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MEtherm 50 No Change Service!

Version Revision Date: Date of last issue: 12.12.2022

02.05 04.01.2023

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

1.1 Product identifier

Trade name MEtherm 50

2JD0-20KJ-F003-EDWH Unique Formula Identifier

(UFI)

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

Use of the Sub-Cleaning agent

stance/Mixture

Recommended restrictions

on use

Restricted to professional users.

1.3 Details of the supplier of the safety data sheet

MELAG Medizintechnik GmbH & Co. KG Supplier

Geneststraße 6-10

10829 Berlin Germany

Telephone: +4930-7579110 Telefax: +4930-75791199 MEtherm-OEM@melag.de

www.melag.com

Producer Schülke & Mayr GmbH

Robert-Koch-Str. 2

22851 Norderstedt

Germany

Telephone: +49 (0)40/52100-0 Telefax: +49 (0)40/52100318

mail@schuelke.com www.schuelke.com

E-mail address of person

responsible for the SDS/Contact person ChemicalCompliance@schuelke.com

1.4 Emergency telephone number

Emergency telephone num- : Carechem 24 International:+44 1235 239670

ber

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**MEtherm 50** No Change Service!

Version Revision Date: Date of last issue: 12.12.2022

02.05 04.01.2023

#### **SECTION 2: Hazards identification**

#### 2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008) as amended by The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use) (Amendment etc.) (EU Exit) Regulations 2019)

Eye irritation, Category 2 H319: Causes serious eye irritation.

Skin irritation, Category 2 H315: Causes skin irritation.

Serious eye damage, Category 1 H318: Causes serious eye damage.

#### 2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008) as amended by The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use) (Amendment etc.) (EU Exit) Regulations 2019)

Hazard pictograms :



Signal word : Warning

Hazard statements : H315 Causes skin irritation.

H319 Causes serious eye irritation.

Precautionary statements : Prevention:

P280 Wear protective gloves/ eye protection.

Response:

P302 + P352 IF ON SKIN: Wash with plenty of soap and

water.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and

easy to do. Continue rinsing.

P337 + P313 If eye irritation persists: Get medical advice/

attention.

#### **Additional Labelling**

EUH208 Contains subtilisin.

May produce an allergic reaction.

#### 2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

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**MEtherm 50** No Change Service!

Version Revision Date: Date of last issue: 12.12.2022

02.05 04.01.2023

# **SECTION 3: Composition/information on ingredients**

# 3.2 Mixtures

Chemical nature : Solution of the following substances with harmless additives.

### Components

Chemical name	CAS-No. EC-No.	Classification	Concentration (% w/w)
	Index-No.		(70 W/W)
	Registration number		
sodium p-cumenesulphonate	15763-76-5	Eye Irrit. 2; H319	>= 1 - < 10
	239-854-6		
	01-2119489411-37-		
	XXXX		
2-aminoethanol	141-43-5	Acute Tox. 4; H302	>= 2.5 - < 3
	205-483-3 603-030-00-8	Acute Tox. 4; H332 Acute Tox. 4; H312	
	01-2119486455-28-	Skin Corr. 1B;	
	XXXX	H314	
		Eye Dam. 1; H318	
		STOT SE 3; H335	
		(Respiratory sys-	
		tem)	
		Aquatic Chronic 3; H412	
		Π412	
		specific concentra-	
		tion limit	
		STOT SE 3; H335	
		>= 5 %	
sodium etasulfate	126-92-1	Skin Irrit. 2; H315	>= 1 - < 3
	204-812-8	Eye Dam. 1; H318	
	01-2119971586-23-	specific concentra-	
	XXXX	tion limit	
		Eye Irrit. 2; H319 > 10 - < 20 %	
		Eye Dam. 1; H318	
		> 20 %	
Alcohols, C12-15-branched and line-	120313-48-6	Skin Irrit. 2; H315	>= 0.25 - < 1
ar, ethoxylated propoxylated		Aquatic Acute 1; H400	
		Aquatic Chronic 3;	
		H412	
		M-Factor (Acute	
		aquatic toxicity): 1	
subtilisin	9014-01-1	Acute Tox. 4; H302	>= 0.1 - < 0.25
	232-752-2	Skin Irrit. 2; H315	

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# **MEtherm 50** No Change Service!

Version Revision Date: Date of last issue: 12.12.2022

02.05 04.01.2023

	647-012-00-8 01-2119480434-38- XXXX	Eye Dam. 1; H318 Resp. Sens. 1; H334 STOT SE 3; H335 (Respiratory system) Aquatic Acute 1; H400 Aquatic Chronic 2; H411 ——— M-Factor (Acute aquatic toxicity): 1 M-Factor (Chronic aquatic toxicity): 1	
Substances with a workplace exposu	re limit :		
propane-1,2-diol	57-55-6 200-338-0  01-2119456809-23- XXXX		>= 10 - < 20
glycerol	56-81-5 200-289-5 		>= 10 - < 20

For explanation of abbreviations see section 16.

# **SECTION 4: First aid measures**

# 4.1 Description of first aid measures

General advice : Take off all contaminated clothing immediately.

If inhaled : If symptoms persist, call a physician.

In case of skin contact : Wash off immediately with soap and plenty of water.

If skin irritation persists, call a physician.

In case of eye contact : Rinse thoroughly with plenty of water, also under the eyelids.

If eye irritation persists, consult a specialist.

If swallowed : Do NOT induce vomiting.

Drink water as a precaution. Call a physician immediately.

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

Symptoms : Treat symptomatically.

Risks : Causes skin irritation.

Causes serious eye irritation.

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#### MEtherm 50 No Change Service!

Version Revision Date: Date of last issue: 12.12.2022

02.05 04.01.2023

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

**Treatment** For specialist advice physicians should contact the Poisons

Information Service.

