

# SAFETY DATA SHEET

(in accordance with (EU) Regulation 2015/830)

## FAKOLITH FK 12 Concentrate



Version: 3

Last change: 21/01/2021

Page 1 from 10  
Print date: 24/11/2021

### SECTION 1: DESIGNATION OF THE MIXTURE AND OF THE COMPANY.

#### 1.1 Product identifier.

Product name: FAKOLITH FK 12 Concentrate

ECHA registration 12/20  
UFI: KFMF-JCM4-U8SM-8S98

#### 1.2 Relevant identified uses of the mixture and uses advised against.

Detergent

#### Uses advised against:

Uses other than recommended.

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

##### -Manufacturer/Supplier:

Company: **Fakolith Farben GmbH**  
Address: Carl-Benz-Str. 19  
Place: 64658 Fürth/Odw.  
Phone: +49 (0) 6253/ 2394-0  
Fax: +49 (0) 6253/ 2394-10

##### -Informing area:

Germany: Uwe Farenkopf (germany@fakolith.com)  
49 (0) 6253 / 2394-0 Fax: +49 (0) 6253 / 2394-10

#### 1.4 Telephone for emergencies:

**Spain:** +34 (0) 915 620 420  
**Germany:** +49 (0) 61 31 19 240  
**Austria:** +43 (0) 14 06 43 43  
**Switzerland:** +41 (0) 44 25 15 151  
**Italy:** +39 (0) 26 44 42 523

### SECTION 2: POTENTIAL HAZARDS.

#### 2.1 Classification of the mixture.

According to (EU) Regulation No. 1272/2008:  
Eye Irrit. 2 : Causes severe eye irritation.  
Skin Irrit. 2 : Causes skin irritation.

#### 2.2 Marking elements.

##### Labelling according to (EU) Regulation No 1272/2008:

Pictograms:



Signal word:

**Attention**

# SAFETY DATA SHEET

(in accordance with (EU) Regulation 2015/830)



**FAKOLITH**  
chemical systems

Version: 3

Last change: 21/01/2021

Page 2 from 10  
Print date: 24/11/2021

## H-phrases:

H315 Causes skin irritation.  
H319 Causes severe eye irritation.

## P phrases:

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection/ hearing protection/...  
P302+P352 IF ON SKIN: Wash with plenty of soap and water.  
P305+P351+P338 If contact with eyes occurs: Rinse cautiously with water for several minutes. Remove contact lenses if possible. Continue rinsing.  
P321 Special handling (see on this label).  
P337+P313 If eye irritation persists: Get medical advice/attention.  
P362+P364 Remove contaminated clothing and wash before reuse.

## Active substances:

Formic acid, 9.97%;

## 2.3 Other hazards.

Under normal conditions of use and in its original form, the product has no other negative effects on health and the environment.

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS.

### 3.1 Substances.

Not Applicable.

### 3.2 Mixtures.

Substances that pose a risk to health or the environment according to Regulation (CE) No 1272/2008 have been assigned a limit at the workplace in the Community and are classified as PBT or vPvB or included in the candidate list:

Identifications	Name	Concentration	(*)Classification - Regulation 1272/2008	
			Classification	Specific concentration limits
Index No.: 607-001-00-0 CAS No.: 64-18-6 EC No: 200-579-1 Registrierungsnummer: 01-2119491174-37-XXXX	[1] Formic acid	2 - 10 %	Skin Corr. 1A, H314	Skin Corr. 1A, H314: C ≥ 90 %. Skin Corr. 1B, H314: 10 % ≤ C < 90 %. Skin Irrit. 2, H315: 2 % ≤ C < 10 % Eye Irrit. 2, H319: 2 % ≤ C < 10 %

(\*) The full text of the H-phrases is given in section 16 of this safety data sheet.

[1] Substance for which a common occupational exposure limit applies (see point 8.1).

## SECTION 4: FIRST AID MEASURES.

IRRITANT MIXTURE. Repeated and prolonged contact with the skin and mucous membranes may cause irritation symptoms such as flushing, blistering or dermatitis. Some of these symptoms may appear later. In addition, allergic reactions of the skin may occur.

