

Safety data sheet

according to 1907/2006/EC, Article 31

Trade name: i.CLEANER

Revision date: 19.07.2022

Printing date: 19.07.2022

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SECTION 7

Handling and storage

7.1 Precautions for safe handling

Keep container tightly closed.

7.2 Conditions for safe storage, including any incompatibilities

Keep/Store only in original container. Protect against Frost

Hints on joint storage

Storage class (TRGS 510): 12

7.3 Specific end use(s)

Observe technical data sheet. Observe instructions for use.

SECTION 8

Exposure controls/personal protection

Additional information about design of technical facilities: No further data; see item 7.

8.1 Control parameters

Occupational exposure limit values

ETHANOL ; CAS No. :	64-17-5
Limit value type (country of origin) :	TRGS 900 (D)
Limit value :	200 ppm / 380 mg/m ³
Peak limitation :	4(II)
Remark :	Y
Version :	29.03.2019
2-BUTOXYETHANOL ; CAS No. :	111-76-2
Limit value type (country of origin) :	TRGS 900 (D)
Limit value :	10 ppm / 49 mg/m ³
Peak limitation :	2(II)
Remark :	H,Y
Version :	29.03.2019
Limit value type (country of origin) :	STEL (EC)
Limit value :	50 ppm / 246 mg/m ³
Remark :	Skin
Version :	20.06.2019
Limit value type (country of origin) :	TWA (EC)
Limit value :	20 ppm / 98 mg/m ³
Remark :	Skin
Version :	20.06.2019
AMMONIA, ANHYDROUS ; CAS No. :	7664-41-7
Limit value type (country of origin) :	TRGS 900 (D)
Limit value :	20 ppm / 14 mg/m ³
Peak limitation :	2(I)
Remark :	Y
Version :	29.03.2019
Limit value type (country of origin) :	STEL (EC)
Limit value :	50 ppm / 36 mg/m ³
Version :	20.06.2019
Limit value type (country of origin) :	TWA (EC)
Limit value :	20 ppm / 14 mg/m ³
Version :	20.06.2019

Biological limit values

2-BUTOXYETHANOL ; CAS No. : 111-76-2

Limit value type (country of origin) :	TRGS 903 (D)
Parameter :	Butoxy acetic acid / Urine (U) / At long term exposure: after several previous shifts
Limit value :	100 mg/l
Version :	29.03.2019
Limit value type (country of origin) :	TRGS 903 (D)
Parameter :	Butoxy acetic acid / Urine (U) / End of exposure or end of shift ; At long term exposure: after several previous shifts
Limit value :	150 mg/g Kr
Version :	29.03.2019

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DNEL-/PNEC-values

DNEL/DMEL

Limit value type :	DNEL worker (local) (2-BUTOXYETHANOL ; CAS No. : 111-76-2)
Exposure route :	Inhalation
Exposure frequency :	Short-term
Limit value :	246 mg/m3
Limit value type :	DNEL worker (systemic) (2-BUTOXYETHANOL ; CAS No. : 111-76-2)
Exposure route :	Inhalation
Exposure frequency :	Long-term
Limit value :	98 mg/m3
Limit value type :	DNEL worker (systemic) (2-BUTOXYETHANOL ; CAS No. : 111-76-2)
Exposure route :	Inhalation
Exposure frequency :	Short-term
Limit value :	663 mg/m3
Limit value type :	DNEL worker (systemic) (2-BUTOXYETHANOL ; CAS No. : 111-76-2)
Exposure route :	Dermal
Exposure frequency :	Long-term
Limit value :	75 mg/kg
Limit value type :	DNEL worker (systemic) (2-BUTOXYETHANOL ; CAS No. : 111-76-2)
Exposure route :	Dermal
Exposure frequency :	Short-term
Limit value :	89 mg/kg
Limit value type :	DNEL worker (local) (ETHANOL ; CAS No. : 64-17-5)
Exposure route :	Inhalation
Exposure frequency :	Short-term
Limit value :	1900 mg/m3
Limit value type :	DNEL worker (systemic) (ETHANOL ; CAS No. : 64-17-5)
Exposure route :	Inhalation
Exposure frequency :	Long-term
Limit value :	950 mg/m3
Limit value type :	DNEL worker (systemic) (ETHANOL ; CAS No. : 64-17-5)
Exposure route :	Dermal
Exposure frequency :	Long-term
Limit value :	343 mg/kg

