TAG.ex professional

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

1.1. Product identifier

TAG.ex professional

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

Relevant identified uses:
removal of paints

Uses advised against:
use on animate beings.

Reason why uses advised against:
helth risk

1.3. Details of the supplier of the safety data sheet

DMG Chemie GmbH
Heiterblickstraße 42
D - 04347 Leipzig
Telephone: +49(0)341 – 493 70 53
Telefax: +49(0)341 – 33 965 0010
e-mail address of competent person responsible for the SDS: info@dmg-chemie.de
National contact: info@dmg-chemie.de

1.4. Emergency telephone number

+49-361-730730 (24-Stunden-Notrufnummer des GGIZ Erfurt)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to regulation (EC) Nr. 1272 / 2008 (CLP):
The mixture is not classified.

2.2. Label elements

Hazard pictogram:
none

Signal word:
none

Hazard statements:
none

Precautionary statements:
none

For distribution to professional users:
EUH210 Safety data sheet available on request.

Supplemental Hazard information (EU):
none

2.3. Other hazards

no other hazards known
The mixture contains no substance according according to annex XIV Regulation (EC) No. 1907 / 2006 (REACH)
The mixture meets not the criteria for vPvB and PBT according to Regulation (EC) No 1907/2006, Annex XIII

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Hazardous components:

METHOXYISOPROPANOL content: 7% to < 10%
CAS-No: 107-98-2 REACH Reg-No: 01-2119457435-35 EC-No: 203-539-1
classification according to Regulation (EC) No. 1272/2008:
Flam. Liq. 3, H226
STOT SE 3, H336

HEXYLENE GLYCOL content: 2,4% to < 6,4%
CAS-No: 107-41-5 REACH Reg-No: 01-2119539582-35 EG-No: 203-489-0
classification according to Regulation (EC) No. 1272/2008:
Skin Irrit. 2, H315
Eye Irrit. 2, H319

BUTOXYETHANOL content: 0,9% to < 2,6%
CAS- No: 111-76-2 REACH Reg-No: 01-2119475108-36 EC-No: 203-905-0
classification according to Regulation (EC) No. 1272/2008:
Acute Tox. 4, H302
Acute Tox. 4, H312
Acute Tox. 4, H332
Skin Irrit. 2, H315
Eye Irrit. 2, H319

TRIETHYL PHOSPHATE content: 0,9% to < 2,6%
CAS-No: 78-40-0 REACH Reg-No: 01-2119492852-28 EC-No: 201-114-5
classification according to Regulation (EC) No. 1272/2008:
Acute Tox. 4, H302

substances with EC limits, that are not listed above:

PPG-2 METHYL ETHER content: 56% to < 61%
CAS-No: 34590-94-8 REACH-Reg-No: 01-2119450011-60 EC-No: 252-104-2

Additional information:
The full text of each relevant H phrase can be found in section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

general notes
At lasting discomfort after contact or use of the product seek for medical advice. When possible show this safety data sheet to the doctor in attendance.

following inhalation
No measures necessary

following skin contact
Wash contaminated skin with plenty of water.

following eye contact
When irritated: rinse cautiously with water for several minutes. Use eye wash if possible.

following ingestion
Rinse mouth with water and spit it out. Repeat the proceadure until the is a neutral taste. In case of persistent discomfort or lager amounts of swallowed product seek medical advice.

self-protection of the first aider
Never take actions, that have a risk for the first aider or are not trained sufficiently. Wear personal protective equipment if possible.

4.2 Most important symptoms and effects, both acute and delayed

No known symptoms to date. For symptoms of the ingredients refer to section 11.

4.3 Indication of any immediate medical attention and special treatment needed

No information available

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media:
CO2,water spray, extinguishing powder or alcohol resistant foam.

Unsuitable extinguishing media:
water jet

5.2 Special hazards arising from the substance or mixture

Can be released in the case of fire:
carbon dioxide, carbon monoxide (imcomplete burning)
phosphorous oxides and their acides

5.3 Advice for firefighters

Wear a self contained respiratory apparatus and chemical resistant golves.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

6.1.1 For non-emergency personnel
Ensure sufficient ventilation. Avoid contact with skin and eyes. Wear protective glasses and chemically resistant gloves (see section 8.2).

6.1.2 For emergency responders
No information available

6.2 Environmental precautions:

Prevent product and large quantities of contaminated washing water from invading sewage water system, surface waters and soil.
Refer to section 13 for waste treatement of absorbed product.

