Trade name: masteroil Diesel Bakterien Schutz
Product no.: 1973
Current version : 1.0.0, issued: 21.07.2021 **Replaced version:** -, issued: - **Region:** IE

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

1.1 Product identifier

Trade name

masteroil Diesel Bakterien Schutz

UFI:
8MV5-V0SV-A00P-1G0K

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

Relevant identified uses of the substance or mixture
Additive for mineral oil products

Uses advised against
No data available.

1.3 Details of the supplier of the safety data sheet

Address
Masteroil GmbH
Stockholmer Allee 30 b
44269 Dortmund

Telephone no. 0231 444 247 64
e-mail info@masteroil.com

Advice on Safety Data Sheet
sdb_info@umco.de

1.4 Emergency telephone number

+353 1 809 2166 (National Poisons Information Centre)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification in accordance with Regulation (EC) No 1272/2008 (CLP)
Acute Tox. 4; H302
Acute Tox. 4; H312
Acute Tox. 4; H332
Aquatic Chronic 2; H411
Asp. Tox. 1; H304
Eye Dam. 1; H318
Skin Irrit. 2; H315

Classification information
This product is assessed and classified using the methods and criteria below referred to in Article 9 of Regulation (EC) n° 1272/2008:
Physical hazards: determined through assessment data based on the methods or standards referred to in part 2 of Annex I to CLP
Health hazards and environmental hazards: determined through toxicological and ecotoxicological assessment data based on the methods or standards referred to in Part 3, 4 and 5 of Annex I to CLP.

2.2 Label elements

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

Hazard pictograms

GHS05 GHS07 GHS08 GHS09

Signal word
Danger

Hazardous component(s) to be indicated on label:
2-ethylhexyl nitrate
(ethylenedioxy)dimethanol

Hazard statement(s)

H302+H312+H332	Harmful if swallowed, in contact with skin or if inhaled
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H411	Toxic to aquatic life with long lasting effects.

Precautionary statement(s)

P273	Avoid release to the environment.
P280	Wear protective gloves/eye protection.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER/doctor.
P331	Do NOT induce vomiting.
P391	Collect spillage.

UFI:
8MV5-V0SV-A00P-1G0K

2.3 Other hazards

PBT assessment
No data available.

vPvB assessment
No data available.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable. The product is not a substance.

3.2 Mixtures

Hazardous ingredients

No	Substance name		Additional information	
	CAS / EC / Index / REACH no	Classification (EC) 1272/2008 (CLP)	Concentration	%
1	**2-ethylhexyl nitrate**			
	27247-96-7 248-363-6 - 01-2119539586-27	Acute Tox. 4; H302 Acute Tox. 4; H312 Acute Tox. 4; H332 Aquatic Chronic 2; H411 EUH044 EUH066	>= 70,00 - < 90,00	wt%
2	**2-butoxyethanol**			
	111-76-2 203-905-0 603-014-00-0 01-2119475108-36	Acute Tox. 4; H302 Acute Tox. 4; H312 Acute Tox. 4; H332 Eye Irrit. 2; H319 Skin Irrit. 2; H315	>= 10,00 - < 25,00	wt%
3	**(ethylenedioxy)dimethanol**			
	3586-55-8 222-720-6 - -	Acute Tox. 4; H302 Eye Dam. 1; H318 Skin Irrit. 2; H315	< 5,00	wt%

4	**2-ethylhexan-1-ol**			
	104-76-7 203-234-3 - 01-2119487289-20	Eye Irrit. 2; H319 Skin Irrit. 2; H315 STOT SE 3; H335 Acute Tox. 4; H332	< 2,50	wt%
5	**hydrocarbons, C10, aromatics, <1% naphthalene**			
	- 918-811-1 - 01-2119463583-34	Aquatic Chronic 2; H411 Asp. Tox. 1; H304 EUH066 STOT SE 3; H336	< 2,50	wt%

Full Text for all H-phrases and EUH-phrases: pls. see section 16

Acute toxicity estimate (ATE) values			
No	**oral**	**dermal**	**inhalative**
2	1746 mg/kg bodyweight		

SECTION 4: First aid measures

4.1 Description of first aid measures

General information
Remove contaminated clothing and shoes immediately, and launder thoroughly before reusing. If the patient is likely to become unconscious, place and transport in stable sideways position.

