



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

### 1.1 Product identifier

Trade name : Sikament® MFD-1 A

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

Product use : Concrete admixtures

### 1.3 Details of the supplier of the safety data sheet

Company name of supplier : Sika Schweiz AG  
Tüffenwies 16  
8048 Zürich  
Telephone : +41 58 436 40 40  
Telefax : -  
E-mail address of person : EHS@ch.sika.com  
responsible for the SDS

### 1.4 Emergency telephone number

Tox Info Suisse  
CH-8028 Zurich  
+41(0)44 251 51 51 / Speed calling: 145

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

#### Classification (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

### 2.2 Label elements

#### Labelling (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

#### Additional Labelling

EUH210 Safety data sheet available on request.

EUH208 Contains 1,2-benzisothiazol-3(2H)-one (BIT), 2-octyl-2H-isothiazole-3-one (OIT), mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1) (C(M)IT/MIT (3:1)), 2,4,7,9-Tetramethyldec-5-yne-4,7-diol, ethoxylated. 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.



Ecological information: 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.

Toxicological information: 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.

Contains a biocide in order to protect the product. Active ingredient: 1,2-benzisothiazol-3(2H)-one (BIT), 2634-33-5, 2-octyl-2H-isothiazole-3-one (OIT), 26530-20-1, mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1) (C(M)IT/MIT (3:1)), 55965-84-9. Please use treated articles responsibly.

### SECTION 3: Composition/information on ingredients

#### 3.2 Mixtures

##### Components

Chemical name	CAS-No. EC-No. Registration number	Classification	Concentration (% w/w)
2,4,7,9-Tetramethyldec-5-yne-4,7-diol, ethoxylated	9014-85-1 500-022-5 01-2119954393-33-XXXX	Eye Dam. 1; H318 Skin Sens. 1B; H317 Aquatic Chronic 3; H412	>= 0,25 - < 1
1,2-benzisothiazol-3(2H)-one (BIT)	2634-33-5 220-120-9 01-2120761540-60-XXXX	Acute Tox. 4; H302 Acute Tox. 2; H330 Skin Irrit. 2; H315 Eye Dam. 1; H318 Skin Sens. 1; H317 Aquatic Acute 1; H400 Aquatic Chronic 2; H411  specific concentration limit Skin Sens. 1; H317 >= 0,05 %  Acute toxicity estimate  Acute oral toxicity: 597 mg/kg Acute inhalation toxicity (dust/mist): 0,4 mg/l	>= 0,0025 - < 0,025



<p>2-octyl-2H-isothiazole-3-one (OIT)</p>	<p>26530-20-1                  247-761-7                  01-2120768921-45-XXXX</p>	<p>Acute Tox. 3; H301                  Acute Tox. 2; H330                  Acute Tox. 3; H311                  Skin Corr. 1; H314                  Eye Dam. 1; H318                  Skin Sens. 1A; H317                  Aquatic Acute 1;                  H400                  Aquatic Chronic 1;                  H410                  EUH071</p> <hr/> <p>M-Factor (Acute aquatic toxicity): 100                  M-Factor (Chronic aquatic toxicity): 100</p> <hr/> <p>specific concentration limit                  Skin Sens. 1A; H317                  &gt;= 0,0015 %</p> <hr/> <p>Acute toxicity estimate</p> <p>Acute oral toxicity:                  125 mg/kg                  Acute inhalation toxicity (dust/mist): 0,27 mg/l                  Acute dermal toxicity:                  311 mg/kg</p>	<p>&gt;= 0,0002 - &lt; 0,0015</p>
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mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1) (C(M)IT/MIT (3:1))	55965-84-9 911-418-6 01-2120764691-48-XXXX	Acute Tox. 3; H301 Acute Tox. 2; H330 Acute Tox. 2; H310 Skin Corr. 1C; H314 Eye Dam. 1; H318 Skin Sens. 1A; H317 Aquatic Acute 1; H400 Aquatic Chronic 1; H410 EUH071	>= 0,0002 - < 0,0015
		M-Factor (Acute aquatic toxicity): 100 M-Factor (Chronic aquatic toxicity): 100	
		specific concentration limit Skin Corr. 1C; H314 >= 0,6 % Skin Irrit. 2; H315 0,06 - < 0,6 % Eye Irrit. 2; H319 0,06 - < 0,6 % Skin Sens. 1A; H317 >= 0,0015 % Eye Dam. 1; H318 >= 0,6 %	

For explanation of abbreviations see section 16.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

- General advice : No hazards which require special first aid measures.
- If inhaled : Move to fresh air.
- In case of skin contact : Take off contaminated clothing and shoes immediately.  
Wash off with soap and plenty of water.
- In case of eye contact : Remove contact lenses.  
Keep eye wide open while rinsing.
- If swallowed : Do not induce vomiting without medical advice.  
Rinse mouth with water.  
Do not give milk or alcoholic beverages.  
Never give anything by mouth to an unconscious person.