### 4.1 Description of first aid measures.

In case of doubt or symptoms of indisposition, call for medical help. Never give substances or liquids of any kind to unconscious persons.

### Inhale.

# SAFETY DATA SHEET

(in accordance with (EU) Regulation 2015/830)



**FAKOLITH**<sup>®</sup>  
chemical systems

Version: 3

Last change: 21/01/2021

Page 3 from 10  
Print date: 24/11/2021

Injured persons should be brought into fresh air, kept warm and in a resting position. If breathing is irregular or fails, give mouth-to-mouth resuscitation.

#### **Contact with the eyes.**

If necessary, remove contact lenses if it is easy to do. Flush eyes with plenty of clean, fresh water for at least 10 minutes, pulling eyelids up and seeking medical attention at first opportunity. Avoid the person rubbing the affected eye.

#### **Contact with the skin.**

Remove contaminated clothing. Wash skin vigorously and thoroughly with soap and water or an appropriate skin cleanser. DO NOT use solvents or thinners under any circumstances.

#### **Intake.**

Seek immediate medical attention in case of accidental ingestion. Keep injured person in resting position. DO NOT cause vomiting under any circumstances.

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

Irritant product, repeated or prolonged contact with skin or mucous membranes may cause redness, blisters or dermatitis, inhalation of spray or airborne particles may cause respiratory irritation, some symptoms may be delayed.

#### **4.3 Indication of immediate medical attention or special treatment.**

In case of doubt or symptoms of indisposition, call for medical help. Never inject unconscious persons with substances or liquids of any kind. Cover the affected area with a sterile gauze dressing. Protect the affected area from pressure or friction.

## **SECTION 5: FIRE-FIGHTING MEASURES.**

The product does not pose any particular risk in the event of fire.

#### **5.1 Extinguishing media.**

##### **Suitable extinguishing media:**

Extinguishing powder or CO<sub>2</sub>. For more severe fires also alcohol-resistant foam and water spray.

##### **Unsuitable extinguishing media:**

Do not use a direct water jet for extinguishing. Do not use water or foam as an extinguishing agent in the presence of electrical voltage.

#### **5.2 Special hazards arising from the mixture.**

##### **Special risks.**

The fire may cause dense black smoke. Hazardous substances may be released as a result of thermal decomposition: Carbon monoxide, carbon dioxide. Exposure of the combustion or decomposition products is harmful to health.

#### **5.3 Advice for firefighters.**

Cool tanks, storage containers or other containers in the direct vicinity of the heat source or fire with water. When doing so, take the wind direction into account. Ensure that the extinguishing agents used cannot run off into the groundwater or waterways.

#### **Fire Protection Equipment.**

Depending on the extent of the fire, it may be necessary to wear thermal protective suits, appropriate breathing apparatus, gloves, goggles or face mask and boots.

## **SECTION 6: ACTION TO BE TAKEN IN THE EVENT OF IMPROPER RELEASE.**

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

For exposure control and personal protection see section 8.

#### **6.2 Environmental protection measures.**

Contamination of runoff, surface or subsurface waters, and soil shall be avoided.

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

Absorb spilled substances with absorbent and non-flammable material (earth, sand, vermiculite, diatomaceous earth, etc.). Store product and absorbent material in a suitable container. Immediately clean the contaminated area with a suitable decontaminant.

# SAFETY DATA SHEET

(in accordance with (EU) Regulation 2015/830)



**FAKOLITH**  
chemical systems

Version: 3

Last change: 21/01/2021

Page 4 from 10  
Print date: 24/11/2021

The decontamination agent is added to the waste and left to act in the unsealed container for several days until no further reactions occur.

## 6.4 Reference to other sections.

For suspension control and personal protection measures, see inscription 8.

For the disposal of residual materials, follow the recommendations in Inscription 13.

## SECTION 7: HANDLING AND STORAGE.

### 7.1 Precautions for safe handling.

For personal protection, see heading 8.

Do not smoke, eat or drink in the areas where the product is used.