After inhalation
Remove affected person from the immediate area. Ensure supply of fresh air. Take medical treatment.

After skin contact
In case of contact with skin wash off immediately with soap and water. Seek medical attention.

After eye contact
Remove contact lenses. Rinse eye thoroughly under running water keeping eyelids wide open and protecting the unaffected eye (at least 10 to 15 minutes). Seek medical assistance.

After ingestion
Do not induce vomiting - aspiration hazard. Rinse the mouth thoroughly with water. Never give anything by mouth to an unconscious person. If individual is drowsy or unconscious, place in recovery position (on left side, with head down). Call a doctor immediately and show label or packaging.

4.2 Most important symptoms and effects, both acute and delayed
No data available.

4.3 Indication of any immediate medical attention and special treatment needed
No data available.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media
Water spray jet; Foam; Carbon dioxide; Extinguishing powder

Unsuitable extinguishing media
High power water jet

5.2 Special hazards arising from the substance or mixture
In the event of fire, the following can be released: Carbon dioxide (CO2); Carbon dioxide (CO2); Vapours are heavier than air and may spread near ground to sources of ignition. May travel considerable distance to source of ignition and flash back.

5.3 Advice for firefighters
Use self-contained breathing apparatus. Wear protective clothing. Cool endangered containers with water spray jet. Do not allow run-off from fire fighting to enter drains or water courses.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel
Refer to protective measures listed in sections 7 and 8. Avoid contact with skin, eyes and clothing. Ensure adequate ventilation. Keep away from ignition sources.

For emergency responders
No data available. Personal protective equipment (PPE) - see Section 8.

6.2 Environmental precautions

Do not discharge into the drains/surface waters/groundwater. Do not discharge into the subsoil/soil.

6.3 Methods and material for containment and cleaning up

Take up with absorbent material (e.g., sand, kieselguhr, universal binder). When collected, handle material as described under the section heading "Disposal considerations".

6.4 Reference to other sections

No data available.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling
Provide good ventilation at the work area (local exhaust ventilation, if necessary). If workplace exposure limits are exceeded, respiratory protection approved for this particular job must be worn. Risks inherent to handling the product must be minimised by applying the appropriate protective and preventive measures. Working processes should - so far as possible, according to the state of the art - be designed to rule out bodily contact or the release of hazardous substances.

General protective and hygiene measures
Do not eat, drink or smoke during work time. Keep away from foodstuffs and beverages. Avoid contact with eyes and skin. Remove soiled or soaked clothing immediately. Wash hands before breaks and after work.

Advice on protection against fire and explosion
Keep away from sources of heat and ignition.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions
Keep container tightly closed in a cool, well-ventilated place.

Recommended storage temperature

Value	<	50	°C

Requirements for storage rooms and vessels
Containers which are opened must be carefully closed and kept upright to prevent leakage. Keep only in the original container. Protect from heat and direct sunlight.

Incompatible products
Do not store together with: Acids; Alkalies; oxidizing agents

7.3 Specific end use(s)

No data available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values

No	Substance name	CAS no.	EC no.
1	2-butoxyethanol	111-76-2	203-905-0
	2000/39/EC		

	2-Butoxyethanol				
	WEL short-term (15 min reference period)	246	mg/m³	50	ppm
	WEL long-term (8-hr TWA reference period)	98	mg/m³	20	ppm
	Skin resorption / sensibilisation	Skin			
	List of Chemical Agents and Occupational Exposure Limit Values (Code of Practice)				
	2-Butoxyethanol				
	WEL short-term (15 min reference period)	246	mg/m³	50	ppm
	WEL long-term (8-hr TWA reference period)	98	mg/m³	20	ppm
	Comments	Sk, IOELV			
2	**2-ethylhexan-1-ol**	**104-76-7**		**203-234-3**	
	2017/164/EU				
	2-ethylhexan-1-ol				
	WEL long-term (8-hr TWA reference period)	5,4	mg/m³	1	ppm
	List of Chemical Agents and Occupational Exposure Limit Values (Code of Practice)				
	2-Ethylhexan-1-ol				
	WEL long-term (8-hr TWA reference period)	5,4	mg/m³	1	ppm
	Comments	IOELV			

