

ENZO- Concentrated Enzyme Cleaner Deodoriser

SAFETY DATA SHEET

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

1.1. Product identifier

Product form : Mixture
Name : ENZO Concentrated Enzyme Cleaner & Deodoriser
Product code : BC 2620, BC 2660

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

1.2.1. Relevant identified uses

Main use category : Industrial use, Professional use, Consumer use
Use of the substance/mixture : Toilet Deodorizer, Drain Maintainer
Function or use category : Cleaning/washing agents and additives

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Manufacturer:
Calfarme (Singapore) Pte Ltd Telephone: +65 6556 4111
AMK Techlink
20 Ang Mo Kio Industrial Park 2A 06-18
Singapore 567761
Republic of Singapore
Email: sales@calfarme.com.sg Web: www.calfarme.com.sg

Distributor:
Calfarme Products Sdn Bhd Telephone: +60 3 5122 2700
45 & 47 Jalan Tabla 33/21
Shah Alam Technology Park
Seksyen 33 40400 Shah Alam
Selangor Darul Ehsan Malaysia
Email: sales@calfarme.com.my Web: www.calfarme.com.my

Curran Chemicals Pty Ltd Telephone: +61 (3) 93972122
P.O Box 691, WILLIAMSTOWN, VIC 3016
Unit 1/1 CHURCHILL STREET, WILLIAMSTOWN, VIC 3016
Tel: 9397 2122
Email: sales@curranchemicals.com.au Web: www.curranchemicals.com

1.4. Emergency telephone number

Country	Organisation/Company	Address	Emergency number	Comment
Ireland	National Poisons Information Centre Beaumont Hospital	Beaumont Hospital Beaumont Road 9 Dublin	: +353 1 8379964	
United Kingdom	National Poisons Information Service (NHS Direct)	http://www.npis.org	111 (England & Wales only) or 112 (EU) or 08454 24 24 24 (Scotland)	
Australia	NSW Poisons Information Centre Childrens Hospital Westmead	Hawkesbury Road Sydney	+61 2 9845 3969 131126	
New Zealand	National Poisons Centre New Zealand	Dunedin School of Medicine University of Otago PO Box 913 Dunedin 9054	0800 POISON (0800 764 766) 24 hours a day, 7 days a week	
Singapore	Drug & poison information centre	Block 1 Basement 1, c/o Department of Emergency Medicine, Singapore General Hospital Outram Road 169608 Singapore	6423 9119	
Country	Organisation/Company	Address	Emergency number	Comment
Malaysia	National Poisons Centre / WHO Collaborating Centre for drug Information Western- Pacific Region	c/o Universiti Sains Malaysia Penang	1 800 88 90 99 +604 567 0099	

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Skin corrosion/irritation, Category 2 H315

Serious eye damage/eye irritation, Category 1 H318

Sensitisation — Respiratory, Category 1 H334

Full text of hazard classes and H-statements : see section 16

Adverse physicochemical, human health and environmental effects

Causes skin irritation. Causes serious eye damage. May cause allergy or asthma symptoms or breathing difficulties if inhaled.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)



Signal word (CLP) : Danger

Hazardous ingredients : alkylpolyglycoside

Hazard statements (CLP) :
H315 - Causes skin irritation
H318 - Causes serious eye damage
H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled

Precautionary statements (CLP) :
P261 - Avoid breathing dust/fume/gas/mist/vapours/spray
P280 - Wear eye protection, face protection, protective clothing, protective gloves
P284 - In case of inadequate ventilation wear respiratory protection
P302+P352 - IF ON SKIN: Wash with plenty of water
P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P342+P311 - If experiencing respiratory symptoms: Call a POISON CENTER or doctor
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
alkylpolyglycoside	(CAS No) 68515-73-1 (EC no) 500-220-1	10 - 25	Eye Dam. 1, H318
propan-2-ol, isopropyl alcohol, isopropanol	(CAS No) 67-63-0 (EC no) 200-661-7 (EC index no) 603-117-00-0 (REACH-no) 01-2119457558-25-XXXX	1 - 10	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336
citral substance with national workplace exposure limit(s) (ES, IT, PL, PT)	(CAS No) 5392-40-5 (EC no) 226-394-6 (EC index no) 605-019-00-3		Skin Irrit. 2, H315 Skin Sens. 1, H317
2,6-di-tert-butyl-p-cresol substance with national workplace exposure limit(s) (AT, BE, BG, DE, DK, ES, FI, FR, GB, GR, IE, IT, PT)	(CAS No) 128-37-0 (EC no) 204-881-4 (REACH-no) 01-2119565113-46-XXXX		Acute Tox. 4 (Oral), H302 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
cineole(=1,8-cineole) substance with national workplace exposure limit(s) (BE)	(CAS No) 470-82-6 (EC no) 207-431-5		Flam. Liq. 3, H226
alpha-pinene substance with national workplace exposure limit(s) (BE, IT, PT)	(CAS No) 80-56-8 (EC no) 201-291-9		Flam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Asp. Tox. 1, H304 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
(R)-p-mentha-1,8-diene, d-limonene substance with national workplace exposure limit(s) (BE, DE, FI)	(CAS No) 5989-27-5 (EC no) 227-813-5 (EC index no) 601-029-00-7		Flam. Liq. 3, H226 Skin Irrit. 2, H315 Skin Sens. 1, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: Call a poison center or a doctor if you feel unwell.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a poison center or a doctor.
First-aid measures after skin contact	: Wash skin with plenty of water. Take off contaminated clothing. If skin irritation occurs: Get medical advice/attention.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.
First-aid measures after ingestion	: Call a poison center or a doctor if you feel unwell.