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

Symptoms : See Section 11 for more detailed information on health effects and symptoms.

Risks : No known significant effects or hazards.

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

Treatment : Treat symptomatically.

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### SECTION 5: Firefighting measures

#### 5.1 Extinguishing media

Suitable extinguishing media : In case of fire, use water/water spray/water jet/carbon dioxide/sand/foam/alcohol resistant foam/chemical powder for extinction.

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

Hazardous combustion products : No hazardous combustion products are known

#### 5.3 Advice for firefighters

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

Further information : Standard procedure for chemical fires.

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### SECTION 6: Accidental release measures

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

Personal precautions : For personal protection see section 8.

#### 6.2 Environmental precautions

Environmental precautions : No special environmental precautions required.

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

Methods for cleaning up : Wipe up with absorbent material (e.g. cloth, fleece).  
Keep in suitable, closed containers for disposal.

#### 6.4 Reference to other sections

For personal protection see section 8.

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## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

Advice on safe handling : For personal protection see section 8.  
No special handling advice required.  
Follow standard hygiene measures when handling chemical products

Advice on protection against fire and explosion : Normal measures for preventive fire protection.

Hygiene measures : When using do not eat or drink. When using do not smoke.

### 7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Keep container tightly closed in a dry and well-ventilated place. Store in accordance with local regulations.

Advice on common storage : No special restrictions on storage with other products.

Further information on storage stability : No decomposition if stored and applied as directed.

### 7.3 Specific end use(s)

Specific use(s) : Consult most current local Product Data Sheet prior to any use.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parameters *	Basis *
2-octyl-2H-isothiazole-3-one (OIT)	26530-20-1	TWA (inhalable dust)	0,05 mg/m <sup>3</sup>	CH SUVA
	Further information: Toxic by skin resorption possible; Substances, which are easily absorbed through the skin, can give by additional skin resorption a substantial higher risk compared to only inhalation by the airways., Sensitizers; Substances marked with an S can lead to very strong allergic reactions.			
		STEL (inhalable dust)	0,1 mg/m <sup>3</sup>	CH SUVA
mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1) (C(M)IT/MIT (3:1))	55965-84-9	TWA (inhalable dust)	0,2 mg/m <sup>3</sup>	CH SUVA
	Further information: Sensitizers; Substances, marked with an S can lead to very strong allergic reactions., Harm to the unborn			



	child is not to be expected when the OEL-value is respected		
	STEL (inhalable dust)	0,4 mg/m <sup>3</sup>	CH SUVA

\*The above mentioned values are in accordance with the legislation in effect at the date of the release of this safety data sheet.

## 8.2 Exposure controls

### Engineering measures

Maintain air concentrations below occupational exposure standards.  
Ensure adequate ventilation, especially in confined areas.

### Personal protective equipment

- Eye/face protection : Safety glasses
- Hand protection : Chemical-resistant, impervious gloves complying with an approved standard must be worn at all times when handling chemical products. Reference number EN 374. Follow manufacturer specifications.  
  
Butyl rubber/nitrile rubber gloves (> 0,1 mm)  
Recommended: Butyl rubber/nitrile rubber gloves.
- Skin and body protection : Protective clothing (e.g. Safety shoes acc. to EN ISO 20345, long-sleeved working clothing, long trousers). Rubber aprons and protective boots are additionally recommended for mixing and stirring work.
- Respiratory protection : In case of inadequate ventilation wear respiratory protection. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.  
organic vapor filter (Type A)  
A1: < 1000 ppm; A2: < 5000 ppm; A3: < 10000 ppm  
Ensure adequate ventilation. This can be achieved by local exhaust extraction or by general ventilation. (EN 689 - Methods for determining inhalation exposure). This applies in particular to the mixing / stirring area. In case this is not sufficient to keep the concentrations under the occupational exposure limits then respiration protection measures must be used.

### Environmental exposure controls

- General advice : No special environmental precautions required.