DNEL, DMEL and PNEC values

DNEL values (worker)

No	Substance name			CAS / EC no	
	Route of exposure	**Exposure time**	**Effect**	**Value**	
1	**2-ethylhexyl nitrate**			**27247-96-7 248-363-6**	
	dermal	Long term (chronic)	systemic	1	mg/kg/day
	dermal	Long term (chronic)	local	44	µg/cm²
	inhalative	Long term (chronic)	systemic	0.35	mg/m³
2	**2-butoxyethanol**			**111-76-2 203-905-0**	
	dermal	Long term (chronic)	systemic	125,00	mg/kg/day
	dermal	Short term (acut)	systemic	89,00	mg/kg/day
	inhalative	Long term (chronic)	systemic	98,00	mg/m³
	inhalative	Short term (acut)	systemic	1091,00	mg/m³
	inhalative	Long term (chronic)	local	246,00	mg/m³
3	**2-ethylhexan-1-ol**			**104-76-7 203-234-3**	
	dermal	Long term (chronic)	systemic	23	mg/kg/day
	inhalative	Short term (acut)	local	106,4	mg/m³
	inhalative	Long term (chronic)	systemic	53,2	mg/m³
4	**hydrocarbons, C10, aromatics, <1% naphthalene**			**- 918-811-1**	
	dermal	Long term (chronic)	systemic	12,5	mg/kg/day
	inhalative	Long term (chronic)	systemic	151	mg/m³

DNEL value (consumer)

No	Substance name			CAS / EC no	
	Route of exposure	**Exposure time**	**Effect**	**Value**	
1	**2-ethylhexyl nitrate**			**27247-96-7 248-363-6**	
	oral	Long term (chronic)	systemic	25	µg/kg/day
	dermal	Long term (chronic)	systemic	0.52	mg/kg/day
	dermal	Long term (chronic)	local	22	µg/cm²
	inhalative	Long term (chronic)	systemic	87	µg/m³
2	**2-butoxyethanol**			**111-76-2 203-905-0**	
	oral	Long term (chronic)	systemic	6,30	mg/kg/day
	oral	Short term (acut)	systemic	26,70	mg/kg/day

	dermal	Long term (chronic)	systemic	75,00	mg/kg/day
	dermal	Short term (acut)	systemic	89,00	mg/kg/day
	inhalative	Long term (chronic)	systemic	59,00	mg/m³
	inhalative	Short term (acut)	systemic	426,00	mg/m³
	inhalative	Long term (chronic)	local	147,00	mg/m³
3	**2-ethylhexan-1-ol**			**104-76-7 203-234-3**	
	oral	Long term (chronic)	systemic	1,1	mg/kg/day
	dermal	Long term (chronic)	systemic	11,4	mg/kg/day
	inhalative	Long term (chronic)	systemic	2,3	mg/m³
	inhalative	Short term (acut)	local	53,2	mg/m³
4	**hydrocarbons, C10, aromatics, <1% naphthalene**			**- 918-811-1**	
	oral	Long term (chronic)	systemic	7,5	mg/kg/day
	dermal	Long term (chronic)	systemic	7,5	mg/kg/day
	inhalative	Long term (chronic)	systemic	32	mg/m³