The relevant regulations on safety and hygiene in the workplace must be complied with.

Never use pressure to empty the containers. The containers are not pressure vessels. Always keep the product in its original container.

### 7.2 Conditions for safe storage taking into account incompatibilities.

Storage in accordance with relevant local regulations. The instructions given on the label must be strictly observed. The containers can be stored in temperature ranges from 5 to 35 °C in dry and well ventilated rooms at a sufficient distance from heat sources and direct sunlight. Also ensure sufficient distance from all ignition points, propellant gas and strongly acidic or alkaline materials. Do not smoke. Access to the storage area by unauthorized persons must be prohibited. Opened containers must be carefully resealed and placed in an upright position to prevent leakage.

The product is not affected by the EU Directive 2012/18/EU (SEVESO III).

Storage class (LGK): 12 Non-flammable liquids.

### 7.3 Specific end uses.

Not available.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTIVE EQUIPMENT.

### 8.1 Parameters to be monitored.

Exposure restriction in the work environment for:

Name	CAS No.	Country	Limit value	ppm	mg/m <sup>3</sup>
Formic acid	64-18-6	European Union [1]	Eight hours	5	9
			Briefly		

[1] According to both Binding Occupational Exposure Limits (BOELVs) and Indicative Occupational Exposure Limits (IOELVs) adopted by Scientific Committee for Occupational Exposure Limits to Chemical Agents (SCOEL).

The product does not contain any substances with biological limits.

Concentration levels DNEL/DMEL:

Name	DNEL/DMEL	Type	Value
Formic acid CAS No.: 64-18-6 EC No: 200-579-1	DNEL (Workers)	Inhalative, Long-term, Local effects	9.5 (mg/m <sup>3</sup> )

DNEL: Derived No Effect Level Measure of exposure to substances below which no adverse effects are predicted.

DMEL: Derived Minimal Effect Level, measure of exposure corresponding to a low risk that should be considered as a tolerable minimum.

Concentration levels PNEC:

Name	Details	Value
Formic acid CAS No.: 64-18-6 EC No: 200-579-1	Fresh water	2 (mg/l)
	Marine water	0,2 (mg/l)
	Aqua	1 (mg/l)

# SAFETY DATA SHEET

(in accordance with (EU) Regulation 2015/830)



**FAKOLITH**  
chemical systems

Version: 3

Last change: 21/01/2021

Page 5 from 10  
Print date: 24/11/2021

	Fresh water sediments	13,4 (mg/kg sediment dw)
	Marine water sediments	1,34 (mg/kg sediment dw)
	Soil	1,5 (mg/kg soil dw)

PNEC: Predicted No Effect Concentration, concentration of the substance below which no harmful effects on the environment are expected.

## 8.2 Exposure controls.

### Technical measures:

Provide adequate ventilation. Effective on-site exhaust/ventilation and an effective general exhaust system may be used for this purpose.