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

Symptoms/injuries after inhalation	: May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Symptoms/injuries after skin contact	: Irritation.
Symptoms/injuries after eye contact	: Serious damage to eyes.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapours/spray.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material.
Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Avoid contact with skin and eyes. Wear personal protective equipment. Avoid breathing dust/fume/gas/mist/vapours/spray.
Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a well-ventilated place. Keep cool.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

propan-2-ol, isopropyl alcohol, isopropanol (67-63-0)		
Austria	Local name	2-Propanol Kurzzeitwert für Großguss
Austria	MAK (mg/m³)	500 mg/m³
Austria	MAK (ppm)	200 ppm
Austria	MAK Short time value (mg/m³)	2000 mg/m³
Austria	MAK Short time value (ppm)	800 ppm
Belgium	Local name	Alcool isopropylique
Belgium	Limit value (mg/m³)	500 mg/m³
Belgium	Limit value (ppm)	200 ppm
Belgium	Short time value (mg/m³)	1000 mg/m³
Belgium	Short time value (ppm)	400 ppm
Bulgaria	Local name	Изопропилов алкохол
Bulgaria	OEL TWA (mg/m³)	980 mg/m³
Bulgaria	OEL STEL (mg/m³)	1225 mg/m³
Croatia	Local name	Propan-2-ol; (izopropil-alkohol; izopropanol)

Croatia	KGVI (kratkotrajna granična vrijednost izloženosti) (ppm)	500 ppm
Croatia	Naznake (HR)	F, Xi
Czech Republic	Local name	iso-Propanol
Czech Republic	Expoziční limity (PEL) (mg/m³)	500 mg/m³
Czech Republic	Expoziční limity (PEL) (ppm)	204 ppm
Czech Republic	Expoziční limity (NPK-P) (mg/m³)	1000 mg/m³
Czech Republic	Expoziční limity (NPK-P) (ppm)	410 ppm
Czech Republic	Remark (CZ)	D
Denmark	Local name	Isopropylalkohol (2005)
Denmark	Grænseværdie (langvarig) (mg/m³)	490 mg/m³
Denmark	Grænseværdie (langvarig) (ppm)	200 ppm
Estonia	Local name	2-propanool (isopropüülalkohol, isopropanool)
Estonia	OEL TWA (mg/m³)	350 mg/m³

propan-2-ol, isopropyl alcohol, isopropanol (67-63-0)		
Estonia	OEL TWA (ppm)	150 ppm
Estonia	OEL STEL (mg/m³)	600 mg/m³
Estonia	OEL STEL (ppm)	250 ppm
Finland	Local name	2-Propanoli
Finland	HTP-arvo (8h) (mg/m³)	500 mg/m³
Finland	HTP-arvo (8h) (ppm)	200 ppm
Finland	HTP-arvo (15 min)	620 mg/m³
Finland	HTP-arvo (15 min) (ppm)	250 ppm
France	Local name	Alcool isopropylique
France	VLE (mg/m³)	980 mg/m³
France	VLE (ppm)	400 ppm
Germany	Local name	Propan-2-ol
Germany	TRGS 900 Occupational exposure limit value (mg/m³)	500 mg/m³
Germany	TRGS 900 Occupational exposure limit value (ppm)	200 ppm
Germany	Remark (TRGS 900)	DFG,Y
Greece	OEL TWA (mg/m³)	980 mg/m³
Greece	OEL TWA (ppm)	400 ppm
Greece	OEL STEL (mg/m³)	1225 mg/m³
Greece	OEL STEL (ppm)	500 ppm
Hungary	Local name	IZOPROPIL-ALKOHOL
Hungary	AK-érték	500 mg/m³
Hungary	CK-érték	2000 mg/m³
Hungary	Megjegyzések (HU)	b, i; II.1.
Ireland	Local name	Isopropyl alcohol
Ireland	OEL (8 hours ref) (ppm)	200 ppm
Ireland	OEL (15 min ref) (ppm)	400 ppm
Ireland	Notes (IE)	Sk
Latvia	Local name	Izopropanols (2-propanols, izopropilspirts, 1-metil-1-etanols)
Latvia	OEL TWA (mg/m³)	350 mg/m³
Latvia	OEL STEL (mg/m³)	600 mg/m³
Lithuania	Local name	2-propanolis (izopropanolis, izopropilo alkoholis)
Lithuania	IPRV (mg/m³)	350 mg/m³
Lithuania	IPRV (ppm)	150 ppm
Lithuania	TPRV (mg/m³)	600 mg/m³
Lithuania	TPRV (ppm)	250 ppm
Poland	Local name	Propan-2-ol (izopropylowy alkohol)
Poland	NDS (mg/m³)	900 mg/m³
Poland	NDSch (mg/m³)	1200 mg/m³
Portugal	Local name	2-Propanol (isopropanol ou álcool isopropílico)
Portugal	OEL TWA (ppm)	200 ppm
Portugal	OEL STEL (ppm)	400 ppm
Romania	Local name	Alcool izopropilic
Romania	OEL TWA (mg/m³)	200 mg/m³
Romania	OEL TWA (ppm)	81 ppm
Romania	OEL STEL (mg/m³)	500 mg/m³
Romania	OEL STEL (ppm)	203 ppm