PNEC values

No	Substance name		CAS / EC no	
	ecological compartment	**Type**	**Value**	
1	**2-ethylhexyl nitrate**		**27247-96-7 248-363-6**	
	water	fresh water	0,8	µg/L
	water	marine water	0,08	µg/L
	water	fresh water sediment	0,00074	mg/kg dry weight
	water	marine water sediment	0,00074	mg/kg dry weight
	soil	-	0,000191	mg/kg dry weight
	sewage treatment plant	-	10	mg/L
2	**2-butoxyethanol**		**111-76-2 203-905-0**	
	water	fresh water	8,80	mg/L
	water	marine water	0,88	mg/L
	water	fresh water sediment	34,60	mg/kg
	with reference to: dry weight			
	water	marine water sediment	3,46	mg/kg
	water	Aqua intermittent	26,4	mg/L
	soil	-	2,33	mg/kg dry weight
	sewage treatment plant	-	463,00	mg/L
	secondary poisoning	-	0,02	g/kg
3	**2-ethylhexan-1-ol**		**104-76-7 203-234-3**	
	water	fresh water	0,017	mg/L
	water	marine water	0,0017	mg/L
	water	Aqua intermittent	0,17	mg/L
	water	fresh water sediment	0,28	mg/kg
	with reference to: dry weight			
	water	marine water sediment	0,028	mg/kg
	with reference to: dry weight			
	soil	-	0,047	mg/kg
	with reference to: dry weight			
	sewage treatment plant	-	10	mg/L
	secondary poisoning	-	55	mg/kg
	with reference to: food			

8.2 Exposure controls

Appropriate engineering controls
No data available.

Personal protective equipment

Respiratory protection
If workplace exposure limits are exceeded, a respiration protection approved for this particular job must be worn. In case of aerosol, vapour and mist formation, take appropriate measures for breathing protection in the event workplace threshold values are not specified. combination filter

Respirator	EN14387-A

Eye / face protection
Safety glasses with side protection shield (EN 166)

Hand protection
Sufficient protection is given wearing suitable protective gloves checked according to i.e. EN 374, in the event of risk of skin contact with the product. Before use, the protective gloves should be tested in any case for its specific work-station suitability (i.e. mechanical resistance, product compatibility and antistatic properties). Adhere to the manufacturer's instructions and information relating to the use, storage, care and replacement of protective gloves. Protective gloves shall be replaced immediately when physically damaged or worn. Design operations thus to avoid permanent use of protective gloves.

Appropriate Material	In case of short-term contact / splash protection: PVC		
Material thickness		0,8	mm
Breakthrough time		4	h

Other
Normal chemical work clothing.

Appropriate Material	cotton

Environmental exposure controls
No data available.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

State of aggregation
liquid

Form/Colour
liquid
Various, depending on coloration

Odour
No data available

pH value
No data available

Boiling point / boiling range			
Value	>	160	°C

Melting point/freezing point
No data available

Decomposition temperature
No data available

Flash point			
Value	>	61	°C

Ignition temperature
No data available

Flammability
No data available

Lower explosion limit
No data available

Upper explosion limit
No data available

Vapour pressure
No data available

Relative vapour density
No data available

Relative density
No data available

Density
No data available

Solubility
No data available

Partition coefficient n-octanol/water (log value)			
No	**Substance name**	**CAS no.**	**EC no.**
1	**2-ethylhexyl nitrate**	**27247-96-7**	**248-363-6**
log Pow	5,24		
Method	OECD 117		
Source	ECHA		
2	**2-butoxyethanol**	**111-76-2**	**203-905-0**
log Pow	0,81		
Reference temperature	25 °C		
Source	ECHA		
3	**2-ethylhexan-1-ol**	**104-76-7**	**203-234-3**
log Pow	2,9		
Reference temperature	25 °C		
Method	OECD 117		
Source	ECHA		

Viscosity			
Value	<	20,5	mm²/s
Reference temperature		40	°C
Type	kinematic		

Particle characteristics
No data available

9.2 Other information

Other information
No data available.

SECTION 10: Stability and reactivity

10.1 Reactivity
Dangerous reactions are not expected if the product is handled according to its intended use.

10.2 Chemical stability
Stable under recommended storage and handling conditions (See section 7).

10.3 Possibility of hazardous reactions
Dangerous reactions are not to be expected when handling product according to its intended use.