<b>Concentration:</b>	<b>100 %</b>		
<b>Uses:</b>	<b>Detergent</b>		
<b>Respiratory protection:</b>			
PPE:	Filter mask for protection against gases and particles		
Features:	"The mask must have a large field of vision and be anatomically shaped to provide a hermetic seal.		
CEN standards:	EN 136, EN 140, EN 405		
Retention:	It must not be stored in places exposed to high temperatures and humidity before use. Particularly check the condition of the inhalation and exhalation valves of the facepiece.		
Comments:	Carefully read the manufacturer's instructions for use and storage of the device. The filters required for the specific characteristics of the risk (particles and aerosols: P1-P2-P3, gases and vapours: A-B-E-K-AX) are inserted in the appliance and replaced according to the manufacturer's recommendations.		
Required filter type:	B2+E2		
<b>Hand protection:</b>			
PPE:	Protective gloves against chemical products		
Features:	"CE" mark category III.		
CEN standards:	EN 374-1, En 374-2, EN 374-3, EN 420		
Retention:	They must be stored in a dry place away from possible sources of heat and, if possible, not exposed to sunlight. The gloves must not be modified in any way that may affect their resistance, nor must they be painted, solved or glued.		
Comments:	The gloves must be selected in a suitable size and fit neither too tightly nor too loosely on the hand. They must always be worn with clean and dry hands.		
Material:	Nitrile	Breakthrough time (min):	> 480
		Material thickness (mm):	0,12
Material:	Nitrile	Breakthrough time (min):	> 480
		Material thickness (mm):	0,38
Material:	Chloroprene	Breakthrough time (min):	> 480
		Material thickness (mm):	0,18
<b>Protective measures for the eyes:</b>			
PPE:	Full view safety goggles		
Features:	"CE" mark category II. Full vision goggles for protection against dust, smoke, mists and vapours.		
CEN standards:	EN 165, EN 166, EN 167, EN 168		
Retention:	Visibility through the lenses must be optimal, for which they must be cleaned daily. The protective device must be disinfected regularly according to the manufacturer's instructions.		
Comments:	Indications of wear can be: Yellowish discoloration of the lenses, scratches on the lens surface, fissures, etc.		
<b>Protective measures for the skin:</b>			
PPE:	Work shoes		
Features:	"CE" mark category II.		
CEN standards:	EN ISO 13287, EN 20347		
Retention:	This article adapts to the shape of the foot of the first user. For this reason and for hygienic reasons, its reuse by another person must be avoided		

# SAFETY DATA SHEET

(in accordance with (EU) Regulation 2015/830)



**FAKOLITH**<sup>®</sup>  
chemical systems

**Version: 3**

**Last change: 21/01/2021**

**Page 6 from 10**  
**Print date: 24/11/2021**

Comments:	Professional work shoes contain protective elements designed to protect the wearer from injury in the event of an accident. It is necessary to check for which work these shoes are suitable.
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## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES.

### 9.1 Information on basic physical and chemical properties.

Appearance: Transparent liquid with characteristic odor  
Colour: Colourless  
Odour: Pungent  
Odour threshold: N.V./N.A.  
pH: 2.8  
Melting point: N.V./N.A.  
Boiling point: 100 °C  
Flash point estimated: 92 °C  
Evaporation rate: N.V./N.A.  
Flammability (solid, gas): N.V./N.A.  
Lower explosion limit: N.V./N.A.  
Upper explosion limit: N.V./N.A.  
Vapour pressure: 24.439  
Density of vapour: N.V./N.A.  
Relative density: 1.04  
Solubility: Miscible in water  
Fat solubility: N.V./N.A.  
Water solubility: Miscible  
Partition factor (N-octanol / water): N.V./N.A.  
Auto-ignition temperature: ; N.V./N.A.  
Decomposition temperature: N.V./N.A.  
Viscosity: N.V./N.A.  
Explosion properties: N.V./N.A.  
Combustion promoting properties: N.V./N.A.  
N.V./N.A.= Not Available/Not Applicable due to the nature of the product.

### 9.2 Other information.

Stick Point: N.V./N.A.  
Scintillation counter: N.V./N.A.  
Kinematic viscosity: N.V./N.A.  
N.V./N.A.= Not Available/Not Applicable due to the nature of the product.

## SECTION 10: STABILITY AND REACTIVITY.

### 10.1 Reactivity.

The product does not present any hazards resulting from reactivity.

### 10.2 Chemical stability.

Unstable on contact with:  
- bases

### 10.3 Possibility of hazardous reactions.

Contact with bases can lead to neutralization.

### 10.4 Conditions to avoid.

- Avoid contact with bases.

### 10.5 Incompatible materials.

Avoid the following materials:  
- bases

# SAFETY DATA SHEET

(in accordance with (EU) Regulation 2015/830)



**FAKOLITH**<sup>®</sup>  
chemical systems

Version: 3

Last change: 21/01/2021

Page 7 from 10  
Print date: 24/11/2021

## 10.6 Hazardous decomposition products.

Depending on the conditions of use, the following products may arise:

- Corrosive vapours or gases

## SECTION 11: TOXICOLOGICAL INFORMATION.

IRRITANT MIXTURE. Splashes that get into the eyes have an irritating effect on the eyes.

