

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

MELAG
competence in hygiene

MEtherm 50 *No Change Service!*

Version
01.00

Revision Date:
08.03.2017

Date of last issue: -
Date of first issue: 08.03.2017

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

1.1 Product identifier

Trade name : MEtherm 50

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

Use of the Sub-
stance/Mixture : Cleaning agent

Recommended restrictions
on use : Restricted to professional users.

1.3 Details of the supplier of the safety data sheet

Manufacturer/ Supplier : MELAG Medizintechnik oHG
Geneststraße 6-10

10829 Berlin
Germany
Telephone: +4930-7579110
Telefax: +4930-757901199
info@melag.de
www.melag.de

E-mail address of person
responsible for the
SDS/Contact person : Safety Coordinator:
+49(0)30 /335 055 33

1.4 Emergency telephone number

Emergency telephone num-
ber : UK Poisons Emergency number: 0870 600 6266

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Skin irritation, Category 2
Eye irritation, Category 2

H315: Causes skin irritation.
H319: Causes serious eye irritation.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :



Signal word : Warning

Hazard statements : H315 Causes skin irritation.
H319 Causes serious eye irritation.

Supplemental Hazard
Statements : EUH208 Contains Subtilisin. May produce an allergic
reaction.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



MEtherm 50 No Change Service!

Version
01.00

Revision Date:
08.03.2017

Date of last issue: -
Date of first issue: 08.03.2017

Precautionary statements : P280 Wear protective gloves/ eye protection.
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.

Special labelling of certain mixtures : Labelling according to Regulation (EC) No. 648/2004: (5 - 15 % anionic surfactants, < 5 % non-ionic surfactants, < 5% Polycarboxylates, enzymes)

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.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

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

Hazardous components

Chemical name	Index-Number CAS-No. EC-No. Registration number	Classification	Concentration (% w/w)
Sodium cumenesulfonate	- - - 15763-76-5 239-854-6 01-2119489411-37-XXXX	Eye Irrit. 2; H319	5 - 15
Reaction mass of (2S)-Alanine, N,N-bis(carboxymethyl)-, trisodium salt and (2R)-Alanine, N,N-bis(carboxymethyl)-, trisodium salt	- - - - - - - - - 01-0000016977-53-XXXX	Met. Corr. 1; H290	< 5
2-aminoethanol	603-030-00-8 141-43-5 205-483-3 01-2119486455-28-XXXX	Acute Tox. 4; H302 Acute Tox. 4; H312 Acute Tox. 4; H332 Skin Corr. 1B; H314 STOT SE 3; H335	< 5

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



MEtherm 50 No Change Service!

Version
01.00

Revision Date:
08.03.2017

Date of last issue: -
Date of first issue: 08.03.2017

Sodim-etasulfate	- - - 126-92-1 204-812-8 01-2119971586-23-XXXX	Skin Irrit. 2; H315 Eye Dam. 1; H318	< 5
Alkylpolyethylen-glycol-polybutylen-glycoether	- - - 120313-48-6 Polymer	Aquatic Acute 1; H400 Aquatic Chronic 3; H412	< 1
Subtilisin	647-012-00-8 9014-01-1 232-752-2 01-2119480434-38-XXXX	Acute Tox. 4; H302 Skin Irrit. 2; H315 Eye Dam. 1; H318 Resp. Sens. 1; H334 STOT SE 3; H335 Aquatic Acute 1; H400 Aquatic Chronic 2; H411	< 1
Alcohols, C13-15-branched and linear, butoxylated ethoxylated	- - - 111905-53-4 Polymer	Acute Tox. 4; H302 Eye Irrit. 2; H319 Aquatic Chronic 3; H412	< 1

Non-hazardous ingredients

Chemical name	Index-Number CAS-No. EC-No.	Concentration (% w/w)
Glycerol	- - - 56-81-5 200-289-5	< 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 : Ensure adequate ventilation. If symptoms persist, call a physician.
- In case of skin contact : Wash off immediately with plenty of water. If skin irritation persists, call a physician.
- In case of eye contact : In case of eye contact, remove contact lens and rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. 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.,

4.3 Indication of any immediate medical attention and special treatment needed

- Treatment : For specialist advice physicians should contact the Poisons

MEtherm 50 **No Change Service!**Version
01.00Revision Date:
08.03.2017Date of last issue: -
Date of first issue: 08.03.2017

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 : High volume water jet

5.2 Special hazards arising from the substance or mixture

Specific hazards during fire-fighting : No information available.