### **SECTION 5: Firefighting measures**

## 5.1 Extinguishing media

Suitable extinguishing media Dry powder

Carbon dioxide (CO2)

Foam

Water spray jet

Unsuitable extinguishing

media

Do NOT use water jet.

### 5.2 Special hazards arising from the substance or mixture

Specific hazards during fire-

fighting

No information available.

Hazardous combustion prod- : No hazardous combustion products are known

#### 5.3 Advice for firefighters

for firefighters

Special protective equipment : In the event of fire, wear self-contained breathing apparatus.

#### **SECTION 6: Accidental release measures**

### 6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions Increased risk of slipping in the presence of leaked / spilled

product.

#### 6.2 Environmental precautions

Environmental precautions : Avoid subsoil penetration.

### 6.3 Methods and material for containment and cleaning up

Wipe up with absorbent material (e.g. cloth, fleece). Methods for cleaning up

Soak up with inert absorbent material (e.g. sand, silica gel,

acid binder, universal binder, sawdust).

# 6.4 Reference to other sections

see Section 8 + 13

# **SECTION 7: Handling and storage**

# 7.1 Precautions for safe handling

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**MEtherm 50** No Change Service!

Version Revision Date: Date of last issue: 12.12.2022

02.05 04.01.2023

Advice on safe handling : Wear personal protective equipment.

Never mix concentrates directly.

Advice on protection against :

fire and explosion

Normal measures for preventive fire protection. The product

itself does not burn.

Hygiene measures : Keep away from food and drink.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage

areas and containers

: Store at room temperature in the original container.

Further information on stor-

age conditions

Recommended storage temperature: 5 - 25°C Protect from

frost, heat and direct sunlight.

Advice on common storage : Do not store together with explosive, infectious and radioactive

products.

7.3 Specific end use(s)

Specific use(s) : none

# **SECTION 8: Exposure controls/personal protection**

# 8.1 Control parameters

# **Occupational Exposure Limits**

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
propane-1,2-diol	57-55-6	TWA (particles)	10 mg/m3	GB EH40
		TWA (Total va-	150 ppm	GB EH40
		pour and parti- cles)	474 mg/m3	
glycerol	56-81-5	TWA (Mist)	10 mg/m3	GB EH40
2-aminoethanol	141-43-5	TWA	1 ppm 2.5 mg/m3	GB EH40
	Further inform	nation: Can be absor	bed through the skin. The as	signed sub-
	stances are those for which there are concerns that dermal absorption will			
	lead to systemic toxicity.			
		STEL	3 ppm 7.6 mg/m3	GB EH40
	Further information: Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity.			
		TWA	1 ppm 2.5 mg/m3	2006/15/EC
	Further information: Indicative, Identifies the possibility of significant uptake			
	through the skin			
		STEL	3 ppm 7.6 mg/m3	2006/15/EC
	Further information: Indicative, Identifies the possibility of significant uptake through the skin			

According to REACH etc. (Amendment etc.) (EU Exit) Regulations 2019



MEtherm 50 No Change Service!

Version Revision Date: Date of last issue: 12.12.2022

02.05 04.01.2023

subtilisin	9014-01-1	TWA	0.00004 mg/m3	GR FH40
subtilisin	Further information cence polarisate (HSL). The prepling to achieve methodology has this. The limit is term reference that can cause tory sensitisers via an immunol become hypereven in tiny quality.	ion technique divious limit for si e sufficient sens ave improved the based on stan period (15 minuloccupational as ) can induce a si ogical irritant or responsive, furtantities, may capterity from a ru	leveloped by the Hea ubtilisin was based or sitivity. However, impose sensitivity and the dard personal samplicate) sampling is not a sthma (also known as state of specific airwar other mechanism. Other exposure to the suse respiratory sympanny nose to asthma.	GB EH40 ent methods is the fluores- lth and Safety Laboratory in high-volume static sam- rovements in the analytical WEL for subtilisin reflects ing (MDHS14/4).4 Short- ppropriate., Substances is asthmagens and respira- iny hyper-responsiveness once the airways have substance, sometimes toms. These symptoms Not all workers who are we and it is impossible to
	identify in adva stances that ca substances wh existing airway themselves. Th atory sensitiser Asthmagen? C occupational as stances that ca is not possible, prevent worker cause occupations sho centrations sho	nce those who n cause occupation may trigger hyper-responsion le latter substants. Further informatical assessmenthma., Whereven cause occupation becoming asthma, Canably practicable and receive partical assessmenthma.	are likely to become ational asthma should the symptoms of asthveness, but which donces are not classified mation can be found the ents of the evidence for it is reasonably practional asthma should in is to apply adequate g hyper-responsive. OSHH requires that ele. Activities giving risticular attention when	hyper-responsive. Sub- d be distinguished from hama in people with pre- onot include the disease d as asthmagens or respir- in the HSE publication or agents implicated in acticable, exposure to sub- d be prevented. Where this e standards of control to For substances that can exposure be reduced to as se to short-term peak con- orisk management is being
	liable to be exp and there shou fessional over t teolytic enzyme washing powde active enzyme, occupational as figure three tim notation in the may cause occ be remembered	osed to a substald be appropriate the degree of rises derived from ers, animal feed inactive enzymesthma., Where rest the long-terralist of WELs has upational asthmed that other sub HSE's asthma v	tance which may causte consultation with a sk and level of surveil Bacillus subtilis. The stuffs etc. The enzymer and protein residuent specific short-term exposure limit shous been assigned only not in the categories stances not in these	I employees exposed or se occupational asthma n occupational health prolance., Subtilisins are proyare used in biological ne preparation contains es., Capable of causing exposure limit is listed, and be used., The 'Sen' to those substances which hown in Table 1. It should tables may cause occupacygov.uk/asthma) provide

# **Derived No Effect Level (DNEL):**

Substance name	End Use	Exposure routes	Potential health effects	Value
propane-1,2-diol	Workers	Inhalation	Long-term systemic effects	168 mg/m3
	Workers	Inhalation	Long-term local effects	10 mg/m3
sodium p- cumenesulphonate	Workers	Skin contact	Long-term systemic effects	136.25 mg/kg
·	Workers	Skin contact	Long-term local ef-	0.096 mg/cm2

According to REACH etc. (Amendment etc.) (EU Exit) Regulations 2019



MEtherm 50 No Change Service!