6.3 Methods and material for containment and cleaning up

6.3.1 For containment:
No information available

6.3.2 For cleaning up:
Collect scattered material. Clean possibly contaminated surfaces with a sufficient amount of water. Treat non usable material according to section 13.
Wash off contaminated area with water. Prevent greater amounts of contaminated water from entering sewage water system, surface waters and soil.

6.3.3 Other information:
no information available

6.4 Reference to other sections

Note the instructions for handling and storage in section 7, for safety equipment section 8.2 and section 13 for waste treatment.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Measures to prevent fire:
No measures necessary

Measures to prevent aerosol and dust generation:
No measures necessary at intended use.

Measures to protect incompatible materials:
Solvent containing. Test plastics on durability before use.

Measures to protect the environment:
Close container firmly after use.

Advice on general occupational hygiene:
Avoid contact with skin and eyes. Wear protective equipment mentioned in section 8.2.2.
Do not eat, drink or smoke during work. Remove contaminated clothing and protective equipment before entering eating areas.
Wash hands and remove contaminated clothing and protective equipment after use.

7.2 Conditions for safe storage, including any incompatibilities

Avoid temperatures above 60°C. Safety considerations have been made up to this temperature.

Mixed storage with following substances is forbidden:
- medical products, nutrition, feed
- substances liable to spontaneous combustion, explosives
Mind TRGS 510 for mixed storage.

Always store in original container or containers with corresponding safety standards.
Mind the regulation TRGS 800 for fire protection.

Store lager amounts on al collective device.
storage class 11: Combustible solids that cannot be assigned to any of the above storage classes

7.3 Specific end use(s)

Additional uses are listed in the product data sheet.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

BUTOXYETHANOL; EC-No.: 603-014-00-0; CAS-Nr.: 111-76-2

specification:	Arbeitsplatzgrenzwert according to TRGS 900 (date 05/2020), EU, DFG	
value:	10 ml/m³ respectively 49 mg/m³	
peak limit:	2(I); maximum allowable twofold AGW-exceedance within 15 minutes.	
risk of foetal damage:	No need to fear fetal impairment with compliance of the BGW-value and the AGW treshold	
Sonstiges:	skin resorptive	
Spezifizierung:	Biologischer Grenzwert nach TRGS 903 (Stand 05/2020), DFG	
value:	150 mg/g Creatinine	
parameter:	butoxyacetic acid (after hydrolysis)	
test substance:	urine	
sampling:	end of exposion respectively shift. After several shifts (for long-term exposures).	

METHOXYISOPROPANOL; EC-No.: 203-539-1; CAS-No.: 107-98-2

specification:	Arbeitsplatzgrenzwert according to TRGS 900 (date 05/2020), EU, DFG	
	value:	100 ml/m³ respectively 370 mg/m³
	peak limit:	2(I); maximum allowable twofold AGW-exceedance within 15 minutes.
	risk of foetal damage:	No need to fear fetal impairment with compliance of the BGW-value and the AGW treshold
specification:	Biologischer Grenzwert according to TRGS 903 (date 05/2020), DFG	
	value:	150mg/l
	parameter:	METHOXYISOPROPANOL
	test substance:	urine
	sampling:	end of exposion respectively shift
specification:	directive 2000/39/EC	
	value:	8 hours: 100 ml/m³ respectively 375 mg/m³, 15 minutes: 150 ml/m³ respectively 568 mg/m³
	other:	skin resorptive

PPG-2 METHYL ETHER; EC-No: 252-104-2; CAS-No: 34590-94-8

specification:	Arbeitsplatzgrenzwert according to TRGS 900 (date 05/2020), DFG, EU	
	value:	50 ml/m³ respectively 310 mg/m³, sum of aerosols and vapour
	peak limit:	1(I); maximum allowable onefold AGW-exceedance within 15 minutes.
specification:	directive 2000/39/EC	
	value:	8 hours: 50 ml/m³ respectively 308 mg/m³
	other:	skin resorptive

HEXYLENE GLYCOL; EG-Nr.: 203-489-0; CAS: 107-41-5

specification:	Recommendation from the MAK-Kommission	
	value:	10 ml/m³ respectively 49 mg/m³, sum od aerosols and vapour
	peak limit:	2(I); maximum allowable twofold AGW-exceedance within 15 minutes, four times per shift.