propan-2-ol, isopropyl alcohol, isopropanol (67-63-0)		
Slovenia	Local name	propan-2-ol (izopropilalkohol; izopropanol)
Slovenia	OEL TWA (mg/m³)	500 mg/m³
Slovenia	OEL TWA (ppm)	200 ppm
Slovenia	OEL STEL (mg/m³)	2000 mg/m³
Slovenia	OEL STEL (ppm)	800 ppm
Spain	Local name	Isopropanol (Alcohol isopropílico)
Spain	VLA-ED (mg/m³)	500 mg/m³
Spain	VLA-ED (ppm)	200 ppm
Spain	VLA-EC (mg/m³)	1000 mg/m³
Spain	VLA-EC (ppm)	400 ppm
Spain	Notes	(2011), VLB® (Agente químico que tiene Valor Límite Biológico específico en este documento.), s (Esta sustancia tiene prohibida total o parcialmente su comercialización y uso como fitosanitario y/o como biocida. Para unainformación detallada acerca de las prohibiciones consúltase:Base de datos de productos biocidas:http://www.msssi.gob.es/ciudadanos/produ ctos.do?tipo=plaguicidasBase de datos de productos fitosanitarios:http://www.magrama.gob.es/agricultura/p ags/fitos/registro/fichas/pdf/Lista_sa.pdf)
Sweden	Local name	Isopropanol
Sweden	nivågränsvärde (NVG) (mg/m³)	350 mg/m³
Sweden	nivågränsvärde (NVG) (ppm)	150 ppm
Sweden	kortidsvärde (KTV) (mg/m³)	600 mg/m³
Sweden	kortidsvärde (KTV) (ppm)	250 ppm
United Kingdom	Local name	Propan-2-ol
United Kingdom	WEL TWA (mg/m³)	999 mg/m³
United Kingdom	WEL TWA (ppm)	400 ppm
United Kingdom	WEL STEL (mg/m³)	1250 mg/m³
United Kingdom	WEL STEL (ppm)	500 ppm
Norway	Local name	2-Propanol
Norway	Grenseverdier (AN) (mg/m³)	245 mg/m³
Norway	Grenseverdier (AN) (ppm)	100 ppm
Switzerland	Local name	2-Propanol
Switzerland	VME (mg/m³)	500 mg/m³
Switzerland	VME (ppm)	200 ppm
Switzerland	VLE (mg/m³)	1000 mg/m³
Switzerland	VLE (ppm)	400 ppm
Switzerland	Remark (CH)	4x15
Australia	Local name	Isopropyl alcohol
Australia	TWA (mg/m³)	983 mg/m³
Australia	TWA (ppm)	400 ppm
Australia	STEL (mg/m³)	1230 mg/m³
Australia	STEL (ppm)	500 ppm
USA - ACGIH	Local name	2-Propanol
USA - ACGIH	ACGIH TWA (ppm)	200 ppm
USA - ACGIH	ACGIH STEL (ppm)	400 ppm
USA - ACGIH	Remark (ACGIH)	Eye & URT irr; CNS impair
USA - OSHA	Local name	Isopropyl alcohol
USA - OSHA	OSHA PEL (TWA) (mg/m³)	980 mg/m³
USA - OSHA	OSHA PEL (TWA) (ppm)	400 ppm
cineole(=1,8-cineole) (470-82-6)		
Belgium	Limit value (mg/m³)	10 mg/m³ (Huiles végétales (brouillards); Belgium; Time-weighted average exposure limit 8 h)
citral (5392-40-5)		
Poland	Local name	3,7-Dimetylookta-2,6-dienal (cytral)
Poland	NDS (mg/m³)	27 mg/m³
Poland	NDSch (mg/m³)	54 mg/m³
Spain	Local name	Citral
Spain	VLA-ED (ppm)	5 ppm