Version Revision Date: Date of last issue: 12.12.2022

02.05 04.01.2023

			fects	
	Workers	Inhalation	Long-term systemic effects	26.9 mg/m3
2-aminoethanol	Workers	Skin contact	Long-term systemic effects	1 mg/kg
	Workers	Inhalation	Long-term local ef- fects	3.3 mg/m3
sodium etasulfate	Workers	Skin contact	Long-term systemic effects	4060 mg/kg
	Workers	Inhalation	Long-term systemic effects	285 mg/m3
subtilisin	Workers	Skin contact	Acute local effects, Long-term local effects	2000 ppm
	Workers	Inhalation	Long-term local ef- fects	0.00006 mg/m3

# **Predicted No Effect Concentration (PNEC):**

Substance name	Environmental Compartment	Value
propane-1,2-diol	Fresh water	260 mg/l
	Marine water	26 mg/l
	Intermittent use/release	183 mg/l
	Sewage treatment plant	20000 mg/l
	Fresh water sediment	572 mg/kg
	Marine sediment	57.2 mg/kg
	Soil	50 mg/kg
sodium p-cumenesulphonate	Fresh water	0.23 mg/l
	Marine water	0.023 mg/l
	Intermittent use/release	2.3 mg/l
	Sewage treatment plant	100 mg/l
	Fresh water sediment	0.862 mg/kg
	Marine sediment	0.0862 mg/kg
	Soil	0.037 mg/kg
2-aminoethanol	Fresh water	0.085 mg/l
	Marine water	0.0085 mg/l
	Intermittent use/release	0.028 mg/l
	Effects on waste water treatment plants	100 mg/l
	Fresh water sediment	0.434 mg/kg dry
		weight (d.w.)
	Marine sediment	0.0434 mg/kg dry
		weight (d.w.)
	Soil	0.0367 mg/kg dry
		weight (d.w.)
sodium etasulfate	Fresh water	0.136 mg/l
	Marine water	0.0136 mg/l
	Fresh water sediment	1.5 mg/kg
	Marine sediment	0.15 mg/kg
	Soil	0.22 mg/kg
	Effects on waste water treatment plants	1.35 mg/l
subtilisin	Fresh water	0.00006 mg/l
	Marine water	0.000006 mg/l
	Effects on waste water treatment plants	65 mg/l

According to REACH etc. (Amendment etc.) (EU Exit) Regulations 2019



**MEtherm 50** No Change Service!

Version Revision Date: Date of last issue: 12.12.2022

02.05 04.01.2023

### 8.2 Exposure controls

Personal protective equipment

Eye/face protection : Safety glasses with side-shields conforming to EN166

Hand protection

Directive : The selected protective gloves have to satisfy the specifica-

tions of Regulation (EU) 2016/425 and the standard EN 374

derived from it.

Remarks : Splash protection: disposable nitrile rubber gloves e.g.

Dermatril (layer thickness: 0.11 mm) made by KCL or gloves from other manufacturers offering the same protection. Prolonged contact: Nitrile rubber gloves e.g. Camatril (>480 Min., layer thickness: 0,40 mm) or butyl rubber gloves e.g. Butoject (>480 Min., layer thickness: 0,70 mm) made by KCL or gloves from other manufacturers offering the same protec-

tion.

Skin and body protection : Work uniform or laboratory coat.

Respiratory protection : No personal respiratory protective equipment normally re-

quired.

Protective measures : Avoid contact with skin and eyes.

# **SECTION 9: Physical and chemical properties**

### 9.1 Information on basic physical and chemical properties

Appearance : liquid

Colour : light yellow

Odour : characteristic

Odour Threshold : not determined

pH : 11 (20 °C)

Concentration: 100 %

Melting point/freezing point : < -5 °C

Decomposition temperature Not applicable

Initial boiling point and boiling

range

ca. 100 °C

Flash point :  $> 100 \, ^{\circ}\text{C}$ 

Method: DIN 51755 Part 1

Evaporation rate : No data available

Upper explosion limit / Upper : No data available

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#### MEtherm 50 No Change Service!

Version Date of last issue: 12.12.2022 Revision Date:

02.05 04.01.2023

flammability limit

Lower explosion limit / Lower : No data available

flammability limit

Vapour pressure No data available

Relative vapour density No data available

Density ca. 1.11 g/cm3 (20 °C, 1,013 hPa)

Solubility(ies)

Water solubility completely soluble (20 °C)

Partition coefficient: n-

octanol/water

Not applicable

Auto-ignition temperature No data available

Viscosity

Viscosity, dynamic : ca. 9 mPa\*s

Method: ISO 3219

Explosive properties : No data available

Oxidizing properties The substance or mixture is not classified as oxidizing.

9.2 Other information

Flammability (liquids) Does not sustain combustion.

Metal corrosion rate None reasonably foreseeable.

Self-ignition No data available

# **SECTION 10: Stability and reactivity**

# 10.1 Reactivity

No dangerous reaction known under conditions of normal use.

#### 10.2 Chemical stability

The product is chemically stable.

### 10.3 Possibility of hazardous reactions

Hazardous reactions reaction with acids.

10.4 Conditions to avoid

Conditions to avoid Protect from frost, heat and sunlight.

10.5 Incompatible materials

Materials to avoid Possible incompatibility with alkali sensitive materials.

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**MEtherm 50** No Change Service!

Version Revision Date: Date of last issue: 12.12.2022

02.05 04.01.2023

# 10.6 Hazardous decomposition products

None reasonably foreseeable.