PNEC

Limit value type :	PNEC (Aquatic, freshwater) (ETHANOL ; CAS No. : 64-17-5)
Limit value :	0,96 mg/l
Limit value type :	PNEC (Aquatic, marine water) (ETHANOL ; CAS No. : 64-17-5)
Limit value :	0,79 mg/l
Limit value type :	PNEC (Sediment, freshwater) (ETHANOL ; CAS No. : 64-17-5)
Limit value :	3,6 mg/l
Limit value type :	PNEC (Sediment, marine water) (ETHANOL ; CAS No. : 64-17-5)
Limit value :	2,9 mg/kg
Limit value type :	PNEC (Soil) (ETHANOL ; CAS No. : 64-17-5)
Limit value :	0,63 mg/l
Limit value type :	PNEC (Secondary poisoning) (ETHANOL ; CAS No. : 64-17-5)
Limit value :	0,72 mg/kg
Limit value type :	PNEC (Sewage treatment plant) (ETHANOL ; CAS No. : 64-17-5)
Limit value :	580 mg/l
Limit value type :	PNEC (Aquatic, freshwater) (2-BUTOXYETHANOL ; CAS No. : 111-76-2)
Limit value :	8,8 mg/l
Limit value type :	PNEC (Aquatic, marine water) (2-BUTOXYETHANOL ; CAS No. : 111-76-2)
Limit value :	0,88 mg/l
Limit value type :	PNEC (Sediment, freshwater) (2-BUTOXYETHANOL ; CAS No. : 111-76-2)
Limit value :	34,6 mg/kg
Limit value type :	PNEC (Soil) (2-BUTOXYETHANOL ; CAS No. : 111-76-2)
Limit value :	2,33 mg/kg
Limit value type :	PNEC (Sewage treatment plant) (2-BUTOXYETHANOL ; CAS No. : 111-76-2)
Limit value :	463 mg/l

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8.2 Exposure controls

Personal protection equipment

Eye/face protection



Wear suitable safety goggles in case of splash.

Suitable eye protection

EN 166.

Skin protection

Hand protection



Wear protective gloves in case of longer lasting skin contact.

Suitable gloves type: EN 374.

Suitable material: NBR (Nitrile rubber)

Breakthrough time (maximum wearing time): 480 min.

Thickness of the glove material: 0.4 mm

Remark: The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Respiratory protection



Respiratory protection necessary at: exceeding exposure limit values

Suitable respiratory protection apparatus

Combination filtering device (EN 14387) Type : A

Remark

Observe the wear time limits according GefStoffV in combination with the rules for using respiratory protection apparatus (BGR 190).

General health and safety measures

Do not put any product-impregnated cleaning rags into your trouser pockets. Do not put any product-impregnated cleaning rags into your trouser pockets. When using do not eat, drink, smoke, sniff. Avoid contact with skin, eyes and clothes. P362+P364 - Take off contaminated clothing and wash it before reuse. P264 -Wash hands thoroughly after handling.

8.3 Additional information

No tests have been performed. Selection made for preparations according to the best available knowledge and information on ingredients. In the case of preparations the resistance of glove materials cannot be calculated in advance so it has to be tested before use.

SECTION 9

Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance: Liquid

Colour: transparent

Odour: characteristic

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Safety relevant basis data

Solidifying point:	(1013 hPa)	approx.	-8,5 °C
Initial boiling point and boiling range:	(1013 hPa)		72 °C
Flash point:			40 °C
Lower explosion limit:			not relevant
Upper explosion limit:			not relevant
Vapour pressure:	(50 °C)	<	1000 hPa
Density:	(20 °C)	approx.	0,97 g/cm ³
pH:		approx.	10,8
Flow time:	(20 °C)	approx.	19 s DIN-cup 4 mm
Maximum VOC content (EC):			18,9 Wt %
Maximum VOC content (Switzerland):			18,9 Wt %

9.2 Other information

Not sustaining combustion

SECTION 10

Stability and reactivity

10.1 Reactivity

No information available.

10.2 Chemical stability

Under normal pressure: distillation without decomposition.