DIPROPYLENE GLYCOL; EC-No.: 246-770-3; CAS-No.: 25265-71-8

Spezifizierung:	Arbeitsplatzgrenzwert according to TRGS 900 (date 05/2020), DFG	
	value:	100 mg/m³ breathable fraction, sum of aerosols and vapours
	peak limit:	2(I); maximum allowable twofold AGW-exceedance within 15 minutes.
	risk of foetal damage:	No need to fear fetal impairment with compliance of the BGW-value and the AGW treshold

Information on monitoring procedures

Mind TRGS 402 and AGS-Liste geeigneter Messverfahren.

8.2 Exposure controls

8.2.1. Appropriate engineering controls:

8.2.1.1 Substance/mixture related measures to prevent exposure during identified uses:
Remove the product immediately when the paint is stripped.

8.2.1.2 Structural measures to prevent exposure:
Use the product preferably outdoors.
Keep away from beverage, nutrition and feeding stuff.

8.2.1.3 Organisational measures to prevent exposure:
Wash hands before breaks and when finishing work.
Keep containers shut.

8.2.1.4 Technical measures to prevent exposure:
Take care for adequate ventilation in enclosed rooms (dependent on size of the room), especially on hot days, when room temperature is higher than outdoor temperature.
Also see section 7.

8.2.2 Individual protection measures, such as personal protective equipment:

8.2.2.1 Eye/face protection:
Not needed at intended use.

8.2.2.2 Skin protection:

Hand protection:

Note for the occupational safety specialist: if the employer has no skin safety specification for the operation, test gloves on optical an physical damage (swelling, tear strength e.g.) caused by contact to the product during the intended using times before use. Following recommendation is based on calculations with the data of the ingredients. The product itself is not tested.
Note for the employer: If the product is usedregularly it is therefore recommended to select a glove that is tested on usage times, operations and physical stress. Please contact a glove manufacturer and send him this safety data sheet or a sample of the product.
General note: The use of resistant gloves ist recommended.
Damaged, swollen or otherwise optically changed gloves have to be replaced.

Splash protection:
Disposable gloves of nitrile rubber e.g. Dermatril (thickness: 0,11 mm) from KCL or other manufacturers with similar protection.

Usage time of 4 hours or less:
Protective gloves made from butyl rubber (thickness: 0,7 mm) e.g. Butoject from KCL

other means of skin protection:
Not required. Wash contaminated clothing before reuse.

8.2.2.3 Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment. Necessary at vapour/aerosol concentrations higher than limits allowed (see section 8.1). Follow the wear time limits for breathing apparatus.
Recommended filter type: A for organic vapours and gases.

8.2.2.4 Thermal hazards:
No information available.

8.2.3 Environmental exposure controls
See sections 5, 6, 7 and 13.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

a) Physical state:

b) Farbe:

c) Odour:
charakteristic

d) Melting point/freezing point:
not applicable

e) Boiling point or initial boiling point and boiling range:
not determined
not applicable

f) Flammability:
flammable

g) Lower and upper explosion limit:
relevant ingredient: METHOXYISOPROPANOL (content 7% to < 10%)
lower explosion limit: 1,6 Vol.-% bzw. 68 g/m³
upper explosion limit: 13,1 Vol-% bzw. 491 g/m³

h) Flash point:
not applicable
Flash point of the component with the lowest flash point: 32 °C

i) Auto-ignition temperature:
Not known for the mixture. Lowest auto-ignition temperature of a component (1-Methoxy-2-propanol): 240 °C

j) Decomposition temperature:
not applicable

k) pH:
1% in solution:

l) Kinematic viscosity:
not applicable

m) Solubility:
not applicable

n) Partition coefficient n-octanol/water (log value):
not applicable

o) Vapour pressure:

vapour pressure of the most volatile compound:	11,5 hPa	at 20 °C

p) Density and/or relative density:
0,96 ± 0,01 kg/l at 20 °C
The value refers to the liquid.

q) Relative vapour density:
not applicable

r) Partikeleigenschaften:
wipes

9.2 Other information

9.2.1. Information with regard to physical hazard classes:
No other relevant information available.

9.2.2. Other safety characteristics:
No relevant information available.

SECTION 10: Stability and Reactivity

10.1 Reactivity
No dangerous reaktion is to be expected at intended use.

10.2 Chemical stability
The product is stable at normal storage conditions (0 - 30 °C).

10.3 Possibility of hazardous reactions
No dangerous reactions are know at intended use.
Contact with highly reactive substances can lead to dangerous reactions.

10.4 Conditions to avoid

Temperatures above 60 °C. Safety considerations have been made up to 60 °C in accordance with the classification criteria. Above these Temperature the liquid can be inflammable.