10.4 Conditions to avoid
Heat, naked flames and other ignition sources.

10.5 Incompatible materials
None known.

10.6 Hazardous decomposition products
No hazardous decomposition products known.

SECTION 11: Toxicological information

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

Acute oral toxicity (result of the ATE calculation for the mixture)	
No	**Product Name**
1	**masteroil Diesel Bakterien Schutz**
ATE (Mixture)	589,88 mg/kg
Method	Calculation method according Regulation (EC) No 1272/2008, (CLP), annex I, part 3, section 3.1.3.6.

Acute oral toxicity			
No	**Substance name**	**CAS no.**	**EC no.**
1	**2-butoxyethanol**	**111-76-2**	**203-905-0**
LD50	1746		mg/kg bodyweight
Species	rat		
Method	OECD 401		
Source	ECHA		
2	**2-ethylhexan-1-ol**	**104-76-7**	**203-234-3**
LD50	2047		mg/kg bodyweight
Species	rat		
Method	OECD 401		
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		

Acute dermal toxicity (result of the ATE calculation for the mixture)	
No	**Product Name**
1	**masteroil Diesel Bakterien Schutz**
ATE (Mixture)	1333,38 mg/kg
Method	Calculation method according Regulation (EC) No 1272/2008, (CLP), annex I, part 3, section 3.1.3.6.

Acute dermal toxicity			
No	**Substance name**	**CAS no.**	**EC no.**
1	**2-butoxyethanol**	**111-76-2**	**203-905-0**
LD50	> 2000		mg/kg bodyweight
Species	guinea pig		
Method	OECD 402		
Source	ECHA		
2	**(ethylenedioxy)dimethanol**	**3586-55-8**	**222-720-6**
LD50	> 2000		mg/kg bodyweight
Species	rabbit		
Method	OECD 402		
Source	ECHA		
3	**2-ethylhexan-1-ol**	**104-76-7**	**203-234-3**
LD50	> 3000		mg/kg bodyweight
Species	rabbit		
Method	OECD 402		
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		

Acute inhalational toxicity (result of the ATE calculation for the mixture)	
No	**Product Name**
1	**masteroil Diesel Bakterien Schutz**
ATE (Mixture)	12,3051 mg/l
Route of exposure / physical from	Vapour
Method	Calculation method according Regulation (EC) No 1272/2008, (CLP), annex I, part 3, section 3.1.3.6.

Acute inhalational toxicity			
No	**Substance name**	**CAS no.**	**EC no.**
1	**2-ethylhexan-1-ol**	**104-76-7**	**203-234-3**
LC50	1,1 - 4,3 mg/l		
Duration of exposure	4 h		
State of aggregation	Dust/mist		
Species	rat		
Method	OECD 403		
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are met.		

Skin corrosion/irritation			
No	**Substance name**	**CAS no.**	**EC no.**
1	**2-butoxyethanol**	**111-76-2**	**203-905-0**
Duration of exposure	4 h		
Species	rabbit		
Method	EU B.4		
Source	ECHA		
Evaluation	irritant		
2	**(ethylenedioxy)dimethanol**	**3586-55-8**	**222-720-6**
Species	rabbit		
Method	OECD 404		
Source	ECHA		
Evaluation	irritant		
3	**2-ethylhexan-1-ol**	**104-76-7**	**203-234-3**
Species	rabbit		
Method	OECD 404		
Source	ECHA		
Evaluation	irritant		
Evaluation/classification	Based on available data, the classification criteria are met.		

Serious eye damage/irritation			
No	**Substance name**	**CAS no.**	**EC no.**
1	**2-butoxyethanol**	**111-76-2**	**203-905-0**
Duration of exposure	24 h		
Species	rabbit		
Method	OECD 405		
Source	ECHA		
Evaluation	Irritating to eyes		
2	**(ethylenedioxy)dimethanol**	**3586-55-8**	**222-720-6**
Species	rabbit		
Method	OECD 405		
Source	ECHA		
Evaluation	Irreversible effects on the eye		
3	**2-ethylhexan-1-ol**	**104-76-7**	**203-234-3**
Species	rabbit		
Method	OECD 405		
Source	ECHA		
Evaluation	Irritating to eyes		
Evaluation/classification	Based on available data, the classification criteria are met.		