IRRITANT MIXTURE. Repeated and prolonged contact with the skin and mucous membranes may cause irritation symptoms such as flushing, blistering or dermatitis. Some of these symptoms may appear later. In addition, allergic reactions of the skin may occur.

### 11.1 Information on toxicological effects.

Frequent or prolonged contact with the product may lead to lipid depletion in the skin, subsequently to non-allergic contact dermatitis and thus to absorption of the product through the skin.

Splashes of the product in the eyes may cause irritation and repairable damage.

### Toxicological information on the substances contained in the mixture.

Name	Acute toxicity			
	Type	Try	Art	Value
formic acid	Oral	LD50	Council	730 mg/kg [1]
		[1] study report, 1985		
	Dermal	LD50	Council	>2000 mg/kg [1]
		[1] study report, 2007		
CAS No.: 64-18-6      EC No: 200-579-1	Inhalative	LC50	Council	7.85 mg/L air (4 h) [1]
		[1] study report, 1980		

(a) acute toxicity,

No conclusive data for classification.

(b) Corrosive/irritant effect on the skin,

Classified Product:

Skin Irritant, Category 2: Causes skin irritation.

(c) Serious eye damage/irritation,

Classified Product:

Eye Irritation, Category 2: Causes severe eye irritation.

(d) Respiratory/skin sensitisation,

No conclusive data for classification.

(e) germ cell mutagenicity,

No conclusive data for classification.

(f) carcinogenicity,

No conclusive data for classification.

(g) reproductive toxicity,

No conclusive data for classification.

(h) single exposure specific target organ toxicity,

No conclusive data for classification.

(i) specific target organ toxicity in case of repeated exposure,

No conclusive data for classification.

j) Aspiration hazard.

No conclusive data for classification.

# SAFETY DATA SHEET

(in accordance with (EU) Regulation 2015/830)



**FAKOLITH**  
chemical systems

Version: 3

Last change: 21/01/2021

Page 8 from 10  
Print date: 24/11/2021

## SECTION 12: ENVIRONMENTAL DISCLOSURES.

### 12.1 Toxicity.

Name	Ecotoxicity			
	Type	Try	Art	Value
Formic acid  CAS No.: 64-18-6      EC No: 200-579-1	Fish	LC50	Danio rerio	130 mg/L (96 h) [1]
		[1] study report, 2005		
	Aquatic invertebrates	EC50	Daphnia magna	540 mg/L (48 h) [1]
		[1] study report, 1992		
	Water plants	EC50	Skeletonema costatum	>1000 mg/L (72 h) [1]
		[1] study report, 1994		

### 12.2 Persistence and degradability.

There is no information on the biodegradability of the substances present.

There is no information available on the degradability of the substances present. No information is available on the persistence and degradability of the product.

### 12.3 Bioaccumulative potential.

Information on bioaccumulation of the substances contained.

Name	Bioaccumulation			
	Log Pow	BCF	NOECs	Stage
Formic acid  CAS No.: 64-18-6      EC No: 200-579-1	-0,46	-	-	Very low

### 12.4 Mobility in soil.

No information is available on mobility in soil.

Do not allow the substance to enter drains or waterways.

Penetration into the soil must be avoided.

### 12.5 Results of PBT and vPvB assessment.

No information is available on the PBT and vPvB assessment of the product.

### 12.6 Other adverse effects.

No information is available on harmful effects on the environment.

## SECTION 13: DISPOSAL INSTRUCTIONS.

### 13.1 Waste treatment process.

Disposal into drains or waterways is not permitted. Waste products and contaminated containers must be disposed of in accordance with the relevant local/national regulations.

For the handling of residual materials, the instructions of Directive 2008/98/EC must be followed.

## SECTION 14: TRANSPORT INFORMATION.

Not dangerous for transport. In case of accident or leakage of the product, proceed according to point 6.



# SAFETY DATA SHEET

(in accordance with (EU) Regulation 2015/830)

## FAKOLITH FK 12 Concentrate



Version: 3

Last change: 21/01/2021

Page 9 from 10  
Print date: 24/11/2021

### 14.1 UN number.

Not dangerous for transport.