Specific risk from the substance or the product itself, its combustion products or evolved gases : Carbon dioxide (CO₂), carbon monoxide (CO), oxides of nitrogen (NO_x)**5.3 Advice for firefighters**

Special protective equipment for firefighters : 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 upMethods for cleaning up : Wipe up with absorbent material (e.g. cloth, fleece).
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**

Advice on safe handling : Wear personal protective equipment. Never mix concentrates directly.

Advice on protection against fire and explosion : No special protective measures against fire required. 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.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



MEtherm 50 No Change Service!

Version
01.00

Revision Date:
08.03.2017

Date of last issue: -
Date of first issue: 08.03.2017

Further information on storage 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
Glycerol	56-81-5	Permissible exposure limit (Form of exposure)	200 mg/m ³ (Aerosol)	DFG
		Short term exposure limit (Form of exposure)	400 mg/m ³ (Aerosol)	DFG
		Permissible exposure limit (Form of exposure)	5 mg/m ³ (Respirable dust)	OSHA
2-aminoethanol	141-43-5	Permissible exposure limit	1 ppm 2,5 mg/m ³	EC/2000/39
		Short term exposure limit	3 ppm 7,6 mg/m ³	EC/2000/39

Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

Substance name	End Use	Exposure routes	Potential health effects	Value
Sodium cumenesulfonate	Workers	Skin contact	Long-term systemic effects	136,25 mg/kg
	Workers	Skin contact	Long-term local effects	0,096 mg/cm ²
	Workers	Inhalation	Long-term systemic effects	26,9 mg/m ³
Reaction mass of (2S)-Alanine, N,N-bis(carboxymethyl)-, trisodium salt and (2R)-Alanine, N,N-bis(carboxymethyl)-, trisodium salt	Workers	Inhalation	Long-term systemic effects	40 mg/m ³
	Workers	Inhalation	Long-term local effects	4 mg/m ³

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



MEtherm 50 **No Change Service!**

Version
01.00

Revision Date:
08.03.2017

Date of last issue: -
Date of first issue: 08.03.2017

	Workers	Inhalation	Short-term exposure, Specific effects, Local effects	40 mg/m ³
2-aminoethanol	Workers	Skin contact	Long-term systemic effects	1 mg/kg
	Workers	Inhalation	Long-term local effects	3,3 mg/m ³
Sodim-etasulfate	Workers	Skin contact	Long-term systemic effects	4060 mg/kg
	Workers	Inhalation	Long-term systemic effects	285 mg/m ³
Subtilisin	Workers	Skin contact	Acute local effects	2000 ppm
	Workers	Inhalation	Long-term local effects	0,06 mg/m ³

Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

Substance name	Environmental Compartment	Value	
Sodium cumenesulfonate	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	
	Reaction mass of (2S)-Alanine, N,N-bis(carboxymethyl)-, trisodium salt and (2R)-Alanine, N,N-bis(carboxymethyl)-, trisodium salt	Fresh water	2,0 mg/l
Marine water		0,2 mg/l	
Intermittent use/release		1 mg/l	
Effects on waste water treatment plants		100 mg/l	
Fresh water sediment		24 mg/kg	
Soil		2,5 mg/kg	
2-aminoethanol		Fresh water	0,085 mg/l
		Marine water	0,0085 mg/l
	Intermittent use/release	0,025 mg/l	
	Effects on waste water treatment plants	100 mg/l	
	Fresh water sediment	0,425 mg/kg	