# **SECTION 11: Toxicological information**

#### 11.1 Information on toxicological effects

#### **Acute toxicity**

Not classified based on available information.

**Product:** 

Acute oral toxicity : Acute toxicity estimate: > 2,000 mg/kg

Method: Calculation method

Acute inhalation toxicity : Acute toxicity estimate: > 20 mg/l

Exposure time: 4 h
Test atmosphere: vapour
Method: Calculation method

Acute dermal toxicity : Acute toxicity estimate: > 2,000 mg/kg

Method: Calculation method

### **Components:**

sodium p-cumenesulphonate:

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg

Method: OECD Test Guideline 401

Acute inhalation toxicity : LC50 (Rat): > 5 mg/l

Test atmosphere: dust/mist

Method: OECD Test Guideline 403

Acute dermal toxicity : LD50 (Rabbit): > 2,000 mg/kg

2-aminoethanol:

Acute oral toxicity : (Rat): 1,515 mg/kg

Method: OECD Test Guideline 401 Assessment: Harmful if swallowed.

Acute inhalation toxicity : (Rat): > 1.3 mg/l

Exposure time: 6 h
Test atmosphere: vapour
Assessment: Harmful if inhaled.

Acute dermal toxicity : Assessment: Harmful in contact with skin.

sodium etasulfate:

Acute oral toxicity : LD50 (Rat): 2,840 mg/kg

Acute inhalation toxicity : Remarks: No data available

Acute dermal toxicity : LD50 (Rat): > 2,000 mg/kg

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Page 11/29

According to REACH etc. (Amendment etc.) (EU Exit) Regulations 2019



**MEtherm 50** No Change Service!

Version Revision Date: Date of last issue: 12.12.2022

02.05 04.01.2023

Alcohols, C12-15-branched and linear, ethoxylated propoxylated:

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg

Method: Calculated value

Acute inhalation toxicity : Remarks: not determined

Acute dermal toxicity : Remarks: not determined

subtilisin:

Acute oral toxicity : LD50 (Rat): 1,800 mg/kg

Method: OECD Test Guideline 401

Acute dermal toxicity : Remarks: No data available

propane-1,2-diol:

Acute oral toxicity : LD50 Oral (Rat): > 20,000 mg/kg

Acute inhalation toxicity : LC50 (Rabbit): 317.042 mg/l

Exposure time: 2 h

Test atmosphere: dust/mist

Acute dermal toxicity : LD50 (Rabbit): > 2,000 mg/kg

glycerol:

Acute oral toxicity : LD50 (Rat, female): 27,200 mg/kg

Method: OECD Test Guideline 401

Acute dermal toxicity : LD50 (Guinea pig, male and female): 56,750 mg/kg

Skin corrosion/irritation

Causes skin irritation.

**Components:** 

sodium p-cumenesulphonate:

Species : Rabbit

Method : OECD Test Guideline 404

Result : slight irritation

Remarks : Based on available data, the classification criteria are not met.

2-aminoethanol:

Species : Rabbit

Method : OECD Test Guideline 404

Result : Corrosive after 3 minutes to 1 hour of exposure

sodium etasulfate:

Species : Rabbit

Method : OECD Test Guideline 404

Result : Skin irritation

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**MEtherm 50** No Change Service!

Version Revision Date: Date of last issue: 12.12.2022

02.05 04.01.2023

Alcohols, C12-15-branched and linear, ethoxylated propoxylated:

Species : Rabbit
Method : Draize Test
Result : Skin irritation

subtilisin:

Method : OECD Test Guideline 404

Result : Skin irritation

propane-1,2-diol:

Result : No skin irritation

Serious eye damage/eye irritation

Causes serious eye irritation.

**Components:** 

sodium p-cumenesulphonate:

Species : Rabbit

Method : OECD Test Guideline 405

Result : Eye irritation

2-aminoethanol:

Species : Rabbit

Method : OECD Test Guideline 405
Result : Risk of serious damage to eyes.

sodium etasulfate:

Species : Rabbit

Method : OECD Test Guideline 405
Result : Irreversible effects on the eye

Alcohols, C12-15-branched and linear, ethoxylated propoxylated:

Species : Rabbit

Method : OECD Test Guideline 405

Result : No eye irritation

subtilisin:

Method : OECD Test Guideline 405
Result : Irreversible effects on the eye

propane-1,2-diol:

Result : Mildly irritant - does not need to be labelled

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**MEtherm 50** No Change Service!

Version Revision Date: Date of last issue: 12.12.2022

02.05 04.01.2023

### Respiratory or skin sensitisation

#### Skin sensitisation

Not classified based on available information.

#### Respiratory sensitisation

Not classified based on available information.

#### **Components:**

#### sodium p-cumenesulphonate:

Test Type : Buehler Test Species : Guinea pig

Method : OECD Test Guideline 406

Result : Did not cause sensitisation on laboratory animals.

2-aminoethanol:

Test Type : Maximisation Test

Species : Guinea pig

Method : OECD Test Guideline 406

Result : Did not cause sensitisation on laboratory animals.

sodium etasulfate:

Method : OECD Test Guideline 429

Result : Did not cause sensitisation on laboratory animals.

#### Alcohols, C12-15-branched and linear, ethoxylated propoxylated:

Remarks : No data available

subtilisin:

Result : Probability of respiratory sensitisation in humans based on

animal testing

Remarks : largely based on human evidence

propane-1,2-diol:

Result : Does not cause skin sensitisation.

### Germ cell mutagenicity

Not classified based on available information.

### **Components:**

## sodium p-cumenesulphonate:

Genotoxicity in vitro : Test Type: Mutagenicity (Salmonella typhimurium - reverse

mutation assay)

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 471 Result: Not mutagenic in Ames Test

Genotoxicity in vivo : Test Type: In vivo micronucleus test

Species: Mouse

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**MEtherm 50** No Change Service!