10.5. Incompatible materials

Varnish, paints etc. and coatings can be removed.
No incompatibility is to be expected in at a storage in containers in accordance to the regulations. Sorage in other conatiners than the original one, can lead to evaporation, that can negatively affect the performance of the product.

10.6 Hazardous decomposition products

No dangerous decompositions products are known.

SECTION 11: Toxicological information

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

The mixture itself is not tested. The classification is executed according regulation (EC) No 1272/2008 (CLP).

Acute toxicity:
ATE oral > 2000 mg/kg
On account of the available data, the classification criteria are not met.

ATE dermal > 2000 mg/kg
On account of the available data, the classification criteria are not met.

ATE inhalative > 2000 mg/kg
On account of the available data, the classification criteria are not met.

Skin corrosion/irritation:
On account of the available data, the classification criteria are not met.

Serious eye damage/irritation:
On account of the available data, the classification criteria are not met.

Respiratory or skin sensitisation:
On account of the available data, the classification criteria are not met.

germ cell mutagenicity:
On account of the available data, the classification criteria are not met.

carcinogenicity:
On account of the available data, the classification criteria are not met.

reproductive toxicity:
On account of the available data, the classification criteria are not met.

STOT-single exposure:
On account of the available data, the classification criteria are not met.

STOT-repeated exposure:
On account of the available data, the classification criteria are not met.

aspiration hazard:
On account of the available data, the classification criteria are not met.

Main known acute health effects of the relevant hazardous components listed in section 3.2:

maximum percentage of components with effect	effect
72,6 %	eye irritation
9 %	skin irritation
19 %	effects on the central nervous system
73,6 %	irritation to the mucous membranes
70 %	irritation in the respiratory system
2,6 %	headache
2,6 %	nausea, vomiting
2,6 %	gastrointestinal problems
6,4 %	aspiration hazard after swallowing und following vomiting
6,4 %	risk of pulmonary oedema

Main known chronic health effects of the relevant hazardous components listed in section 3.2:
No component in relevant concentration.

Toxicity of dangerous components

BUTOXYETHANOL content: 0,9% to < 2,6%
CAS-No: 111-76-2 REACH Reg-No: 01-2119475108-36 EC-No: 203-905-0

LD50 (oral, rat):	1300 mg/kg
LD50 (oral, Meerschweinchen):	1414 mg/kg
NOAEC (oral, guinea pig):	500 mg/kg
LD50 (dermal, rabbitn)	400 mg/kg
LD0 (dermal, guinea pig)	>2000 mg/kg
NOAEC (dermal , guinea pig)	>2000 mg/kg
LC50 (4h, inhalative, rat, male)	2,4 mg/l
LC50 (4h, inhalative, rat, female)	2,2 mg/l

acute main effects:
eye irritation
skin irritation
irritation mucous membranes
irritation in the respiratory system
headache
nausea

gastrointestinal problems
effects on the central nervous system

chronic main effects:
no information available

acute toxicity:
Orale Aufnahme: Ca. 50 g pure substance cause coma, elimination of pain reflex, respiratory disorders, metabolic disorders (acidosis, hypopotassemia, sometimes also hypoxemia, polyuria) and disorders of cardiovascular functions (tachycardia, hypotension, hyperventilation) and blood damage (haemolysis). Fatalities are not recorded.

In animal experimentation with guinea pigs in low doses (500 mg/kg) slight weakening and drowsiness were observed. At medium doses (1000 mg/kg) severe, lethal weakening or mdium weakness occured. At high doses (2000 mg/kg) mainly lethal severe weakness, surviving individuals had only medium weakness and increased salivation.
Resorption: blood damage (haemolysis) and functional changes of liver, kidneys, spleen and lungs. In consequnece haemoglobin secretion.
In animal experimentation guniea pigs no clinical symptoms were observed.
Inhalation: By inhalativ exposure of humans for 8 hours at doses of 100 respectively 195 ppm (10-fold respectively 19,5-fold of MAK) acute irritation of mucous membranes as well as effects on the central nervous system (sickness and head ache) but no systemic toxic effects were observed.
In animal experimentation with the sensitive specimen rat have been observed respiratory disorders and blood secretion in urine and blood congestion on the spleen. IDLH-value (immediately dangerous to life and health): 700 ppm.
Eyes: Vapours (100 ppm for 8 h) cause Eye irritation. Reversible eye irritation in animal testin (rabbit).
Skin: No irritation at a two hours exposure on humans. Classification as skin irritative is based on animal experimantation: within 14 days not fully reversible reddening after a exposion of four hours (rabbit).

chronic toxicity:
No data aviable on harm caused by overexposure of workers.
Ingestion: Damage on kidneys and liver in animal experimentation with rats.
Inhalation: Haemolysis and consequences of it: decrease of erythrozyt number and blood Hb concentration; increase of reticulocyte number and liver weihgt.