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



MEtherm 50 *No Change Service!*

Version
01.00

Revision Date:
08.03.2017

Date of last issue: -
Date of first issue: 08.03.2017

	Marine sediment	0,0425 mg/kg
	Soil	0,035 mg/kg
Sodim-etasulfate	Fresh water	0,1357 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	0,06 mg/l
	Marine water	0,006 mg/l
	Effects on waste water treatment plants	65000 mg/l

8.2 Exposure controls

Personal protective equipment

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

Hand protection
Directive

: The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC 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 protection.

Respiratory protection

: No personal respiratory protective equipment normally required.

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 : yellow
Odour : characteristic
Odour Threshold : not determined
pH : ca. 11, 20 °C, concentrate
Melting point/freezing point : < -5 °C
Decomposition temperature : Not applicable
Initial boiling point and boiling range : ca. 100 °C

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



MEtherm 50 *No Change Service!*

Version
01.00

Revision Date:
08.03.2017

Date of last issue: -
Date of first issue: 08.03.2017

Flash point	:	> 100 °C, DIN 51755 Part 1 Other information: Does not sustain combustion.
Evaporation rate	:	No data available
Flammability (solid, gas)	:	Not applicable
Upper explosion limit	:	No data available
Lower explosion limit	:	No data available
Vapour pressure	:	No data available
Relative vapour density	:	No data available
Density	:	ca. 1,10 g/cm ³ , 20 °C, 1.013 hPa
Solubility(ies)		
Water solubility	:	in all proportions , 20 °C
Partition coefficient: n-octanol/water	:	Not applicable
Auto-ignition temperature	:	No data available
Viscosity		
Viscosity, dynamic	:	ca. 9 mPa*s, ISO 3219
Explosive properties	:	No data available
Oxidizing properties	:	No data available

9.2 Other information

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

reaction with acids

10.4 Conditions to avoid

Protect from frost, heat and sunlight.

10.5 Incompatible materials

Possible incompatibility with alkali sensitive materials.,

10.6 Hazardous decomposition products

None reasonably foreseeable.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product:

Acute oral toxicity	:	Acute toxicity estimate: > 5.000 mg/kg
Acute inhalation toxicity	:	Acute toxicity estimate: > 25 mg/l
Acute dermal toxicity	:	Acute toxicity estimate: > 5.000 mg/kg

MEtherm 50 *No Change Service!*Version
01.00Revision Date:
08.03.2017Date of last issue: -
Date of first issue: 08.03.2017**Skin corrosion/irritation****Product:**

Causes skin irritation., Calculation method

Serious eye damage/eye irritation**Product:**

Causes serious eye irritation., Calculation method

Respiratory or skin sensitisation**Components:****Sodium cumenesulfonate:**

Did not cause sensitisation on laboratory animals. Buehler Test, Guinea pig, OECD Test Guideline 406

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

Did not cause sensitisation on laboratory animals. Maximisation Test, Guinea pig, OECD Test Guideline 406

2-aminoethanol:

Did not cause sensitisation on laboratory animals. Maximisation Test, Guinea pig, OECD Test Guideline 406

Sodim-etasulfate:

Did not cause sensitisation on laboratory animals. OECD Test Guideline 429

Alkylpolyethylen-glycol-polybutylen-glycolether:

No data available

Subtilisin:

Does not cause respiratory sensitisation. largely based on human evidence

Alcohols, C13-15-branched and linear, butoxylated ethoxylated:

No data available

Germ cell mutagenicity**Components:****Sodium cumenesulfonate:**

Genotoxicity in vitro : Mutagenicity (Salmonella typhimurium - reverse mutation assay), with and without metabolic activation, OECD Test Guideline 471, Not mutagenic in Ames Test

Genotoxicity in vivo : In vivo micronucleus test, Mouse, Oral, not mutagenic

Germ cell mutagenicity- Assessment : Not mutagenic in Ames Test

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

Genotoxicity in vitro : Ames test, OECD Test Guideline 471, negative

Germ cell mutagenicity- Assessment : Not mutagenic in Ames Test

2-aminoethanol:

Germ cell mutagenicity- Assessment : Animal testing did not show any mutagenic effects., Tests on bacterial or mammalian cell cultures did not show mutagenic effects.