Version Revision Date: Date of last issue: 12.12.2022

02.05 04.01.2023

Application Route: Oral Result: Non mutagenic

Germ cell mutagenicity- As-

sessment

Not mutagenic in Ames Test

2-aminoethanol:

Genotoxicity in vitro : Result: Tests on bacterial or mammalian cell cultures did not

show mutagenic effects.

Genotoxicity in vivo : Result: Did not show mutagenic effects in animal experiments.

Germ cell mutagenicity- As-

sessment

Animal testing did not show any mutagenic effects., Tests on

bacterial or mammalian cell cultures did not show mutagenic

effects.

sodium etasulfate:

Genotoxicity in vitro : Test Type: Microbial mutagenesis assay (Ames test)

Test system: Bacteria

Method: OECD Test Guideline 471

Result: negative

Alcohols, C12-15-branched and linear, ethoxylated propoxylated:

Genotoxicity in vitro : Test Type: Microbial mutagenesis assay (Ames test)

Result: negative

Germ cell mutagenicity- As-

sessment

Based on available data, the classification criteria are not met.

subtilisin:

Genotoxicity in vitro : Method: OECD Test Guideline 471

Result: Non mutagenic

Germ cell mutagenicity- As-

sessment

Animal testing did not show any mutagenic effects.

propane-1,2-diol:

Germ cell mutagenicity- As-

sessment

Non mutagenic

#### Carcinogenicity

Not classified based on available information.

#### **Components:**

### sodium p-cumenesulphonate:

Species : Rat Exposure time : 2 Years

Method : OECD Test Guideline 453
Result : no increase in tumors observed

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**MEtherm 50** No Change Service!

Version Revision Date: Date of last issue: 12.12.2022

02.05 04.01.2023

Carcinogenicity - Assess-

ment

Animal testing did not show any carcinogenic effects.

2-aminoethanol:

Carcinogenicity - Assess-

ment

Not classifiable as a human carcinogen.

sodium etasulfate:

Species : Rat
Application Route : Oral
Exposure time : 2 Years

Dose : > 1125 mg/kg body weight

Alcohols, C12-15-branched and linear, ethoxylated propoxylated:

Carcinogenicity - Assess-

ment

Weight of evidence does not support classification as a car-

cinogen

subtilisin:

Carcinogenicity - Assess-

ment

No data available

propane-1,2-diol:

Result : negative

Carcinogenicity - Assess-

ment

Animal testing did not show any carcinogenic effects.

Reproductive toxicity

Not classified based on available information.

Components:

sodium p-cumenesulphonate:

Effects on fertility : Species: Rat

**Application Route: Oral** 

General Toxicity - Parent: NOAEL: 300 mg/kg bw/day General Toxicity F1: NOAEL: 1,000 mg/kg bw/day

Method: OECD Test Guideline 421

Effects on foetal develop-

ment

Species: Rat

Application Route: Oral

General Toxicity Maternal: NOAEL: 936 mg/kg body weight

Teratogenicity: NOAEL: 936 mg/kg bw/day

Reproductive toxicity - As-

sessment

study scientifically unjustified

2-aminoethanol:

Effects on fertility : Test Type: Two-generation study

Z11276\_01 ZSDB\_P\_GB EN

Page 16/29

According to REACH etc. (Amendment etc.) (EU Exit) Regulations 2019



**MEtherm 50** No Change Service!

Version Revision Date: Date of last issue: 12.12.2022

02.05 04.01.2023

Species: Rat

Application Route: Oral

General Toxicity - Parent: NOAEL: 300 mg/kg body weight General Toxicity F1: NOAEL: 1,000 mg/kg body weight General Toxicity F2: NOAEL: 1,000 mg/kg body weight

Method: OECD Test Guideline 416

Result: Animal testing did not show any effects on fertility.

Effects on foetal develop-

ment

Species: Rat

Application Route: Oral

General Toxicity Maternal: NOAEL: 120 mg/kg bw/day

Teratogenicity: NOAEL: 450 mg/kg bw/day

Method: OECD Test Guideline 414

Remarks: Based on available data, the classification criteria

are not met.

Reproductive toxicity - As-

sessment

Based on available data, the classification criteria are not met.

sodium etasulfate:

Effects on foetal develop-

ment

Species: Rat

Application Route: Oral

Dose: 250 milligram per kilogram

Result: negative

Remarks: Did not show teratogenic effects in animal experi-

ments.

Reproductive toxicity - As-

sessment

No data available

Alcohols, C12-15-branched and linear, ethoxylated propoxylated:

Reproductive toxicity - As-

sessment

Based on available data, the classification criteria are not met.

subtilisin:

Reproductive toxicity - As-

sessment

No data available

propane-1,2-diol:

Reproductive toxicity - As-

sessment

Did not show carcinogenic or teratogenic effects in animal

experiments.

STOT - single exposure

Not classified based on available information.

**Components:** 

sodium p-cumenesulphonate:

Assessment : The substance or mixture is not classified as specific target

organ toxicant, single exposure.

According to REACH etc. (Amendment etc.) (EU Exit) Regulations 2019



**MEtherm 50** No Change Service!

Version Revision Date: Date of last issue: 12.12.2022

02.05 04.01.2023

2-aminoethanol:

Assessment : May cause respiratory irritation.

sodium etasulfate:

Remarks : No data available

Alcohols, C12-15-branched and linear, ethoxylated propoxylated:

Remarks : No data available

subtilisin:

Target Organs : Respiratory Tract

Assessment : May cause respiratory irritation.

propane-1,2-diol:

Assessment : Not classified based on available information.

STOT - repeated exposure

Not classified based on available information.

**Components:** 

sodium p-cumenesulphonate:

Assessment : The substance or mixture is not classified as specific target

organ toxicant, repeated exposure.