TRIETHYL PHOSPHATE content: 0,9% to < 2,6%
CAS-No: 78-40-0 REACH Reg-No: 01-2119492852-28 EC-No: 201-114-5

LD50 (oral, rat):	1 170 mg/kg
LD50 (dermal, rabbit):	20 000 mg/kg
LC50 (inhalation, rat):	> 8,817 mg/l

acute main effects:
Weak eye irritation (animal experimentation).

chronic main effects:
no information available

acute toxicity:
general remark: Information is based on animal experimentation.
Ingestion: At letal doses: stimulation/depression of central nervous system, loss of movement coordination, narcotic effects, paralysis of the rear extremities, respiratory dysfunction, low blood pressure, reduced heart activity, reduction in muscle tonus. Possible inhibition of cholinesterase.
Resorption: Low toxicity.
Inhalation: High aerosol concentrations cause lung damage. These concentrations are technically harder to achieve, so this component is not to be assumed as a primary source of intoxication.
Eyes: Weak irritation.
Skin: Irritation by degreasing of the skin possible.
Sensitization: No indication of sensitization in two animal experimentations.

chronic toxicity:
Ingestion: Decreased body weight increase, increased weight of liver and adrenal glands, changes in liver tissue. Decrease of cholinesterase activity in serum and brain. At higher doses depressive effects on central nervous system, lethargy, decreased sensitivity of noise, behavioural disorders und increased nasal secretion.

METHOXYISOPROPANOL content: 7% to < 10%
CAS-NR: 107-98-2 REACH Reg-Nr: 01-2119457435-35 EG-Nr: 203-539-1

LD50 (oral, rat):	4 016 mg/kg
LD50 (dermal, rat):	13 500 mg/kg
LC50 (inhalation, rat):	6 mg/l

acute main effects:
slight irritation by liquid or vapours on mucous membranes
depression of the central nervous system

chronic main effects:
no information available

acute toxicity:

Ingestion: No information concerning symptoms available. Should be regarded as low toxic.

Resorption: No information concerning symptoms available. Should be regarded as low toxic.

Inhalation: Human tests: At doses of 150 ppm merely subjective weak irritation on the eye, not clinically manifested. Systemic-toxic effects not found. 100 ppm were without symptoms. At 300 ppm slight irritation of eye and nose within 5 min, after 1 h partially difficult to bear. 750 ppm were considered severe irritating. Signs of a depression of the central nervous system started at 1000 ppm.

Eyes: Reversible corneal clouding in an extreme situation eventually possible.
Skin: No effect observed in animal experimentation.
Sensitization: No effect in animal experimentation.

Chronic toxicity:

Generel remark: Following data can only extrapolated to humans with a great reservation, since in commercial, industrial or professional use such high exposures are not imaginable.
Ingestion: high oral doses caused minor damages of liver and kidney.
Resorption: slightly narcotical effects.
Inhalation: slightly narcotical effects.

HEXYLENE GLYCOL content: 2,4% to < 6,4%
CAS-No: 107-41-5 REACH Reg-No: 01-2119539582-35 EC-No: 203-489-0

LD50 (oral, rat):	3700 mg/kg
LD50 (dermal, rabbit):	7890 mg/kg
LC50 (inhalative, rat):	no information available

acute main effects:
eye irritation
irritation in the respiratory system
skin irritation
risk of aspirtion, can cause chemical pneumonia or suffocation
depression of the central nervous system
risk of pulmonary oedema

chronic main effects:
no information available

acute toxicity:
ingestion: at high doses depression of the central nervous system, partially kindey, gastrointestinal tract and lung damage.
resorption: at high doses bleeding in the lung and liver, kidney damage and collected liquid in the gastrointestinal tract. High resorption when skin is damaged.
eyes: irritation and slowly reversible corneal damage in animal experimentation.
skin: Irritation, stranger when skin is diseased.
inhalation: slight irritation, at concentrations above saturated concentration at room temperature: irritation of nose and respiratory problems.