### 14.2 UN proper shipping name.

Description:

ADR: Not dangerous for transport.

IMDG: Not dangerous for transport.

ICAO/IATA: Not dangerous for transport.

### 14.3 Transport hazard classes.

Not dangerous for transport.

### 14.4 Packing group.

Not dangerous for transport.

### 14.5 Environmental hazards.

Not dangerous for transport.

### 14.6 Special precautions for the user.

Not dangerous for transport.

### 14.7 Carriage in bulk in accordance with Annex II of MARPOL and the IBC Code.

Not dangerous for transport.

## SECTION 15: LEGISLATION.

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

The product is not affected by Regulation (EC) No 1005/2009 of the European Parliament and of the Council of 16 September 2009 on substances that deplete the ozone layer.

Product classification according to Annex I of EU Directive 2012/18/EU (SEVESO III): N/A

Information regarding the EU Regulation No. 528/2012 on the provision on the market as well as the use of organic products:  
Numbers/Approval status/National approval: N-26205

Product type	Group
disinfectants and algaecides not intended for direct human or animal use	Disinfectant

Active substances	Concentration %
formic acid CAS No.: 64-18-6 EC No: 200-579-1	9,97

The product is not affected by the procedures established by EU Regulation No. 649/2012 for the export and import of hazardous chemicals.

Pollutant class for water (Germany): WGK 1: slightly hazardous for water. (Self-assessment according to the AwSV regulation).

### 15.2 Chemical Safety Assessment.

No evaluation of the chemical safety of the product has been performed.

## SECTION 16: OTHER INFORMATION.

Full text of H- sentences appearing in paragraph 3:

H314 Causes severe skin burns and eye damage.  
H315 Causes skin irritation.  
H319 Causes severe eye irritation.

# SAFETY DATA SHEET

(in accordance with (EU) Regulation 2015/830)



**FAKOLITH**<sup>®</sup>  
chemical systems

**Version: 3**

**Last change: 21/01/2021**

**Page 10 from 10**  
**Print date: 24/11/2021**

Classification codes:

Eye Irrit. 2 : Eye Irritation, Category 2  
Skin Corr. 1A : Skin corrosive, Category 1A  
Skin Irrit. 2 : Irritant to skin, category 2

For the correct handling of the product, it is recommended to carry out basic training on safety and hygiene in the workplace.

Abbreviations and acronyms used:

AwSV: Ordinance on installations for handling substances hazardous to water.  
BCF: Bioconcentration factor.  
CEN: European Committee for Standardization.  
DMEL: Derived Minimal Effect Level, measure of exposure corresponding to a low risk that is considered to be tolerable minimum should be considered.  
DNEL: Derived No Effect Level, (derived concentration by which no effect occurs) Measure of the Exposure to substances below which no adverse effects are foreseen.  
EC50: Average effective concentration.  
PPE: Personal security equipment.  
LC50: Lethal concentration, 50 %.  
LD50: Lethal dose, 50 %.  
Log Pow: Logarithm of the octanol/water partition coefficient.  
NOEC: No Observed Effect Concentration (highest tested concentration with no observed adverse effect).  
PNEC: Predicted No Effect Concentration, concentration of the substance below which no harmful effects can be expected.  
WGK: Water hazard classes.

Key references and data sources:

<http://eur-lex.europa.eu/homepage.html>

<http://echa.europa.eu/>

Regulation (EU) 2015/830.

Regulation (EC) No 1907/2006.

Regulation (EU) No 1272/2008.

The information provided in this safety data sheet has been prepared in accordance with COMMISSION REGULATION (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No. 793/93, Commission Regulation (EC) No 1488/94, Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC.

The information contained in this safety data sheet is based on the current state of knowledge and the relevant national and EU legislation at the time of printing, while the working conditions at the place of use are beyond our knowledge and control. The product must not be used for purposes other than those expressly stated without prior and written instructions on its handling. Consequently, it is the user's sole responsibility to take measures to comply with the legal requirements.