10.3 Possibility of hazardous reactions

Do not spray on naked flames or any incandescent material.

10.4 Conditions to avoid

No information available.

10.5 Incompatible materials

No information available.

10.6 Hazardous decomposition products

Nitrogen oxides (NO_x). Carbon dioxide. Carbon monoxide

SECTION 11

Toxicological information

11.1 Information on toxicological effects

Acute effects

Acute oral toxicity

Parameter:	ATEmix calculated
Exposure route:	Oral
Effective dose:	>2000 mg/kg
Parameter:	LD50 (ETHANOL ; CAS No. : 64-17-5)
Exposure route:	Oral
Species:	Rat
Effective dose:	10470 mg/kg
Method:	OECD 401
Parameter:	LD50 (2-BUTOXYETHANOL ; CAS No. : 111-76-2)
Exposure route:	Oral
Species:	Rat
Effective dose:	1250 - 1490 mg/kg
Method:	OECD 401

Acute dermal toxicity

Parameter:	ATEmix calculated
Exposure route:	Dermal
Effective dose:	>2000 mg/kg
Parameter:	LD50 (2-BUTOXYETHANOL ; CAS No. : 111-76-2)
Exposure route:	Dermal
Species:	Rabbit
Effective dose:	841 mg/kg

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Method:	OECD 402
Parameter:	LD50 (ETHANOL ; CAS No. : 64-17-5)
Exposure route:	Dermal
Species:	Rabbit
Effective dose:	20 g/kg

Acute inhalation toxicity

Parameter:	ATEmix calculated
Exposure route:	Inhalation
Effective dose:	>20 mg/l
Parameter:	LC50 (ETHANOL ; CAS No. : 64-17-5)
Exposure route:	Inhalation
Species:	Rat
Effective dose:	116,9 - 133,8 mg/l
Exposure time:	4 h
Method:	OECD 403
Parameter:	LC50 (2-BUTOXYETHANOL ; CAS No. : 111-76-2)
Exposure route:	Inhalation
Species:	Rat
Effective dose:	2 - 20 mg/l
Exposure time:	4 h

Irritant and corrosive effects

Primary irritation to the skin

No further relevant information available.

Irritation to eyes

No further relevant information available.

Sensitisation

In case of skin contact

No further relevant information available.

In case of inhalation

No further relevant information available.

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Carcinogenicity

No further relevant information available.

Germ cell mutagenicity

No further relevant information available.

Reproductive toxicity

No further relevant information available.

STOT-single exposure

No further relevant information available.

STOT-repeated exposure

No further relevant information available.

Aspiration hazard

No further relevant information available.

11.2 Toxicokinetics, metabolism and distribution

There are no data available on the preparation/mixture itself.

11.3 Other adverse effects

Frequently or prolonged contact with skin may cause dermal irritation. Has degreasing effect on the skin. May be absorbed through the skin.

11.4 Additional information

Preparation not tested. The statement is derived from the properties of the single components.

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SECTION 12

Ecological information

12.1 Toxicity

Aquatic toxicity

Acute (short-term) fish toxicity

Parameter:	LC50 (ETHANOL ; CAS No. : 64-17-5)
Species:	Pimephales promelas (fathead minnow)
Evaluation parameter:	Acute (short-term) fish toxicity
Effective dose:	14,2 g/l
Exposure time:	96 h
Parameter:	LC50 (2-BUTOXYETHANOL ; CAS No. : 111-76-2)
Species:	Oncorhynchus mykiss (Rainbow trout)
Evaluation parameter:	Acute (short-term) fish toxicity
Effective dose:	1474 mg/l
Exposure time:	96 h
Method:	OECD 203
Parameter:	LC50 (2-BUTOXYETHANOL ; CAS No. : 111-76-2)
Species:	Daphnia magna (Big water flea)
Evaluation parameter:	Acute (short-term) daphnia toxicity
Effective dose:	1815 mg/l
Exposure time:	24 h
Method:	DIN 38412 / part 11
Parameter:	LC50 (ETHANOL ; CAS No. : 64-17-5)
Species:	Fish
Evaluation parameter:	Chronic (long-term) fish toxicity
Effective dose:	9164 - 14536 mg/l
Exposure time:	200 h
Parameter:	LC50 (ETHANOL ; CAS No. : 64-17-5)
Species:	Daphnia
Evaluation parameter:	Chronic (long-term) daphnia toxicity
Effective dose:	1806 mg/l
Exposure time:	10 d
Parameter:	LC50 (2-BUTOXYETHANOL ; CAS No. : 111-76-2)
Species:	Daphnia magna (Big water flea)
Evaluation parameter:	Chronic (long-term) daphnia toxicity
Effective dose:	297 mg/l
Exposure time:	21 d
Method:	OECD 211