2-aminoethanol:

Assessment : The substance or mixture is not classified as specific target

organ toxicant, repeated exposure.

sodium etasulfate:

Remarks : No data available

Alcohols, C12-15-branched and linear, ethoxylated propoxylated:

Remarks : No data available

Repeated dose toxicity

**Components:** 

sodium p-cumenesulphonate:

Species : Rat

NOAEL : 763 mg/kg Application Route : Oral

Target Organs : Cardio-vascular system Remarks : Subchronic toxicity

Species : Rat NOAEL : 60 mg/kg

According to REACH etc. (Amendment etc.) (EU Exit) Regulations 2019



# **MEtherm 50** No Change Service!

Version Revision Date: Date of last issue: 12.12.2022

02.05 04.01.2023

Application Route : Dermal Exposure time : 2 yr

Method : OECD Test Guideline 453

Target Organs : Skin

#### sodium etasulfate:

Species : Rabbit
NOAEL : 488 mg/kg
Application Route : Oral
Exposure time : 90-day

Species : Mouse
NOAEL : 400 mg/kg
Application Route : Skin contact
Exposure time : 90-day

### **Aspiration toxicity**

Not classified based on available information.

#### **Components:**

### Alcohols, C12-15-branched and linear, ethoxylated propoxylated:

Due to the viscosity, this product does not present an aspiration hazard.

# propane-1,2-diol:

No aspiration toxicity classification

#### **Experience with human exposure**

### **Components:**

#### 2-aminoethanol:

General Information : Repeated and prolonged exposure to solvents may cause

brain and nervous system damage.

### **Further information**

Product:

Remarks : The product has not been tested.

# **SECTION 12: Ecological information**

# 12.1 Toxicity

#### **Components:**

#### sodium p-cumenesulphonate:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): > 100 mg/l

Exposure time: 96 h

Toxicity to daphnia and other : EC50 (Daphnia magna (Water flea)): > 100 mg/l

Z11276\_01 ZSDB\_P\_GB EN Page 19/29

According to REACH etc. (Amendment etc.) (EU Exit) Regulations 2019



MEtherm 50 No Change Service!

Version Revision Date: Date of last issue: 12.12.2022

02.05 04.01.2023

> aquatic invertebrates Exposure time: 48 h

Toxicity to algae/aquatic

plants

EC50 (Desmodesmus subspicatus (green algae)): > 100 mg/l

Exposure time: 72 h

2-aminoethanol:

Toxicity to fish LC50 (Cyprinus carpio (Carp)): 349 mg/l

> Exposure time: 96 h Test Type: semi-static test

Method: Tested according to Directive 92/69/EEC.

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna): 65 mg/l

Exposure time: 48 h Method: EG 84/449

Toxicity to algae/aquatic

plants

EC50 (Scenedesmus capricornutum (fresh water algae)): 2.5

mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

Toxicity to fish (Chronic tox-

icity)

1.2 mg/l

Exposure time: 30 d

Species: Oryzias latipes (Orange-red killifish)

Toxicity to daphnia and other

aquatic invertebrates (Chron-

ic toxicity)

NOEC: 0.85 mg/l Exposure time: 21 d

Species: Daphnia magna (Water flea) Method: OECD Test Guideline 211

sodium etasulfate:

Toxicity to fish LC50 (Brachydanio rerio (zebrafish)): > 100 mg/l

Exposure time: 96 h

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 483 mg/l

Toxicity to algae/aquatic

plants

Exposure time: 48 h

EC50 (Desmodesmus subspicatus (green algae)): > 511 mg/l Exposure time: 72 h

Toxicity to fish (Chronic tox-

icity)

NOEC: >= 1,357 mg/l

Exposure time: 42 d

Species: Pimephales promelas (fathead minnow)

Toxicity to daphnia and other :

aquatic invertebrates (Chron-

NOEC: 1.4 mg/l Exposure time: 21 d

ic toxicity)

Species: Daphnia magna (Water flea)

Alcohols, C12-15-branched and linear, ethoxylated propoxylated:

Toxicity to fish LC50 (Leuciscus idus): 1 - 10 mg/l

Exposure time: 96 h

Toxicity to daphnia and other : EC50 (Daphnia magna): 0.1 - 1 mg/l

According to REACH etc. (Amendment etc.) (EU Exit) Regulations 2019



MEtherm 50 No Change Service!

Version Revision Date: Date of last issue: 12.12.2022

02.05 04.01.2023

> Exposure time: 48 h aquatic invertebrates

> > Method: OECD Test Guideline 202

Toxicity to algae/aquatic

plants

EC50 (algae): 0.1 - 1 mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

M-Factor (Acute aquatic tox-

icity)

Toxicity to daphnia and other : NOEC: > 0.1 - < 1 mg/l aquatic invertebrates (Chron-

ic toxicity)

Exposure time: 21 d

Species: Daphnia magna (Water flea)

subtilisin:

Toxicity to fish LC50 (Fish): 8.2 mg/l

Exposure time: 96 h

Method: OECD Test Guideline 203

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna): 0.586 mg/l

Exposure time: 48 h

Method: OECD Test Guideline 202

Toxicity to algae/aquatic

plants

ErC50 (algae): 0.83 mg/l Exposure time: 72 h

Method: OECD Test Guideline 201

NOEC (Pseudokirchneriella subcapitata (green algae)): 0.041

mg/l

Exposure time: 72 h

M-Factor (Acute aquatic tox-

icity)

1

Toxicity to fish (Chronic tox-

icity)

NOEC: 0.017 ma/l Exposure time: 32 d

Species: Pimephales promelas (fathead minnow)

Method: OECD Test Guideline 210

M-Factor (Chronic aquatic

toxicity)

: 1

propane-1,2-diol:

Toxicity to fish LC50 (Oncorhynchus mykiss): 40,613 mg/l

> Exposure time: 96 h Test Type: static test

Method: OECD Test Guideline 203

Toxicity to daphnia and other :

aquatic invertebrates

LC50 (Ceriodaphnia dubia (water flea)): 18,340 mg/l

Exposure time: 48 h Test Type: static test

Method: OECD Test Guideline 202

According to REACH etc. (Amendment etc.) (EU Exit) Regulations 2019



MEtherm 50 No Change Service!