Spain	Notes	(2013), Vía dérmica: (Indica que, en las exposiciones a esta sustancia, la aportación por la vía cutánea puede resultar significativa para el contenido corporal total si no se adoptan medidas para prevenir la absorción. En estas situaciones, es aconsejable la utilización del control biológico para poder cuantificar la cantidad global absorbida del contaminante. Para más información véase el Apartado 5 de este documento.), Sen (Sensibilizante. Véase Apartado 6.), FIV (Fracción inhalable y vapor. La notación FIV señala a aquellos agentes químicos que se pueden presentar en el ambiente de trabajo, tanto en forma de materia particulada como vapor, por lo que las dos fases pueden coexistir, contribuyendo ambas a la exposición. Esta situación se puede dar, principalmente, en los siguientes casos:• Cuando el agente en cuestión tiene un valor "intermedio" de presión de vapor (en estos casos se tiene en cuenta la relación entre su concentración en el aire saturado de vapor y el valor del VLA-ED® y la nota se asigna, generalmente, cuando el cociente entre ambas cantidades se encuentra entre 0.1 y 10)• Por razón de la forma de uso del agente químico (por ejemplo, pulverización)• En los procesos que conlleven cambios importantes de temperatura que puedan afectar al estado físico del agente químico• En los procesos en los que una fracción significativa del vapor puede disolverse o adsorberse en las partículas de otra sustancia, a semejanza de lo que ocurre con los agentes solubles en agua en ambientes con humedad elevada. Para mayor información, véase C. Perez and S. C. Soderholm. Some chemicals requiring special consideration when deciding whether to sample the particle, vapor, or both phases of an atmosphere. Appl. Occup. Environ. Hyg. 6 (10), 859-864. 1991.)
USA - ACGIH	Local name	Citral
USA - ACGIH	ACGIH TWA (ppm)	5 ppm
USA - ACGIH	Remark (ACGIH)	Body weight eff, URT irr, eye dam; Skin; DSEN; A4

2,6-di-tert-butyl-p-cresol (128-37-0)		
Austria	Local name	2,6-Di-tert-butyl-p-kresol
Austria	MAK (mg/m³)	10 mg/m³
Belgium	Local name	2,6-Di-tert-butyl-p-crésol (vapeur et aérosol)
Belgium	Limit value (mg/m³)	2 mg/m³
Bulgaria	Local name	Дибутилпаракрезол
Bulgaria	OEL TWA (mg/m³)	10 mg/m³
Bulgaria	OEL STEL (mg/m³)	50 mg/m³
Croatia	Local name	2,6-Di-tert-butyl-p-krezol
Croatia	GVI (granična vrijednost izloženosti) (mg/m³)	10 mg/m³
Denmark	Local name	2,6-Di-tert-butyl-p-cresol (1994)
Denmark	Grænseværdie (langvarig) (mg/m³)	10 mg/m³
Finland	Local name	2,6-Di-tert-butyyl-p-kresoli

2,6-di-tert-butyl-p-cresol (128-37-0)		
Finland	HTP-arvo (8h) (mg/m³)	10 mg/m³
Finland	HTP-arvo (15 min)	20 mg/m³
France	Local name	2,6-Di-tert-butyl-p-crésol
France	VME (mg/m³)	10 mg/m³
Germany	Local name	2,6-Di-tert-butyl-p-kresol
Germany	TRGS 900 Occupational exposure limit value (mg/m³)	10 mg/m³
Greece	OEL TWA (mg/m³)	10 mg/m³
Ireland	Local name	2,6-Ditertiary-butyl-para- cresol
Ireland	OEL (8 hours ref) (mg/m³)	10 mg/m³
Portugal	Local name	Hidroxitoluenobutilado (2,6-Di-terc-butyl-p-cresol) (BHT)
Portugal	OEL TWA (mg/m³)	2 mg/m³
Slovenia	Local name	2,6-di-terc-butyl-p-krezol
Slovenia	OEL TWA (mg/m³)	10 mg/m³
Spain	Local name	2,6-Diterc-butyl-p-cresol
Spain	VLA-ED (mg/m³)	10 mg/m³
Spain	Notes	2014
United Kingdom	Local name	2,6-Di-tert-butyl-p-cresol
United Kingdom	WEL TWA (mg/m³)	10 mg/m³
Iceland	Local name	2,6-Di-tert-bútýl-p -kresól (bútýlhýdroxýtólúen)
Iceland	OEL (8 hours ref) (mg/m³)	10 mg/m³
Switzerland	Local name	2,6-Di-tert-butyl-4-crésol
Switzerland	VME (mg/m³)	10 mg/m³
Australia	Local name	2,6-Di-tert-butyl-p-cresol
Australia	TWA (mg/m³)	10 mg/m³
USA - ACGIH	Local name	Butylated hydroxytoluene
USA - ACGIH	ACGIH TWA (mg/m³)	2 mg/m³
USA - ACGIH	Remark (ACGIH)	URT irr