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## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

- Physical state : liquid  
Colour : amber  
  
Odour : like methacrylic acid



Melting point/range / Freezing point : No data available

Boiling point/boiling range : No data available

Flammability (solid, gas) : No data available

**Upper/lower flammability or explosive limits**

Upper explosion limit / Upper flammability limit : No data available

Lower explosion limit / Lower flammability limit : No data available

Flash point : > 100 °C  
Method: closed cup

Auto-ignition temperature : No data available

Decomposition temperature : No data available

pH : ca. 3,8 (20 °C)

**Viscosity**

Viscosity, kinematic : > 20,5 mm<sup>2</sup>/s (40 °C)

**Solubility(ies)**

Water solubility : soluble

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

Vapour pressure : 23 hPa

Density : ca. 1,02 g/cm<sup>3</sup> (20 °C)

Relative vapour density : No data available

Particle characteristics : No data available





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**9.2 Other information**

No data available

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**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 : No hazards to be specially mentioned.

**10.4 Conditions to avoid**

Conditions to avoid : No data available

**10.5 Incompatible materials**

Materials to avoid : No data available

**10.6 Hazardous decomposition products**

No decomposition if stored and applied as directed.

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**SECTION 11: Toxicological information**

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

**Acute toxicity**

Not classified based on available information.

**Components:**

**1,2-benzisothiazol-3(2H)-one (BIT):**

Acute oral toxicity : LD50 Oral (Rat): 597 mg/kg  
Acute toxicity estimate: 597 mg/kg  
Method: Calculation method

Acute inhalation toxicity : LC50: 0,4 mg/l  
Exposure time: 4 h  
Test atmosphere: dust/mist  
Method: OECD Test Guideline 403  
Acute toxicity estimate: 0,4 mg/l  
Test atmosphere: dust/mist  
Method: Calculation method

Acute dermal toxicity : LD50 Dermal (Rabbit): > 2.000 mg/kg



**2-octyl-2H-isothiazole-3-one (OIT):**

- Acute oral toxicity : Acute toxicity estimate: 125 mg/kg  
Method: Acute toxicity estimate according to Regulation (EC)  
No. 1272/2008
- Acute inhalation toxicity : Acute toxicity estimate: 0,27 mg/l  
Test atmosphere: dust/mist  
Method: Acute toxicity estimate according to Regulation (EC)  
No. 1272/2008
- Acute dermal toxicity : Acute toxicity estimate: 311 mg/kg  
Method: Acute toxicity estimate according to Regulation (EC)  
No. 1272/2008

mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1) (C(M)IT/MIT (3:1)):

Acute inhalation toxicity : Assessment: Corrosive to the respiratory tract.

**Skin corrosion/irritation**

Not classified based on available information.

**Serious eye damage/eye irritation**

Not classified based on available information.

**Respiratory or skin sensitisation**

**Skin sensitisation**

Not classified based on available information.

**Respiratory sensitisation**

Not classified based on available information.

**Components:**

**1,2-benzisothiazol-3(2H)-one (BIT):**

Assessment : May cause sensitisation by skin contact.

**Germ cell mutagenicity**

Not classified based on available information.

**Carcinogenicity**

Not classified based on available information.

**Reproductive toxicity**

Not classified based on available information.

**STOT - single exposure**

Not classified based on available information.

**STOT - repeated exposure**

Not classified based on available information.



**Aspiration toxicity**

Not classified based on available information.

**11.2 Information on other hazards**

**Endocrine disrupting properties**

**Product:**

Assessment : 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.

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**SECTION 12: Ecological information**

**12.1 Toxicity**

**Components:**

**1,2-benzisothiazol-3(2H)-one (BIT):**

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia (water flea)): 3 mg/l  
Exposure time: 48 h

**2-octyl-2H-isothiazole-3-one (OIT):**

M-Factor (Acute aquatic toxicity) : 100

M-Factor (Chronic aquatic toxicity) : 100

mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1) (C(M)IT/MIT (3:1)):

M-Factor (Acute aquatic toxicity) : 100

M-Factor (Chronic aquatic toxicity) : 100

**12.2 Persistence and degradability**

No data available

**12.3 Bioaccumulative potential**

No data available

**12.4 Mobility in soil**

No data available



## 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 Endocrine disrupting properties

**Product:**

Assessment : 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.

## 12.7 Other adverse effects

**Product:**

Additional ecological information : There is no data available for this product.