Revision Date: Date of last issue: 12.12.2022 Version

02.05 04.01.2023

Toxicity to algae/aquatic

plants

ErC50 (Pseudokirchneriella subcapitata (green algae)):

19,000 mg/l

Exposure time: 96 h

Test Type: Growth inhibition Method: OECD Test Guideline 201

Toxicity to microorganisms NOEC (Pseudomonas putida): > 20,000 mg/l

Exposure time: 18 h

Toxicity to daphnia and other :

aquatic invertebrates (Chron-

ic toxicity)

NOEC: 13,020 mg/l Exposure time: 7 d

Species: Ceriodaphnia dubia (water flea)

glycerol:

Toxicity to fish LC50 (Oncorhynchus mykiss): 54,000 mg/l

Exposure time: 96 h

aquatic invertebrates

Toxicity to daphnia and other : EC50 (Daphnia magna (Water flea)): > 10,000 mg/l

Exposure time: 24 h

### 12.2 Persistence and degradability

**Product:** 

Biodegradability Result: Readily biodegradable, according to appropriate

OECD test.

Method: OECD 301D / EEC 84/449 C6

Components:

sodium p-cumenesulphonate:

Biodegradability Test Type: aerobic

Result: Readily biodegradable. Biodegradation: > 60 % Exposure time: 28 d

Method: OECD Test Guideline 301B

2-aminoethanol:

Biodegradability Test Type: aerobic

> Inoculum: activated sludge Result: Readily biodegradable. Biodegradation: > 90 % Exposure time: 21 d

Method: OECD Test Guideline 301A

sodium etasulfate:

Biodegradability Result: Readily biodegradable.

Biodegradation: 89 % Exposure time: 28 d

Method: OECD Test Guideline 301B

Alcohols, C12-15-branched and linear, ethoxylated propoxylated:

According to REACH etc. (Amendment etc.) (EU Exit) Regulations 2019



**MEtherm 50** No Change Service!

Version Revision Date: Date of last issue: 12.12.2022

02.05 04.01.2023

Biodegradability : Result: Readily biodegradable.

Biodegradation: > 60 % Exposure time: 28 d

Method: OECD Test Guideline 301B

subtilisin:

Biodegradability : Result: Readily biodegradable.

Method: OECD Test Guideline 301B

propane-1,2-diol:

Biodegradability : Result: Readily biodegradable, according to appropriate

OECD test.

Biodegradation: 81 % Exposure time: 28 d

Method: OECD Test Guideline 301F

Result: Readily biodegradable, according to appropriate

OECD test.

Biodegradation: 96 % Exposure time: 64 d

Method: OECD Test Guideline 306

### 12.3 Bioaccumulative potential

# **Components:**

sodium p-cumenesulphonate:

Bioaccumulation : Remarks: Bioaccumulation is unlikely.

2-aminoethanol:

Bioaccumulation : Remarks: No bioaccumulation is to be expected (log Pow <=

4).

Partition coefficient: n-

octanol/water

log Pow: -1.91

sodium etasulfate:

Bioaccumulation : Remarks: No data available

Partition coefficient: n-

octanol/water

log Pow: -0.248

# Alcohols, C12-15-branched and linear, ethoxylated propoxylated:

Bioaccumulation : Remarks: Accumulation in aquatic organisms is unlikely.

subtilisin:

Bioaccumulation : Remarks: Does not bioaccumulate.

Partition coefficient: n-

octanol/water

 $\log Pow: < 0$ 

Z11276\_01 ZSDB\_P\_GB EN

Page 23/29

According to REACH etc. (Amendment etc.) (EU Exit) Regulations 2019



**MEtherm 50** No Change Service!

Version Revision Date: Date of last issue: 12.12.2022

02.05 04.01.2023

propane-1,2-diol:

Bioaccumulation : Bioconcentration factor (BCF): 0.09

Remarks: No bioaccumulation is to be expected (log Pow <=

4).

Partition coefficient: n-

octanol/water

log Pow: -1.07

glycerol:

Partition coefficient: n- : log Pow: -1.75 (25 °C)

octanol/water Method: OECD Test Guideline 107

12.4 Mobility in soil

**Components:** 

sodium p-cumenesulphonate:

Mobility : Remarks: Not expected to adsorb on soil.

2-aminoethanol:

Mobility : Remarks: Not expected to adsorb on soil.

sodium etasulfate:

Mobility : Remarks: No data available

Alcohols, C12-15-branched and linear, ethoxylated propoxylated:

Mobility : Remarks: Substance does not evaporate from water surface

into the atmosphere., Adsorption to solid soil phase is possi-

ble.

subtilisin:

Mobility : Remarks: No data available

propane-1,2-diol:

Mobility : Medium: Soil

Remarks: Mobile in soils

Distribution among environ-

mental compartments

Koc: < 1

12.5 Results of PBT and vPvB assessment

**Product:** 

Assessment : This substance/mixture contains no components considered

to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of

0.1% or higher.

According to REACH etc. (Amendment etc.) (EU Exit) Regulations 2019



**MEtherm 50** No Change Service!

Version Revision Date: Date of last issue: 12.12.2022

02.05 04.01.2023

**Components:** 

propane-1,2-diol:

Assessment : This substance is not considered to be persistent, bioaccumu-

lating and toxic (PBT).. This substance is not considered to be

very persistent and very bioaccumulating (vPvB).

12.6 Other adverse effects

**Product:** 

Endocrine disrupting poten-

tial

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at

levels of 0.1% or higher.

Additional ecological infor-

mation

No data is available on the product itself.

**SECTION 13: Disposal considerations** 

13.1 Waste treatment methods

Product : Disposal together with normal waste is not allowed. Special

disposal required according to local regulations.