Respiratory or skin sensitisation			
No	**Substance name**	**CAS no.**	**EC no.**
1	**2-butoxyethanol**	**111-76-2**	**203-905-0**
Route of exposure	Skin		
Species	guinea pig		
Method	OECD 406		
Source	ECHA		
Evaluation	non-sensitizing		
2	**(ethylenedioxy)dimethanol**	**3586-55-8**	**222-720-6**
Route of exposure	Skin		
Species	guinea pig		
Method	OECD 406		
Source	ECHA		
Evaluation	non-sensitizing		

Germ cell mutagenicity			
No	**Substance name**	**CAS no.**	**EC no.**
1	**2-butoxyethanol**	**111-76-2**	**203-905-0**
Method	OECD 471		
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		

Reproduction toxicity
No data available

Carcinogenicity			
No	**Substance name**	**CAS no.**	**EC no.**
1	**2-butoxyethanol**	**111-76-2**	**203-905-0**
Species	rat		
Method	OECD 451		
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		

STOT - single exposure
No data available

STOT - repeated exposure
No data available

Aspiration hazard
No data available

11.2 Information on other hazards

Endocrine disrupting properties
No data available.

Other information
No data available.

SECTION 12: Ecological information

12.1 Toxicity

Toxicity to fish (acute)			
No	**Substance name**	**CAS no.**	**EC no.**
1	**2-ethylhexyl nitrate**	**27247-96-7**	**248-363-6**
LC50		2	mg/l
Duration of exposure		96	h
Species	Danio rerio		
Method	OECD 203		
Source	ECHA		

2	2-butoxyethanol	111-76-2	203-905-0
LC50	>	1474	mg/l
Duration of exposure		96	h
Species	Oncorhynchus mykiss		
Method	OECD 203		
Source	ECHA		
3	**(ethylenedioxy)dimethanol**	**3586-55-8**	**222-720-6**
LC50		71	mg/l
Duration of exposure		96	h
Species	Danio rerio		
Method	OECD 203		
Source	ECHA		
4	**2-ethylhexan-1-ol**	**104-76-7**	**203-234-3**
LC50		17,1	mg/l
Duration of exposure		96	h
Species	Leuciscus idus melanotus		
Source	ECHA		
5	**hydrocarbons, C10, aromatics, <1% naphthalene**	**-**	**918-811-1**
LL50	>= 2 -	5	mg/l
Duration of exposure		96	h
Species	Oncorhynchus mykiss		
Method	OECD 203		
Source	ECHA		

Toxicity to fish (chronic)			
No	**Substance name**	**CAS no.**	**EC no.**
1	**2-butoxyethanol**	**111-76-2**	**203-905-0**
NOEC	>	100	mg/l
Duration of exposure		21	day(s)
Species	Danio rerio		
Method	OECD 204		
Source	ECHA		

Toxicity to Daphnia (acute)			
No	**Substance name**	**CAS no.**	**EC no.**
1	**2-ethylhexyl nitrate**	**27247-96-7**	**248-363-6**
EC50	>	12,6	mg/l
Duration of exposure		48	h
Species	Daphnia magna		
Method	OECD 202		
Source	ECHA		
2	**2-butoxyethanol**	**111-76-2**	**203-905-0**
EC50		1550	mg/l
Duration of exposure		48	h
Species	Daphnia magna		
Method	OECD 202		
Source	ECHA		
3	**(ethylenedioxy)dimethanol**	**3586-55-8**	**222-720-6**
EC50		28	mg/l
Duration of exposure		48	h
Species	Daphnia magna		
Method	OECD 202		
Source	ECHA		
4	**2-ethylhexan-1-ol**	**104-76-7**	**203-234-3**
EC50		39	mg/l
Duration of exposure		48	h
Species	Daphnia magna		
Source	ECHA		
5	**hydrocarbons, C10, aromatics, <1% naphthalene**	**-**	**918-811-1**

EL50	>= 3	-	10	mg/l
Duration of exposure			48	h
Species	Daphnia magna			
Method	OECD 202			
Source	ECHA			