Chronic toxicity:
ingestion/resorption: liver and kidney damage.
Skin: sensitising effect when skin is diseased.
Eye: Irritation

PPG-2 METHYL ETHER content: 56% to < 61%
CAS-No: 34590-94-8 REACH-Reg-No: 01-2119450011-60 EC-No: 252-104-2

LD50 (oral, rat):	5140 mg/kg
LD50 (dermal, rabbit):	9510 mg/kg

LC50 (inhalative, rat):	no information available

acute main effects:
eye irritation
irritation in the respiratory system
irritation of mucous membranes

chronic main effects:
no information available

Akute Toxizität, Symptome:
oral: at high doses: depression of the central nervous system, letal apnea.
resorption: long term skin contact with larger amounts can cause drowsiness.
inhalation: slight irritation of nasal mucous membrane above 35 ppm and of respiratory system and exes above 75 ppm in animal experimentation. IDLH 600 ppm.
eyes: slight burning of the eyes, lacrimation and dystonia of the eyelid , slightly increased intraocular pressure.

Chronic toxicity:
skin: possibly skin inflammation. Irritation in the event of overexposure.
inhalation: irritaion of eyes, nose and throat at higher concentrations. Respiratory system damage possible.

11.2 Other information
none

SECTION 12: Ecological information

12.1 Toxicity

BUTOXYETHANOL
CAS-No: 111-76-2 REACH Reg-No: 01-2119475108-36 EC-No: 203-905-0

LC50, 96h (oncorhynchus mykiss)	1474 mg/l
NOEC, 21 d (brachydanio rerio)	31,6 mg/l
EC50, 72h (pseudokirchneriella subcapitata)	1840 mg/l
NOEC, 3 d (pseudokirchneriella subcapitata)	31,6 mg/l
EC50, 48h (daphnia magna)	1550 mg/l
NOEC, 21 d (daphnia magna)	> 100 mg/l

TRIETHYL PHOSPHATE
CAS-No: 78-40-0 REACH Reg-No: 01-2119492852-28 EC-No: 201-114-5

LC50 (pimephales promelas)	> 100 ml/l
EC50 (daphnien)	729 mg/l
NOEC, 21 d (daphnia magna)	31,6 mg/l
EC50, 72h (scenedesmus subspicatus)	900 mg/l

EC10 (bBakteria)	10 000 mg/l

METHOXYISOPROPANOL
CAS-No: 107-98-2 REACH Reg-No: 01-2119457435-35 EC-No: 203-539-1

LC50 (ide)	> 4000 mg/l
LC50 (pimephales promelas)	20 800 mg/kg
EC50 (daphnia)	23 300 mg/l

HEXYLENE GLYCOL
CAS-No: 107-41-5 REACH Reg-No: 01-2119539582-35 EC-No: 203-489-0

LC50 (fish, 96h)	>1000 mg/l
EC50 (daphnia magna, 48h)	>1000 mg/l
EC50 (algae, 72h)	429 mg/l

PPG-2 METHYL ETHER
CAS-No: 34590-94-8 REACH-Reg-No: 01-2119450011-60 EC-No: 252-104-2

LC50/96h (pimephales promelas)	> 10 000 mg/l
EC50/48h (daphnien, daphnia magna)	1919 mg/l
EC50/96h (Selenastrum capricornutum)	969 mg/l

12.2 Persistence and degradability

BUTOXYETHANOL
CAS-No: 111-76-2 REACH Reg-No: 01-2119475108-36 EC-No: 203-905-0
OECD TG 301 B: 95%
readily biodegradable

TRIETHYL PHOSPHATE
CAS-No: 78-40-0 REACH Reg-No: 01-2119492852-28 EC-No: 201-114-5
OECD TG 301 B: 98%
readily biodegradable

METHOXYISOPROPANOL
CAS-No: 107-98-2 REACH Reg-No: 01-2119457435-35 EC-No: 203-539-1
OECD TG 301 E: 96%
readily biodegradable

HEXYLENE GLYCOL
CAS-No: 107-41-5 REACH Reg-No: 01-2119539582-35 EC-No: 203-489-0
OECD TG 301 E: 81 %
readily biodegradable

PPG-2 METHYL ETHER
CAS-No: 34590-94-8 REACH-Reg-No: 01-2119450011-60 EC-No: 252-104-2
OECD TG 301 E: > 70 %
readily biodegradable

12.3 Bioaccumulative potential

BUTOXYETHANOL
CAS-No: 111-76-2 REACH Reg-No: 01-2119475108-36 EC-No: 203-905-0
log Pow = 0,81
no bioakkumulation expected

TRIETHYL PHOSPHATE
CAS-No: 78-40-0 REACH Reg-No: 01-2119492852-28 EC-No: 201-114-5
log Pow = 1,1
BCF < 1,3
no bioakkumulation expected

METHOXYISOPROPANOL
CAS-No: 107-98-2 REACH Reg-No: 01-2119457435-35 EC-No: 203-539-1
log Kow 0,37
BCF < 100
low bioakkumulation potential

HEXYLENE GLYCOL
CAS-No: 107-41-5 REACH Reg-No: 01-2119539582-35 EC-No: 203-489-0
log Pow = -0,14
low bioakkumulation potential (log Pow <1).