Contaminated packaging : Empty containers should be taken to an approved waste han-

dling site for recycling or disposal.

**SECTION 14: Transport information** 

14.1 UN number

ADR : Not regulated as a dangerous good

IMDG : Not regulated as a dangerous good

IATA : Not regulated as a dangerous good

14.2 UN proper shipping name

ADR : Not regulated as a dangerous good

IMDG : Not regulated as a dangerous good

IATA : Not regulated as a dangerous good

14.3 Transport hazard class(es)

ADR : Not regulated as a dangerous good

IMDG : Not regulated as a dangerous good

IATA : Not regulated as a dangerous good

Z11276\_01 ZSDB\_P\_GB EN

Page 25/29

According to REACH etc. (Amendment etc.) (EU Exit) Regulations 2019



MEtherm 50 No Change Service!

Version Revision Date: Date of last issue: 12.12.2022

02.05 04.01.2023

14.4 Packing group

**ADR** Not regulated as a dangerous good **IMDG** Not regulated as a dangerous good IATA (Cargo) Not regulated as a dangerous good IATA (Passenger) Not regulated as a dangerous good

14.5 Environmental hazards

Not regulated as a dangerous good

14.6 Special precautions for user

Not applicable

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

Not applicable for product as supplied.

# **SECTION 15: Regulatory information**

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

Relevant EU provisions transposed through retained EU law

UK REACH List of restrictions (Annex 17) : Conditions of restriction for the fol-

lowing entries should be considered:

Number on list 3 Not applicable

UK REACH Candidate list of substances of very high

concern (SVHC) for Authorisation

Not applicable

The Persistent Organic Pollutants Regulations (retained

Regulation (EU) 2019/1021 as amended for Great Brit-

ain)

Regulation (EC) No 1005/2009 on substances that de-

plete the ozone layer

Not applicable

UK REACH List of substances subject to authorisation

(Annex XIV)

Not applicable

Volatile organic compounds Directive 2010/75/EU of 24 November 2010 on industrial

> emissions (integrated pollution prevention and control) Volatile organic compounds (VOC) content: 3.7 %

according to Detergents

Regulation EC 648/2004

5 % or over but less than 15 %: Anionic surfactants less than 5 %: Non-ionic surfactants, Polycarboxylates

Other constituents: Enzymes

The components of this product are reported in the following inventories:

**TCSI** Not in compliance with the inventory

**TSCA** Product contains substance(s) not listed on TSCA inventory.

AIIC Not in compliance with the inventory

This product contains the following components that are not

Z11276\_01 ZSDB\_P\_GB EN

Page 26/29

According to REACH etc. (Amendment etc.) (EU Exit) Regulations 2019



# **MEtherm 50** No Change Service!

Version Revision Date: Date of last issue: 12.12.2022

02.05 04.01.2023

on the Canadian DSL nor NDSL.

sodium p-cumenesulphonate

Reaction mass of (2S)-Alanine, N,N-bis(carboxymethyl)-, trisodium salt and (2R)-Alanine, N,N-bis(carboxymethyl)-,

trisodium salt

Sodium polyacrylate

Alcohols, C12-15-branched and linear, ethoxylated propox-

ylated

ENCS : Not in compliance with the inventory

ISHL : Not in compliance with the inventory

KECI : Not in compliance with the inventory

PICCS : Not in compliance with the inventory

IECSC : Not in compliance with the inventory

NZIoC : Not in compliance with the inventory

TECI: Not in compliance with the inventory

### 15.2 Chemical safety assessment

Exempt

#### **SECTION 16: Other information**

# **Full text of H-Statements**

H302 : Harmful if swallowed. H312 : Harmful in contact with skin.

H314 : Causes severe skin burns and eye damage.

H315 : Causes skin irritation.

H318 : Causes serious eye damage. H319 : Causes serious eye irritation.

H332 : Harmful if inhaled.

H334 : May cause allergy or asthma symptoms or breathing difficul-

ties if inhaled.

H335 : May cause respiratory irritation.

H400 : Very toxic to aquatic life.

H411 : Toxic to aquatic life with long lasting effects.
H412 : Harmful to aquatic life with long lasting effects.

#### Full text of other abbreviations

Acute Tox. : Acute toxicity

Aquatic Acute : Short-term (acute) aquatic hazard
Aquatic Chronic : Long-term (chronic) aquatic hazard

Eye Dam. : Serious eye damage

Eye Irrit. : Eye irritation

Resp. Sens. : Respiratory sensitisation

Skin Corr. : Skin corrosion Skin Irrit. : Skin irritation

According to REACH etc. (Amendment etc.) (EU Exit) Regulations 2019



**MEtherm 50** No Change Service!

Version Revision Date: Date of last issue: 12.12.2022

02.05 04.01.2023

STOT SE : Specific target organ toxicity - single exposure

2006/15/EC : Europe. Indicative occupational exposure limit values

GB EH40 : UK. EH40 WEL - Workplace Exposure Limits

2006/15/EC / TWA : Limit Value - eight hours 2006/15/EC / STEL : Short term exposure limit

GB EH40 / TWA : Long-term exposure limit (8-hour TWA reference period)
GB EH40 / STEL : Short-term exposure limit (15-minute reference period)

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA -European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of very high concern; TCSI - Taiwan Chemical Substance Inventory; TECI -Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods: vPvB - Very Persistent and Very Bioaccumulative

#### **Further information**

Classification of the mixture: Classification procedure:

Skin Irrit. 2 H315 Calculation method Eye Irrit. 2 H319 Calculation method

Changes since the last version are highlighted in the margin. This version replaces all previous versions.

According to REACH etc. (Amendment etc.) (EU Exit) Regulations 2019



**MEtherm 50** No Change Service!

Version Revision Date: Date of last issue: 12.12.2022

02.05 04.01.2023

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