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## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

Product : The generation of waste should be avoided or minimized wherever possible.  
Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way.  
Dispose of surplus and non-recyclable products via a licensed waste disposal contractor.  
Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.  
Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Waste code Switzerland : 16 10 01 -  
VeVA/LVA

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## SECTION 14: Transport information

### 14.1 UN number or ID 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

**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 Maritime transport in bulk according to IMO instruments**

Not applicable for product as supplied.

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**SECTION 15: Regulatory information**

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

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII) : Not applicable

International Chemical Weapons Convention (CWC) Schedules of Toxic Chemicals and Precursors : Not applicable

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59). : None of the components are listed (= > 0.1 %).

REACH - List of substances subject to authorisation (Annex XIV) : Not applicable

Regulation (EC) No 1005/2009 on substances that deplete the ozone layer : Not applicable



Regulation (EU) 2019/1021 on persistent organic pollutants (recast) : Not applicable

PIC Ordinance, ChemPICO (814.82) : Not applicable

REACH Information: All substances contained in our Products are  
- registered by our upstream suppliers, and/or  
- registered by us, and/or  
- excluded from the regulation, and/or  
- exempted from the registration.

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

Water hazard class (Germany) : WGK 1 slightly hazardous to water  
Classification according to AwSV, Annex 1 (5.2)

Volatile organic compounds : Law on the incentive tax for volatile organic compounds (VOCV)  
no VOC duties

Directive 2010/75/EU of 24 November 2010 on industrial emissions (integrated pollution prevention and control)  
Volatile organic compounds (VOC) content: 0,06% w/w

**Other regulations:**

Young people undergoing basic vocational training may only work with this product if the relevant training ordinance makes provision for them to do so with a view to enabling them to achieve their training objectives and if the preconditions for the training plan have been met and the applicable age restrictions have been complied with. Young people who are not completing any basic vocational training are not permitted to work with this product. Employees of either sex who are under 18 years old are classed as young people.

**15.2 Chemical safety assessment**

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

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**SECTION 16: Other information**

**Full text of H-Statements**

- H301 : Toxic if swallowed.
- H302 : Harmful if swallowed.
- H310 : Fatal in contact with skin.
- H311 : Toxic in contact with skin.
- H314 : Causes severe skin burns and eye damage.
- H315 : Causes skin irritation.
- H317 : May cause an allergic skin reaction.

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

## Sikament® MFD-1 A



Revision Date: 10.03.2023

Version 6.0

Print Date 19.02.2024

Date of last issue: 06.07.2022

H318	:	Causes serious eye damage.
H330	:	Fatal if inhaled.
H400	:	Very toxic to aquatic life.
H410	:	Very toxic to aquatic life with long lasting effects.
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
Skin Corr.	:	Skin corrosion
Skin Irrit.	:	Skin irritation
Skin Sens.	:	Skin sensitisation
CH SUVA	:	Switzerland. Limit values at the work place
CH SUVA / TWA	:	Time Weighted Average
CH SUVA / STEL	:	Short Term Exposure Limit
ADR	:	European Agreement concerning the International Carriage of Dangerous Goods by Road
CAS	:	Chemical Abstracts Service
DNEL	:	Derived no-effect level
EC50	:	Half maximal effective concentration
GHS	:	Globally Harmonized System
IATA	:	International Air Transport Association
IMDG	:	International Maritime Code for Dangerous Goods
LD50	:	Median lethal dose (the amount of a material, given all at once, which causes the death of 50% (one half) of a group of test animals)
LC50	:	Median lethal concentration (concentrations of the chemical in air that kills 50% of the test animals during the observation period)
MARPOL	:	International Convention for the Prevention of Pollution from Ships, 1973 as modified by the Protocol of 1978
OEL	:	Occupational Exposure Limit
PBT	:	Persistent, bioaccumulative and toxic
PNEC	:	Predicted no effect concentration
REACH	:	Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency
SVHC	:	Substances of Very High Concern
vPvB	:	Very persistent and very bioaccumulative

### Further information

The information contained in this Safety Data Sheet corresponds to our level of knowledge at the time of publication. All warranties are excluded. Our most current General Sales Conditions shall apply. Please consult the product data sheet prior to any use and processing.



Changes as compared to previous version !

SAFETY DATA SHEET  
according to Regulation (EC) No. 1907/2006

**Sikament® MFD-1 A**



Revision Date: 10.03.2023  
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CH / EN