Sodim-etasulfate:

Germ cell mutagenicity- Assessment : No data available

Alkylpolyethylen-glycol-polybutylen-glycolether:

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



MEtherm 50 *No Change Service!*

Version
01.00

Revision Date:
08.03.2017

Date of last issue: -
Date of first issue: 08.03.2017

Genotoxicity in vitro : Not classified due to data which are conclusive although insufficient for classification.

Germ cell mutagenicity- Assessment : Based on available data, the classification criteria are not met.

Subtilisin:

Genotoxicity in vitro : OECD Test Guideline 471, not mutagenic

Germ cell mutagenicity- Assessment : Animal testing did not show any mutagenic effects.

Alcohols, C13-15-branched and linear, butoxylated ethoxylated:

Germ cell mutagenicity- Assessment : No data available

Carcinogenicity

Components:

Sodium cumenesulfonate:

Carcinogenicity - Assessment : Animal testing did not show any carcinogenic effects.

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

Carcinogenicity - Assessment : Animal testing did not show any carcinogenic effects.

2-aminoethanol:

Carcinogenicity - Assessment : Not classifiable as a human carcinogen.

Sodim-etasulfate:

Carcinogenicity - Assessment : No data available

Alkylpolyethylen-glycol-polybutylen-glycolether:

Carcinogenicity - Assessment : Weight of evidence does not support classification as a carcinogen

Subtilisin:

Carcinogenicity - Assessment : No data available

Alcohols, C13-15-branched and linear, butoxylated ethoxylated:

Carcinogenicity - Assessment : No data available

Reproductive toxicity

Components:

Sodium cumenesulfonate:

Effects on foetal development : Rat, Oral, NOAEL: 3.000 mg/kg, NOAEL: 3.000 mg/kg

Reproductive toxicity - Assessment : study scientifically unjustified

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

Rat, Oral, NOAEL: > 2.000 mg/kg

Reproductive toxicity - Assessment : Animal testing did not show any effects on fertility.

2-aminoethanol:

Reproductive toxicity - Assessment : Based on available data, the classification criteria are not met.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



MEtherm 50 *No Change Service!*

Version
01.00

Revision Date:
08.03.2017

Date of last issue: -
Date of first issue: 08.03.2017

Sodim-etasulfate:

Reproductive toxicity - Assessment : No data available

Alkylpolyethylen-glycol-polybutylen-glycolether:

Reproductive toxicity - Assessment : Based on available data, the classification criteria are not met.

Subtilisin:

Reproductive toxicity - Assessment : No data available

Alcohols, C13-15-branched and linear, butoxylated ethoxylated:

Reproductive toxicity - Assessment : No data available

STOT - single exposure

Components:

2-aminoethanol:

May cause respiratory irritation.

Alkylpolyethylen-glycol-polybutylen-glycolether:

No data available

STOT - repeated exposure

Components:

Alkylpolyethylen-glycol-polybutylen-glycolether:

No data available

Repeated dose toxicity

Components:

Sodium cumenesulfonate:

Mouse, NOAEL: 440 mg/kg, LOAEL: 1.300 mg/kg, Dermal, OECD Test Guideline 411, Target Organs: Skin, Subchronic toxicity

Aspiration toxicity

Components:

Alkylpolyethylen-glycol-polybutylen-glycolether:

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

Further information

Product:

The product has not been tested.