PPG-2 METHYL ETHER
CAS-No: 34590-94-8 REACH-Reg-No: 01-2119450011-60 EC-No: 252-104-2
log Pow= -0,35
low bioakkumulation potential

12.4. Mobilität im Boden

BUTOXYETHANOL
CAS-No: 111-76-2 REACH Reg-No: 01-2119475108-36 EC-No: 203-905-0
no data available

TRIETHYL PHOSPHATE
CAS-No: 78-40-0 REACH Reg-No: 01-2119492852-28 EC-No: 201-114-5
Koc = 43,9 (at 20 °C)

METHOXYISOPROPANOL
CAS-No: 107-98-2 REACH Reg-No: 01-2119457435-35 EC-No: 203-539-1
no data available

HEXYLENE GLYCOL
CAS-No: 107-41-5 REACH Reg-No: 01-2119539582-35 EC-No: 203-489-0
Koc = 1 (at 20 °C)

PPG-2 METHYL ETHER
CAS-No: 34590-94-8 REACH-Reg-No: 01-2119450011-60 EC-No: 252-104-2

The substance ist readily biodegradable and log Kow is lower tahn 1. There is a low potential of absorption in organic soil.

12.5 Results of PBT and vPvB assessment

The mixture contains no substance that is assessed to be a PBT/vPvB.

12.6. Endocrine disrupting properties

This mixture contains no component with endocrine disrupting properties in a concentration of 0,1% or more according to REACH article 57 (f) or regulation (EU) 2017/2100 or regulation (EU) 2018/605.

12.7 Other adverse effects

None known.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Arrange recycling methods with the producer.

The product should not be disposed by waste water.

Arrange detailed waste disposal methods with local waste disposer.
Small, normal houshold quantities can be disposed in the houshold waste.

Recommendation:

contaminated, not cleaned packaging

waste code: 15 01 02 — WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED: packaging (including separately collected municipal packaging waste): plastic packaging

contaminated protective clothing, absorbents and wipes

waste code: 15 02 03 — WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED: absorbents, filter materials, wiping cloths and protective clothing 15: absorbents, filter materials, wiping cloths and protective clothing other than those mentioned in 15 02 02.

SECTION 14: Transport Information

14.1. UN number or ID number

none

14.2. UN proper shipping name

none

14.3. Transport hazard class(es)

none

14.4. Packing group

none

14.5. Environmental hazards

ADR /RID /IMDG-Code: none
ICAO TI / IATA DGR: none

14.6. Special precautions for user

see sections 6 - 8

14.7. Maritime transport in bulk according to IMO instruments

The product is supplied only in regularly assessed containers.

SECTION 15: Regulatory information

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

EU regulations:

Ingredients according detergents regulation (EU) No 648/2004
less than 5 %
phosphates
other ingredients
perfume

Volatile organic compounds according Directive 1999/13/EC:
< 75 % of the liquid

Regulation (EC) No 850/2004 on persistent organic pollutants
not applicable

Regulation (EC) No 1005/2009 on substances that deplete the ozone layer
not applicable
Candidate List of substances of very high concern for Authorisation (Article 59(10) of the REACH Regulation)

No ingredient is listed.

REACH Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles (annex XVII)
not applicable

Regulation (EU) No 649/2012 concerning the export and import of hazardous chemicals
not applicable

National regulatory Germany:

Wassergefährdungsklasse (water hazard class) according AwSV:
WGK 1 schwach wassergefährdend (slightly polluting substance)

31. Verordnung zur Durchführung des Bundes-Immissionsschutzgesetzes (Verordnung zur Begrenzung derEmissionen flüchtiger organischer Verbindungen bei derVerwendung organischer Lösemittel in bestimmten Anlagen) (31.BImSchV, German Solvent Ordinance)
The percentage of volatile organic compounds is in accordance to directive 1999/13/EC.