Toxicity to Daphnia (chronic)				
No	**Substance name**	**CAS no.**		**EC no.**
1	**2-butoxyethanol**	**111-76-2**		**203-905-0**
NOEC			100	mg/l
Duration of exposure			21	day(s)
Species	Daphnia magna			
Method	OECD 211			
Source	ECHA			
2	**(ethylenedioxy)dimethanol**	**3586-55-8**		**222-720-6**
NOEC			8	mg/l
Duration of exposure			21	day(s)
Species	Daphnia magna			
Method	OECD 211			
Source	ECHA			

Toxicity to algae (acute)				
No	**Substance name**	**CAS no.**		**EC no.**
1	**2-ethylhexyl nitrate**	**27247-96-7**		**248-363-6**
EC50			1,57	mg/l
Duration of exposure			72	h
Species	Pseudokirchneriella subcapitata			
Method	OECD 201			
Source	ECHA			
2	**2-butoxyethanol**	**111-76-2**		**203-905-0**
EC50			911	mg/l
Duration of exposure			72	h
Species	Pseudokirchneriella subcapitata			
Method	OECD 201			
Source	ECHA			
3	**(ethylenedioxy)dimethanol**	**3586-55-8**		**222-720-6**
EC50			4,62	mg/l
Duration of exposure			72	h
Species	Desmodesmus subspicatus			
Method	OECD 201			
Source	ECHA			
4	**2-ethylhexan-1-ol**	**104-76-7**		**203-234-3**
EC50			11,5	mg/l
Duration of exposure			72	h
Species	Desmodesmus subspicatus			
Source	ECHA			
5	**hydrocarbons, C10, aromatics, <1% naphthalene**	**-**		**918-811-1**
EL50	>= 1	-	3	mg/l
Duration of exposure			72	h
Species	Pseudokirchneriella subcapitata			
Method	OECD 201			
Source	ECHA			

Toxicity to algae (chronic)
No data available

Bacteria toxicity
No data available

12.2 Persistence and degradability

Biodegradability					
No	**Substance name**	**CAS no.**		**EC no.**	
1	**2-butoxyethanol**	**111-76-2**		**203-905-0**	
Type	aerobic biodegradation				
Value			90,4	%	
Duration			28	day(s)	
Method	OECD 301 B				
Source	ECHA				
Evaluation	readily biodegradable				
2	**(ethylenedioxy)dimethanol**	**3586-55-8**		**222-720-6**	
Value			100	%	
Duration			5	day(s)	
Method	OECD 301 A				
Source	ECHA				
Evaluation	readily biodegradable				
3	**2-ethylhexan-1-ol**	**104-76-7**		**203-234-3**	
Type	aerobic biodegradation				
Value	79	-	99,9	%	
Duration			2	week/s	
Method	OECD 301 C				
Source	ECHA				
Evaluation	readily biodegradable				
4	**hydrocarbons, C10, aromatics, <1% naphthalene**	**-**		**918-811-1**	
Type	COD				
Value			49,56	%	
Duration			28	day(s)	
Method	OECD 301 F				
Source	ECHA				
Evaluation	not readily biodegradable				

12.3 Bioaccumulative potential

Partition coefficient n-octanol/water (log value)					
No	**Substance name**	**CAS no.**		**EC no.**	
1	**2-ethylhexyl nitrate**	**27247-96-7**		**248-363-6**	
log Pow			5,24		
Method	OECD 117				
Source	ECHA				
2	**2-butoxyethanol**	**111-76-2**		**203-905-0**	
log Pow			0,81		
Reference temperature			25	°C	
Source	ECHA				
3	**2-ethylhexan-1-ol**	**104-76-7**		**203-234-3**	
log Pow			2,9		
Reference temperature			25	°C	
Method	OECD 117				
Source	ECHA				

12.4 Mobility in soil

No data available.

12.5 Results of PBT and vPvB assessment

Results of PBT and vPvB assessment	
PBT assessment	No data available.
vPvB assessment	No data available.

12.6 Endocrine disrupting properties

No data available.