Acute (short-term) daphnia toxicity

Parameter:	EC50 (ETHANOL ; CAS No. : 64-17-5)
Species:	Daphnia
Evaluation parameter:	Acute (short-term) daphnia toxicity
Effective dose:	5012 mg/l
Exposure time:	48 h

Chronic (long-term) daphnia toxicity

Parameter:	NOEC (ETHANOL ; CAS No. : 64-17-5)
Species:	Daphnia
Evaluation parameter:	Chronic (long-term) daphnia toxicity
Effective dose:	2 - 9,6 mg/l
Exposure time:	10 d
Parameter:	NOEC (2-BUTOXYETHANOL ; CAS No. : 111-76-2)
Species:	Brachydanio rerio (zebra-fish)
Evaluation parameter:	Chronic (long-term) fish toxicity
Effective dose:	>100 mg/l
Exposure time:	21 d
Method:	OECD 204
Parameter:	NOEC (2-BUTOXYETHANOL ; CAS No. : 111-76-2)
Species:	Daphnia magna (Big water flea)
Evaluation parameter:	Chronic (long-term) daphnia toxicity
Effective dose:	100 mg/l
Exposure time:	21 d

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Method:	OECD 211
Parameter:	NOEC (2-BUTOXYETHANOL ; CAS No. : 111-76-2)
Species:	Algae
Effective dose:	286 mg/l
Exposure time:	72 h
Method:	OECD 201

Acute (short-term) algae toxicity

Parameter:	EC50 (ETHANOL ; CAS No. : 64-17-5)
Species:	Chlorella vulgaris
Evaluation parameter:	Acute (short-term) fish toxicity
Effective dose:	675 mg/l
Exposure time:	4 d
Method:	OECD 201
Parameter:	EC50 (2-BUTOXYETHANOL ; CAS No. : 111-76-2)
Species:	Algae
Effective dose:	1840 mg/l
Exposure time:	72 h
Method:	OECD 201

Bacteria toxicity

Parameter:	EC50 (ETHANOL ; CAS No. : 64-17-5)
Species:	Bacteria toxicity
Effective dose:	5,8 g/l
Exposure time:	4 h

12.2 Persistence and degradability

According to the recipe, contains no AOX.

Biodegradation

Parameter:	Biodegradation (ETHANOL ; CAS No. : 64-17-5)
Inoculum:	Biodegradation
Evaluation parameter:	Aerobic
Degradation rate:	approx. 84 %
Test duration:	20 d
Evaluation:	Readily biodegradable (according to OECD criteria).
Parameter:	Biodegradation (2-BUTOXYETHANOL ; CAS No. : 111-76-2)
Inoculum:	Biodegradation
Degradation rate:	88 %
Test duration:	20 d

12.3 Bioaccumulative potential

No indication of bioaccumulation potential.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.

12.6 Other adverse effects

No information available.

12.7 Additional ecotoxicological information

After neutralisation, reduction in toxic effects is observed.

SECTION 13

Disposal considerations

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process. List of proposed waste codes/waste designations in accordance with EWC

13.1 Waste treatment methods

Product/Packaging disposal

Waste codes/waste designations according to EWC/AVV

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Waste code product

07 06 01* - aqueous washing liquids and mother liquors

20 01 29* - detergents containing dangerous substances.

Waste code packaging

15 01 02 - plastic packaging.

Waste treatment options

Appropriate disposal / Package

Contaminated packages must be completely emptied and can be re-used following proper cleaning. Handle contaminated packages in the same way as the substance itself.

13.2 Additional information

These codes are assigned based upon the most common uses for this material and may not reflect contaminants resulting from actual use.

SECTION 14

Transport information

14.1 UN-Number

No dangerous good in sense of these transport regulations.