alpha-pinene (80-56-8)		
Belgium	Limit value (ppm)	20 ppm (Essence de térébenthine et monoterpènes sélectionnés; Belgium; Time-weighted average exposure limit 8 h)
USA - ACGIH	ACGIH TWA (ppm)	20 ppm (Turpentine and selected monoterpenes; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value)
(R)-p-mentha-1,8-diene, d-limonene (5989-27-5)		
Belgium	Limit value (ppm)	20 ppm (Essence de térébenthine et monoterpènes sélectionnés; Belgium; Time-weighted average exposure limit 8 h)
Finland	Local name	D-Limoneeni
Finland	HTP-arvo (8h) (mg/m³)	140 mg/m³
Finland	HTP-arvo (8h) (ppm)	25 ppm
Finland	HTP-arvo (15 min)	280 mg/m³
Finland	HTP-arvo (15 min) (ppm)	50 ppm
Germany	Local name	(R)-p-Mentha-1,8-dien (D-Limonen)
Germany	TRGS 900 Occupational exposure limit value (mg/m³)	28 mg/m³
Germany	TRGS 900 Occupational exposure limit value (ppm)	5 ppm
Germany	Remark (TRGS 900)	H,Sh,Y,DFG
Norway	Local name	d-Limonen
Norway	Grenseverdier (AN) (mg/m³)	140 mg/m³
Norway	Grenseverdier (AN) (ppm)	25 ppm
(R)-p-mentha-1,8-diene, d-limonene (5989-27-5)		
Norway	Merknader (NO)	A
Switzerland	Local name	D-Limonène
Switzerland	VME (mg/m³)	110 mg/m³
Switzerland	VME (ppm)	20 ppm
Switzerland	VLE (mg/m³)	220 mg/m³
Switzerland	VLE (ppm)	40 ppm
Switzerland	Remark (CH)	4x15

8.2. Exposure controls

Appropriate engineering controls	: Ensure good ventilation of the work station.
Personal protective equipment	: Safety glasses. Gloves. Protective clothing.
Hand protection	: Protective gloves
Eye protection	: Safety glasses
Skin and body protection	: Wear suitable protective clothing
Respiratory protection	: In case of inadequate ventilation wear respiratory protection. Wear respiratory protection



Environmental exposure controls	: Avoid release to the environment.
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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: Green, Yellow
Odour	: characteristic.
Odour threshold	: No data available
pH	: 7 - 8
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: No data available
Flash point	: > 94 °C
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: Not applicable
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Solubility	: No data available
Log Pow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

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 toxicological effects

Acute toxicity : Not classified

propan-2-ol, isopropyl alcohol, isopropanol (67-63-0)	
LD50 dermal rabbit	12870 mg/kg (Rabbit; Experimental value; Equivalent or similar to OECD 402; 16.4; Rabbit)
LC50 inhalation rat (mg/l)	73 mg/l/4h (Rat)
alkylpolyglycoside (68515-73-1)	
LD50 oral rat	> 2000 mg/kg
LD50 dermal rat	> 2000 mg/kg
cineole(=1,8-cineole) (470-82-6)	
LD50 oral rat	2480 mg/kg (Rat)
LD50 dermal rabbit	> 5000 mg/kg (Rabbit)
citral (5392-40-5)	
LD50 oral rat	4960 mg/kg (Rat)
LD50 dermal rat	> 2000 mg/kg (Rat)
LD50 dermal rabbit	2250 mg/kg (Rabbit)
2,6-di-tert-butyl-p-cresol (128-37-0)	
LD50 oral rat	890 mg/kg (Rat; OECD 401: Acute Oral Toxicity; Experimental value; >6000 mg/kg bodyweight; Rat)
LD50 dermal rat	> 2000 mg/kg (Rat; Literature study; OECD 402: Acute Dermal Toxicity; >2000 mg/kg bodyweight; Rat; Experimental value)
alpha-pinene (80-56-8)	
LD50 oral rat	3700 mg/kg (Rat)
LD50 dermal rabbit	> 5000 mg/kg (Rabbit)
(R)-p-mentha-1,8-diene, d-limonene (5989-27-5)	
LD50 oral rat	4400 mg/kg bodyweight (Rat; OECD 423: Acute Oral Toxicity – Acute Toxic Class Method; Literature study; > 2000 mg/kg bodyweight; Rat; Read-across)
LD50 dermal rabbit	> 5000 mg/kg bodyweight (Rabbit; Weight of evidence; Equivalent or similar to OECD 402)

Skin corrosion/irritation	: Causes skin irritation. pH: 7 - 8
Serious eye damage/irritation	: Causes serious eye damage. pH: 7 - 8
Respiratory or skin sensitisation	: May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: Not classified
Specific target organ toxicity (repeated exposure)	: Not classified
Aspiration hazard	: Not classified