reference to Technische Regeln für Gefahrstoffe (Technical Rules on Hazard Substances):
TRGS 402
TRGS 510 (Storage of hazardous substances in packages and nonstationary vessels)
TRGS 800 (fire protection measures)
TRGS 900 (workplace limit values)
TRGS 903 (biological limit values)

15.2. Chemical Safety Assessment

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

SECTION 16: Other information

This safety data sheet imcludes the amendments of the REACH regulation by comission regulation (EU) 2020/878 amending Annex II to Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

legend to abbreviations and acronyms used:

ADR	Agreement concerning the International Carriage of Dangerous Goods by Road

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AGW	Arbeitsplatzgrenzwert (occupational exposure limit value)
ATE	Acute Toxicity Estimates
AwSV	Verordnung über Anlagen zum Umgang mit wassergefährdenden Stoffen (Regulations on Facilities Handling Substances Dangerous to Water)
BCF	Biokonzentrationsfaktor (bioaccumulation factors (BAF))
BGW	Biologischer Grenzwert (biological limit value)
BImSchV	Bundesimmissionsschutzverordnung (Federal Imission Control Act)
ca.	circa
CAS	Chemical Abstracts Service
CAS-Nr.	Chemical Abstracts Service number
CLP	Classification, Labelling and Packaging
DFG	Deutsche Forschungsgemeinschaft (German Research Foundation)
EC	Effective Concentration or European community
ECHA	European Chemicals Agency
e.g.	zum Beispiel
etc.	et cetera
EU	European Union
GESTIS	Gefahrstoffinformationssystem (Hazardous Substance Information System)
GGIZ	Gemeinsames Giftinformationszentrum (Joint poison information center)
GmbH	Gesellschaft mit beschränkter Haftung (company with limited liability)
IATA DGR	International Air Transport Association Dangerous Goods Regulations
IBC Code	International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
ICAO TI	International Civil Aviation Organization Technical Instructions For The Safe Transport of Dangerous Goods by Air
IDLH	Immediately Dangerous to Life and Health
IMDG-Code	International Maritime Code for Dangerous Goods
Koc	Adsorption koefficient (in sorbens)
Kow	Verteilungskoeffizient Octanol / Wasser
LC	Lethal Concentration
LD	Lethal Dose
MAK	Maximale Arbeitsplatzkonzentration: in Germany replaced by AGW
MARPOL	International Convention for the Prevention of Marine Pollution from Ships
NOAEC	No Observed Adverse Effect Concentration
OECD TG	OECD Test Guideline
PBT	persistent, bioakkumulative and toxic
POW	Partition Coefficient Oil Water, see Kow
REACH	Regulation concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals
REACH Reg-Nr.	REACH registration number
RID	Règlement concernant le transport international ferroviaire des marchandises dangereuses

TRK	Technische Richtkonzentration (technical standard concentration)
TRGS	Technische Regeln für Gefahrstoffe (Technical Rules on Hazard Substances)
UN	United Nations
vPvB	very persistent and very bioakkumulative
WGK	Wassergefährdungsklasse (water hazard class)

Literature and data sources used:

Guidance on the compilation of safety data sheets, ECHA, 2020
Regulation on classification, labelling and packaging of substances and mixtures, Regulation (EC) No 1907/2006
GESTIS Stoffdatenbank
Safety data sheets of the components provided by manufacturers or traders.
ECHA Database of registered substances
TRGS 402

Bewertung von Verfahren zur messtechnischen Ermittlung von Gefahrstoffen in der Luft am Arbeitsplatz
https://www.baua.de/DE/Aufgaben/Geschaeftsfuehrung-von-Ausschuessen/AGS/pdf/Messverfahren.pdf?__blob=publicationFile&v=6
TRGS 500
TRGS 510
TRGS 900
TRGS 903
Giftinformationsverordnung
Regulation concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH),
Gefahrstoffverordnung
Verordnung über Anlagen zum Umgang mit wassergefährdenden Stoffen
COMMISSION DECISION amending Decision 2000/532/EC on the list of waste pursuant to Directive
ADR
IMDG-code
Guidelines 2000/39/EC, 2006/15/EC, 2009/161/EU, 2017/164/EU und 2019/1831/EU concerning
Chemikaliengesetz
Regulation (EC) No 648/2004 of the European Parliament and of the Council
Störfall-Verordnung (12. BImSchV)

Full text of H-phrases used in this document

H226	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.
H336	May cause drowsiness or dizziness.

This safety data sheet is revised completely.

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All informations given is based on our current state of knowledge. This safety data sheet is created and provided exclusively for this product.