SECTION 12: Ecological information

12.1 Toxicity

Components:

Sodium cumenesulfonate:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): > 100 mg/l, 96 h, literature value

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 100 mg/l, 48 h

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

MEtherm 50 **No Change Service!**Version
01.00Revision Date:
08.03.2017Date of last issue: -
Date of first issue: 08.03.2017

72 h

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

- Toxicity to fish : LC50 (Brachidanio rerio): > 200 mg/l, 96 h, OECD Test Guideline 203
- Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna): > 200 mg/l, 48 h, OECD Test Guideline 202
- Toxicity to algae : EC50 (Scenedesmus capricornutum (fresh water algae)): > 200 mg/l, 72 h
- Toxicity to fish (Chronic toxicity) : > 200 mg/l , 28 d, Oncorhynchus mykiss (rainbow trout), OECD Test Guideline 204
- Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : > 200 mg/l , 21 d, Daphnia magna (Water flea), OECD Test Guideline 202

2-aminoethanol:

- Toxicity to fish : LC50 (Cyprinus carpio (Carp)): 349 mg/l, 96 h, semi-static test, Tested according to Directive 92/69/EEC.
- Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna): 65 mg/l, 48 h, EG 84/449
- Toxicity to algae : EC50 (Scenedesmus capricornutum (fresh water algae)): 2,5 mg/l, 72 h, OECD Test Guideline 201
- Toxicity to fish (Chronic toxicity) : 1,2 mg/l , 30 d, Oryzias latipes (Orange-red killifish)
- Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : 0,85 mg/l , 21 d, Daphnia magna (Water flea), OECD Test Guideline 211

Sodim-etatsulfate:

- Toxicity to fish : LC50 (Brachydanio rerio (zebrafish)): > 100 mg/l, 96 h
- Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia (water flea)): > 100 mg/l, 48 h
- Toxicity to algae : EC50 (Desmodesmus subspicatus (Scenedesmus subspicatus)): > 100 mg/l, 72 h

Alkylpolyethylen-glycol-polybutylen-glycolether:

- Toxicity to fish : LC50 (Leuciscus idus): 1 - 10 mg/l, 96 h
- Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna): 0,1 - 1 mg/l, 48 h
- Toxicity to algae : EC50 (algae): 0,1 - 1 mg/l, 72 h
- M-Factor (Acute aquatic toxicity) : 1
- Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC: > 0,1 - < 1 mg/l , 21 d, Daphnia magna (Water flea)

Subtilisin:

- Toxicity to fish : LC50 (Fish): 0,1 - 1 mg/l, 96 h
- Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna): 0,586 mg/l, 48 h, OECD Test Guideline 202
- Toxicity to algae : ErC50 (algae): 0,83 mg/l, 72 h, OECD Test Guideline 201
- M-Factor (Acute aquatic toxicity) : 1

Alcohols, C13-15-branched and linear, butoxylated ethoxylated:

- Toxicity to fish : LC50 (Leuciscus idus): 1 - 10 mg/l, 48 h
- Toxicity to daphnia and other aquatic invertebrates : EC50 : 0,1 - 1 mg/l, 48 h
- Toxicity to algae : EC50 : 0,1 - 1 mg/l, 72 h

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



MEtherm 50 *No Change Service!*

Version
01.00

Revision Date:
08.03.2017

Date of last issue: -
Date of first issue: 08.03.2017

Toxicity to fish (Chronic toxicity) : No data available
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC: > 0,1 - 1 mg/l

12.2 Persistence and degradability

Product:

Biodegradability : Readily biodegradable, according to appropriate OECD test., OECD 301D / EEC 84/449 C6

Components:

Sodium cumenesulfonate:

Biodegradability : Readily biodegradable.

Sodim-etasulfate:

Biodegradability : Readily biodegradable, according to appropriate OECD test., Biodegradation: > 60 %, Exposure time: 14 d, OECD 301D / EEC 84/449 C6

Alkylpolyethylen-glycol-polybutylen-glycoether:

Biodegradability : Readily biodegradable, according to appropriate OECD test.