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

propan-2-ol, isopropyl alcohol, isopropanol (67-63-0)	
LC50 fish 2	9640 mg/l (LC50; OECD 203: Fish, Acute Toxicity Test; 96 h; Pimephales promelas; Flow-through system; Fresh water; Experimental value)
EC50 Daphnia 2	13299 mg/l (EC50; Other; 48 h; Daphnia magna)
Threshold limit algae 1	> 1000 mg/l (EC50; UBA; 72 h; Scenedesmus subspicatus)
alkylpolyglycoside (68515-73-1)	
LC50 fish 1	126 mg/l 96h
EC50 Daphnia 1	> 100 mg/l 48h (OECD 202)
EC50 other aquatic organisms 1	27,22 mg/l 72h; Algae; Scenedesmus subspicatus
cineole(=1,8-cineole) (470-82-6)	
LC50 fish 1	102 mg/l (LC50; 96 h)

2,6-di-tert-butyl-p-cresol (128-37-0)	
LC50 fish 1	>= 0,57 mg/l (LC0; EU Method C.1; 96 h; Brachydanio rerio; Semi-static system; Fresh water; Experimental value)
LC50 fish 2	0,199 mg/l (LC50; ECOSAR v1.00; 96 h; Pisces)
EC50 Daphnia 1	0,48 mg/l (EC50; OECD 202: Daphnia sp. Acute Immobilisation Test; 48 h; Daphnia magna; Static system; Fresh water; Experimental value)
EC50 Daphnia 2	0,15 mg/l (NOEC; OECD 202: Daphnia sp. Acute Immobilisation Test; 48 h; Daphnia magna; Static system; Fresh water; Experimental value)

alpha-pinene (80-56-8)	
LC50 fish 1	0,28 mg/l (LC50; 96 h)
EC50 Daphnia 1	41 mg/l (LC50; 48 h)

(R)-p-mentha-1,8-diene, d-limonene (5989-27-5)	
LC50 fish 1	720 µg/l (LC50; OECD 203: Fish, Acute Toxicity Test; 96 h; Pimephales promelas; Flow-through system; Fresh water; Experimental value)
EC50 Daphnia 1	0,36 mg/l (EC50; OECD 202: Daphnia sp. Acute Immobilisation Test; 48 h; Daphnia magna; Static system; Fresh water; Experimental value)
Threshold limit algae 1	150 mg/l (EC50; OECD 201: Alga, Growth Inhibition Test; 72 h; Desmodesmus subspicatus; Static system; Fresh water; Read-across)

12.2. Persistence and degradability

BIO CLEAN Concentrated Toilet Maintainer	
Persistence and degradability	Readily biodegradable in water.
BOD (% of ThOD)	72 % ThOD
Biodegradation	90 %

propan-2-ol, isopropyl alcohol, isopropanol (67-63-0)	
Persistence and degradability	Readily biodegradable in water. Biodegradable in soil. Biodegradable in soil in anaerobic condition. No (test)data available on mobility of the substance.
Biochemical oxygen demand (BOD)	1,19 g O ₂ /g substance
Chemical oxygen demand (COD)	2,23 g O ₂ /g substance
ThOD	2,40 g O ₂ /g substance

alkylpolyglycoside (68515-73-1)	
Persistence and degradability	Readily biodegradable in water.

cineole(=1,8-cineole) (470-82-6)	
Persistence and degradability	Not readily biodegradable in water.

citral (5392-40-5)	
Persistence and degradability	Readily biodegradable in water. Forming sediment in water. Ozonation in the air. Photodegradation in the air.

2,6-di-tert-butyl-p-cresol (128-37-0)	
Persistence and degradability	Not readily biodegradable in water. Biodegradable in soil. Adsorbs into the soil. Low potential for Mobility in soil. Photooxidation in the air.
Biochemical oxygen demand (BOD)	0,51 g O ₂ /g substance
Chemical oxygen demand (COD)	2,27 g O ₂ /g substance
ThOD	2,977 g O ₂ /g substance
BOD (% of ThOD)	0,17

alpha-pinene (80-56-8)	
Persistence and degradability	Not readily biodegradable in water. Forming sediment in water. Adsorbs into the soil. Photodegradation in the air.

(R)-p-mentha-1,8-diene, d-limonene (5989-27-5)	
Persistence and degradability	Readily biodegradable in water. Forming sediment in water. Adsorbs into the soil.
ThOD	3,29 g O ₂ /g substance

12.3. Bioaccumulative potential

BIO CLEAN Concentrated Toilet Maintainer	
BCF fish 1	>=

propan-2-ol, isopropyl alcohol, isopropanol (67-63-0)	
Log Pow	0,05 (Weight of evidence approach; Other; 25 °C)
Bioaccumulative potential	Low bioaccumulation potential (Log Kow < 4).

alkylpolyglycoside (68515-73-1)	
Log Pow	-0,07 40 °C

cineole(=1,8-cineole) (470-82-6)	
Log Pow	1,84 (Calculated)
Bioaccumulative potential	Low bioaccumulation potential (Log Kow < 4).

citral (5392-40-5)	
Log Pow	2,76 - 3,45 (Estimated value)
Bioaccumulative potential	bioaccumulable.