14.2 UN proper shipping name

No dangerous good in sense of these transport regulations.

14.3 Transport hazard class(es)

No dangerous good in sense of these transport regulations.

14.4 Packing group

No dangerous good in sense of these transport regulations.

14.5 Environmental hazards

No dangerous good in sense of these transport regulations.

14.6 Special precautions for user

None

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

No transport as bulk according to IBC Code.

SECTION 15

Regulatory information

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

EU legislation

Authorisations and/or restrictions on use

Restrictions on use

Use restriction according to REACH annex XVII, no. : 40

Restrictions of occupation

Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

Other regulations (EU)

Labelling for contents according to regulation (EC) No. 648/2004

None

National regulations

AT: Labelling according to Austrian regulations (Chemikaliengesetz/ChemV).

CH: Chemikalienverordnung (ChemV) and Chemikalien-Risikoreduktions-Verordnung (Chem RRV) are complied.

Störfallverordnung

Category : P5b FLAMMABLE LIQUIDS

Technische Anleitung Luft (TA-Luft)

Weight fraction (Number 5.2.5. I) : < 5 %

Weight fraction (Number 5.2.4. III) : < 1 %

Water hazard class (WGK)

Classification according to AwSV - Class : 1 (Slightly hazardous to water)

15.2 Chemical safety assessment

For this substance a chemical safety assessment has not been carried out.

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SECTION 16

Other information

16.1 Indication of changes

03. Hazardous ingredients · 08. Occupational exposure limit values · 08. DNEL/DMEL · 08. PNEC · 15. Restrictions on use · 15. Technische Anleitung Luft (TA-Luft) · 15. Water hazard class (WGK)

16.2 Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route (Europäisches Übereinkommen über die Beförderung gefährlicher Güter auf der Straße)

AOX: adsorbierbare organisch gebundene Halogene

AwSV: Verordnung über Anlagen zum Umgang mit wassergefährdenden Stoffen

CAS: Chemical Abstracts Service (Unterabteilung der American Chemical Society) CLP: Verordnung (EG) Nr. 1272/2008 über die Einstufung, Kennzeichnung und Verpackung von Stoffen und Gemischen (Classification Labelling and Packaging)

EAK / AVV: europäischer Abfallartenkatalog / Abfallverzeichnis-Verordnung

ECHA: Europäische Chemikalienagentur (European Chemicals Agency)

EINECS: : Altstoffverzeichnis (European Inventory of Existing Commercial Chemical Substances)

GHS: Global harmonisiertes System zur Einstufung und Kennzeichnung von Chemikalien (Globally Harmonized System of Classification and Labelling of Chemicals)

IATA: Internationale Luftverkehrs-Vereinigung (International Air Transport Association)

ICAO: Internationale Zivilluftfahrtorganisation (International Civil Aviation Organization)

IMDG: Gefahrgutkennzeichnung für gefährliche Güter im Seeschiffverkehr (International Maritime Code for Dangerous Goods)

RID: Regelung zur internationalen Beförderung gefährlicher Güter im Schienenverkehr (Règlement concernant le transport international ferroviaire de marchandises dangereuses)

TRGS: Technische Regel für den Umgang mit Gefahrstoffen

VbF: Verordnung über brennbare Flüssigkeiten

VOC: flüchtige organische Verbindung (volatile organic compound)

VwVwS: Verwaltungsvorschrift wassergefährdender Stoffe

WGK: Wassergefährdungsklasse

16.3 Key literature references and sources for data

DGUV: GESTIS-Stoffdatenbank

ECHA: Classification And Labelling Inventory

ECHA: Pre-registered Substances

ECHA: Registered Substances EC_Safety Data Sheet of Suppliers

ESIS: European Chemical Substances Information System GDL: Gefahrstoffdatenbank der Länder UBA Rigoletto: Wassergefährdende Stoffe Regulation (EC) No. 1907/2006 of the European Parliament and of the Council Regulation (EC) No. 1272/2008 of the European Parliament and of the Council

16.4 Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]

No information available.

16.5 Relevant H- and EUH-phrases (Number and full text)

H225 Highly flammable liquid and vapour.

H302 Harmful if swallowed.

H312 Harmful in contact with skin.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H332 Harmful if inhaled.

16.6 Training advice

None

16.7 Additional information

None

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.