Subtilisin:

Biodegradability : No data available

Alcohols, C13-15-branched and linear, butoxylated ethoxylated:

Biodegradability : Readily biodegradable., Biodegradation: > 60 %, Exposure time: 28 d, OECD 301B/ ISO 9439/ EEC 84/449 C5

12.3 Bioaccumulative potential

Components:

Sodium cumenesulfonate:

Bioaccumulation : Bioaccumulation is unlikely.

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

Bioaccumulation : No bioaccumulation is to be expected (log Pow <= 4).

2-aminoethanol:

Bioaccumulation : No bioaccumulation is to be expected (log Pow <= 4).

Sodim-etasulfate:

Bioaccumulation : No data available

Alkylpolyethylen-glycol-polybutylen-glycoether:

Bioaccumulation : Accumulation in aquatic organisms is unlikely.

Subtilisin:

Bioaccumulation : Does not bioaccumulate.

Partition coefficient: n-octanol/water : No data available

Alcohols, C13-15-branched and linear, butoxylated ethoxylated:

Bioaccumulation : Does not significantly accumulate in organisms.

12.4 Mobility in soil

Components:

Sodium cumenesulfonate:

Mobility : Not expected to adsorb on soil.

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

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



MEtherm 50 *No Change Service!*

Version
01.00

Revision Date:
08.03.2017

Date of last issue: -
Date of first issue: 08.03.2017

- Mobility : Not expected to adsorb on soil.
2-aminoethanol:
Mobility : Not expected to adsorb on soil.
Sodim-etatsulfate:
Mobility : No data available
Alkylpolyethylen-glycol-polybutylen-glycoether:
Mobility : Substance does not evaporate from water surface into the atmosphere., Adsorption to solid soil phase is possible.
Subtilisin:
Mobility : Not applicable
Alcohols, C13-15-branched and linear, butoxylated ethoxylated:
Mobility : Substance does not evaporate from water surface into the atmosphere., Adsorption to solid soil phase is possible.

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.

12.6 Other adverse effects

Product:

- Additional ecological information : none

SECTION 13: Disposal considerations

13.1 Waste treatment methods

- Product : Dispose of the product according to the defined EWC (European Waste Code) No.
Contaminated packaging : Take empty packaging to the recycling plant.
Waste key for the unused product : European waste catalog (EWC) 070601
Waste key for the unused product(Group) : Waste material of HZVA from fats, lubricants, soaps, detergents, disinfectants and personal protection products.

SECTION 14: Transport information

14.1 UN number

Not regulated as a dangerous good

14.2 UN proper shipping name

Not regulated as a dangerous good

14.3 Transport hazard class(es)

Not regulated as a dangerous good

14.4 Packing group

Not regulated as a dangerous good

14.5 Environmental hazards

Not regulated as a dangerous good

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



MEtherm 50 *No Change Service!*

Version
01.00

Revision Date:
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14.6 Special precautions for user

For personal protection see section 8.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 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

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59) : Not applicable

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

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances. : Not applicable

Volatile organic compounds : none, Directive 2010/75/EC on the limitation of emissions of volatile organic compounds

Other regulations : The surfactant(s) contained in this mixture complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer. Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work. Take note of Directive 2000/39/EC establishing a first list of indicative occupational exposure limit values.

15.2 Chemical safety assessment

Exempt

SECTION 16: Other information

Full text of H-Statements

H290 : May be corrosive to metals.
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 difficulties if inhaled.

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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 : Acute aquatic toxicity
Aquatic Chronic : Chronic aquatic toxicity
Eye Dam. : Serious eye damage
Eye Irrit. : Eye irritation
Met. Corr. : Corrosive to metals
Resp. Sens. : Respiratory sensitisation
Skin Corr. : Skin corrosion
Skin Irrit. : Skin irritation
STOT SE : Specific target organ toxicity - single exposure

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; AICS - Australian Inventory of Chemical Substances; 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; TCSI - Taiwan Chemical Substance Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

Further information

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) No. 1272/2008

Skin Irrit. 2, H315 : Calculation method