2,6-di-tert-butyl-p-cresol (128-37-0)	
BCF fish 1	230 - 2500 (BCF; OECD 305: Bioconcentration: Flow-Through Fish Test; 56 days; Cyprinus carpio; Flow-through system; Fresh water; Experimental value)
Log Pow	5,1 (Experimental value)
Bioaccumulative potential	Potential for bioaccumulation (500 ≤ BCF ≤ 5000).

alpha-pinene (80-56-8)	
BCF fish 1	718 (BCF)
Log Pow	4,83 (Experimental value)
Bioaccumulative potential	bioaccumulable.
(R)-p-mentha-1,8-diene, d-limonene (5989-27-5)	
BCF fish 1	864,8 - 1022 (BCF; Pisces)
Log Pow	4,38 (Experimental value; OECD 117: Partition Coefficient (n-octanol/water), HPLC method; 37 °C)
Bioaccumulative potential	Potential for bioaccumulation (4 ≥ Log Kow ≤ 5).
12.4. Mobility in soil	
propan-2-ol, isopropyl alcohol, isopropanol (67-63-0)	
Surface tension	0,021 N/m (25 °C)
alkylpolyglycoside (68515-73-1)	
Log Koc	1,7 25 °C

2,6-di-tert-butyl-p-cresol (128-37-0)	
Log Koc	Koc,PCKOCWIN v1.66; 23030; Calculated value; log Koc; PCKOCWIN v1.66; 4.362; Calculated value
Ecology - soil	May be harmful to plant growth, blooming and fruit formation.
alpha-pinene (80-56-8)	
Ecology - soil	May be harmful to plant growth, blooming and fruit formation.
(R)-p-mentha-1,8-diene, d-limonene (5989-27-5)	
Log Koc	Koc, SRC PCKOCWIN v2.0; 1120 - 6324; QSAR

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.
Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

ADR	IMDG	IATA	ADN	RID
14.1. UN number				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.2. UN proper shipping name				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.3. Transport hazard class(es)				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.4. Packing group				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental hazards				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
No supplementary information available				

14.6. Special precautions for user

- Overland transport

Not applicable

- Transport by sea

Not applicable

- Air transport

Not applicable

- Inland waterway transport

Not applicable

- Rail transport

Not applicable

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****15.1.1. EU-Regulations**

The following restrictions are applicable according to Annex XVII of the REACH Regulation (EC) No 1907/2006:

3. Liquid substances or mixtures which are regarded as dangerous in accordance with Directive 1999/45/EC or are fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008	BIO PLUS Multi-Purpose Biological Cleaner and Deodoriser - propan-2-ol, isopropyl alcohol, isopropanol - alkylpolyglycoside - 2,6-dimethyl-7-octen-2-ol - citronellol - linalol - terpineol, mixture of isomers - geraniol - nerol - tetramethyl acetyloctahydronaphthalenes - alpha-hexylcinnamaldehyde - hexyl salicylate - 4-tert-butylcyclohexyl acetate - 1,3,4,6,7,8-hexahydro-4,6,6,7,8-hexamethylindeno[5,6-c]pyran - 2-(4-tert-butylbenzyl)propionaldehyde - linalyl acetate - terpineol, acetate - 3a,4,5,6,7,7a-hexahydro-4,7-methanoinden-6-yl acetate - 3-p-cumenyl-2-methylpropionaldehyde - gamma-Undecalactone - allyl hexanoate - hexyl acetate - citronellyl acetate - methoxyhydratropaldehyde - cis-3-hexenyl salicylate - methylenedioxyphenyl methylpropanal - 2,4-Dimethyl-3-cyclohexenecarboxaldehyde - 2-ethyl-4-(2,2,3-trimethyl-3-cyclopenten-1-yl)-2-buten-1-ol - benzyl salicylate - citral - cineole(=1,8-cineole) - alpha-pinene - allyl heptanoate - 6,6-dimethoxy-2,5,5-trimethylhex-2-ene - (R)-p-mentha-1,8-diene, d-limonene - (E)-3-methyl-5-phenylpent-2-enenitrile - (Z)-3-methyl-5-phenylpent-2-enenitrile - 4,7-Methano-3aH-indene-3a-carboxylic acid, octahydro-, ethyl ester, (3aalpha,4alpha,7alpha,7aalpha)- - tridec-2-enenitrile
3.a. Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 2.1 to 2.4, 2.6 and 2.7, 2.8 types A and B, 2.9, 2.10, 2.12, 2.13 categories 1 and 2, 2.14 categories 1 and 2, 2.15 types A to F	propan-2-ol, isopropyl alcohol, isopropanol - hexyl acetate - cineole(=1,8-cineole) - alpha-pinene - (R)-p-mentha-1,8-diene, d-limonene
3.b. Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10	BIO PLUS Multi-Purpose Biological Cleaner and Deodoriser - propan-2-ol, isopropyl alcohol, isopropanol - alkylpolyglycoside - 2,6-dimethyl-7-octen-2-ol - citronellol - linalol - terpineol, mixture of isomers - geraniol - nerol - tetramethyl acetyloctahydronaphthalenes - alpha-hexylcinnamaldehyde - hexyl salicylate - 4-tert-butylcyclohexyl acetate - 2-(4-tert-butylbenzyl)propionaldehyde - linalyl acetate - 3-p-cumenyl-2-methylpropionaldehyde - gamma-Undecalactone - allyl hexanoate - citronellyl acetate - methoxyhydratropaldehyde - cis-3-hexenyl salicylate - methylenedioxyphenyl methylpropanal - 2,4-Dimethyl-3-cyclohexenecarboxaldehyde - 2-ethyl-4-(2,2,3-trimethyl-3-cyclopenten-1-yl)-2-buten-1-ol - benzyl salicylate - citral - alpha-pinene - allyl heptanoate - 6,6-dimethoxy-2,5,5-trimethylhex-2-ene - (R)-p-mentha-1,8-diene, d-limonene - (E)-3-methyl-5-phenylpent-2-enenitrile - (Z)-3-methyl-5-phenylpent-2-enenitrile - 4,7-Methano-3aH-indene-3a-carboxylic acid, octahydro-, ethyl ester, (3aalpha,4alpha,7alpha,7aalpha)-
3.c. Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard class 4.1	citronellol - tetramethyl acetyloctahydronaphthalenes - hexyl salicylate - 4-tert-butylcyclohexyl acetate - 1,3,4,6,7,8-hexahydro-4,6,6,7,8-hexamethylindeno[5,6-c]pyran - 2-(4-tert-butylbenzyl)propionaldehyde - terpineol, acetate - 3a,4,5,6,7,7a-hexahydro-4,7-methanoinden-6-yl acetate - allyl hexanoate - hexyl acetate - beta-ionone - citronellyl acetate - methoxyhydratropaldehyde - methylenedioxyphenyl methylpropanal - 2,4-Dimethyl-3-cyclohexenecarboxaldehyde - 2-ethyl-4-(2,2,3-trimethyl-3-cyclopenten-1-yl)-2-buten-1-ol - alpha-pinene - allyl heptanoate - 6,6-dimethoxy-2,5,5-trimethylhex-2-ene - (R)-p-mentha-1,8-diene, d-limonene - (E)-3-methyl-5-phenylpent-2-enenitrile - (Z)-3-methyl-5-phenylpent-2-enenitrile - 4,7-Methano-3aH-indene-3a-carboxylic acid, octahydro-, ethyl ester, (3aalpha,4alpha,7alpha,7aalpha)- - tridec-2-enenitrile
40. Substances classified as flammable gases category 1 or 2, flammable liquids categories 1, 2 or 3, flammable solids category 1 or 2, substances and mixtures which, in contact with water, emit flammable gases, category 1, 2 or 3, pyrophoric liquids category 1 or pyrophoric solids category 1, regardless of whether they appear in Part 3 of Annex VI to Regulation (EC) No 1272/2008 or not.	propan-2-ol, isopropyl alcohol, isopropanol - hexyl acetate - cineole(=1,8-cineole) - alpha-pinene - (R)-p-mentha-1,8-diene, d-limonene

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

15.1.2. National regulations

Not listed on the United States TSCA (Toxic Substances Control Act) inventory

Germany

VwVwS Annex reference : Water hazard class (WGK) 1, low hazard to waters (Classification according to VwVwS, Annex 4)
12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV : Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

Netherlands

SZW-lijst van kankerverwekkende stoffen : None of the components are listed
SZW-lijst van mutagene stoffen : None of the components are listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding : None of the components are listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid : None of the components are listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling : None of the components are listed

Denmark

Classification remarks : Emergency management guidelines for the storage of flammable liquids must be followed
Recommendations Danish Regulation : Young people below the age of 18 years are not allowed to use the product

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Full text of H- and EUH-statements:

Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1
Asp. Tox. 1	Aspiration hazard, Category 1
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 2	Flammable liquids, Category 2
Flam. Liq. 3	Flammable liquids, Category 3
Resp. Sens. 1	Sensitisation — Respiratory, Category 1
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Sensitisation — Skin, Category 1
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Narcosis
H225	Highly flammable liquid and vapour
H226	Flammable liquid and vapour
H302	Harmful if swallowed
H304	May be fatal if swallowed and enters airways
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H319	Causes serious eye irritation
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled
H336	May cause drowsiness or dizziness
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects

SDS EU Mod H F (REACH ANNEX II)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.