety data sheet has been completely updated in compliance to Regulation 2015/830.

This document was prepared by a competent person who has received appropriate training.

Main bibliographic sources:

Safety Data Sheet

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre,
Commission of the European Communities
SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van
Nostrand Reinold

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.

ADR:	European Agreement concerning the International Carriage of Dangerous Goods by Road.
CAS:	Chemical Abstracts Service (division of the American Chemical Society).
CLP:	Classification, Labeling, Packaging.
DNEL:	Derived No Effect Level.
EINECS:	European Inventory of Existing Commercial Chemical Substances.
GefStoffVO:	Ordinance on Hazardous Substances, Germany.
GHS:	Globally Harmonized System of Classification and Labeling of Chemicals.
IATA:	International Air Transport Association.
IATA-DGR:	Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
ICAO:	International Civil Aviation Organization.
ICAO-TI:	Technical Instructions by the "International Civil Aviation Organization" (ICAO).
IMDG:	International Maritime Code for Dangerous Goods.
INCI:	International Nomenclature of Cosmetic Ingredients.
KSt:	Explosion coefficient.
LC50:	Lethal concentration, for 50 percent of test population.
LD50:	Lethal dose, for 50 percent of test population.
PNEC:	Predicted No Effect Concentration.
RID:	Regulation Concerning the International Transport of Dangerous Goods by Rail.
STEL:	Short Term Exposure limit.
STOT:	Specific Target Organ Toxicity.
TLV:	Threshold Limiting Value.
TWA:	Time-weighted average
WGK:	German Water Hazard Class.