12.7 Other adverse effects
No data available.

12.8 Other information

Other information
Do not discharge product unmonitored into the environment.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product
Allocation of a waste code number, according to the European Waste Catalogue, should be carried out in agreement with the regional waste disposal company.

Packaging
Residues must be removed from packaging and when emptied completely disposed of in accordance with the regulations for waste removal. Incompletely emptied packaging must be disposed of in the form of disposal specified by the regional disposer.

SECTION 14: Transport information

14.1 Transport ADR/RID/ADN

Class	9
Classification code	M6
Packing group	III
Hazard identification no.	90
UN number	UN3082
Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Technical name	2-ethylhexyl nitrate
Tunnel restriction code	-
Label	9
Environmentally hazardous substance mark	Symbol "fish and tree"

14.2 Transport IMDG

Class	9
Packing group	III
UN number	UN3082
Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Technical name	2-ethylhexyl nitrate
EmS	F-A, S-F
Label	9
Marine pollutant mark	Symbol "fish and tree"

14.3 Transport ICAO-TI / IATA

Class	9
Packing group	III
UN number	UN3082
Proper shipping name	Environmentally hazardous substance, liquid, n.o.s.
Technical name	2-ethylhexyl nitrate
Label	9
Environmentally hazardous substance mark	Symbol "fish and tree"

14.4 Other information
No data available.

14.5 Environmental hazards
Information on environmental hazards, if relevant, please see 14.1 - 14.3.

14.6 Special precautions for user
No data available.

14.7 Maritime transport in bulk according to IMO instruments
Not relevant

SECTION 15: Regulatory information

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

EU regulations

Regulation (EC) No 1907/2006 (REACH) Annex XIV (List of substances subject to authorisation)
According to the data available and/or specifications supplied by upstream suppliers, this product does not contain any substances considered as substances requiring authorisation as listed on Annex XIV of the REACH regulation (EC) 1907/2006.

REACH candidate list of substances of very high concern (SVHC) for authorisation
According to available data and the information provided by preliminary suppliers, the product does not contain substances that are considered substances meeting the criteria for inclusion in annex XIV (List of Substances Subject to Authorisation) as laid down in Article 57 and article 59 of REACH (EC) 1907/2006.

Regulation (EC) No 1907/2006 (REACH) Annex XVII: RESTRICTIONS ON THE MANUFACTURE, PLACING ON THE MARKET AND USE OF CERTAIN DANGEROUS SUBSTANCES, MIXTURES AND ARTICLES	
The product is considered being subject to REACH regulation (EC) 1907/2006 annex XVII.	No 3

Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances	
This product is subject to Part I of Annex I, risk category:	E2

REGULATION (EU) No 528/2012 concerning the making available on the market and use of biocidal products
(Ethylendioxy)dimethanol - (EDDM) BAuA Registrierungsnr.: N-86305

15.2 Chemical safety assessment
A chemical safety assessment has not been carried out for this mixture.

SECTION 16: Other information

Sources of key data used to compile the data sheet:
Regulation (EC) No 1907/2006 (REACH), 1272/2008 (CLP) as amended in each case.
Directives 2000/39/EC, 2006/15/EC, 2009/161/EU, (EU) 2017/164.
National Threshold Limit Values of the corresponding countries as amended in each case.
Transport regulations according to ADR, RID, IMDG, IATA as amended in each case.
The data sources used to determine physical, toxic and ecotoxic data, are indicated directly in the corresponding section.

Full text of the H- and EUH- phrases drawn up in sections 2 and 3 (provided not already drawn up in these sections)

EUH044	Risk of explosion if heated under confinement.
EUH066	Repeated exposure may cause skin dryness or cracking.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.

Creation of the safety data sheet
UMCO GmbH
Georg-Wilhelm-Str. 187, D-21107 Hamburg

Tel.: +49 40 / 555 546 300 Fax: +49 40 / 555 546 357 e-mail: umco@umco.de

This information is based on our present knowledge and experience.
The safety data sheet describes products with a view to safety requirements.
It does not however, constitute a guarantee for any specific product properties and shall not establish a legally valid contractual relationship.

Prod-ID 778320