according to Regulation (EC) No 1907/2006

FADEX H+

Revision date: 30.04.2018

Product code: 5102

Page 1 of 10

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

1.1. Product identifier

FADEX H+

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

Use of the substance/mixture

Cleaning agent-concentrate, liquid, acidic Reserved for industrial and professional use. alternativ: For professional users only.

1.3. Details of the supplier of the safety data sheet

Company name:	MENNO CHEMIE-VERTRIEB GMBH	
Street:	Langer Kamp 104	
Place:	D-22850 Norderstedt	
Telephone:	+49(0)40/5290667-0	Telefax:+49(0)40/5290667-66
e-mail:	info@menno.de	
Contact person:	Jan Nevermann	
e-mail:	info@menno.de	
Internet:	www.menno.de	
Responsible Department:	Menno Chemie-Vertrieb GmbH	
1.4. Emergency telephone	Giftinformationszentrum Nord Universität	t Göttingen, giznord@giz-nord.de
number:	Tel.: +49(0)551/ 1 92 40	

Further Information

The statements made in relation to the physical-chemical properties are not suited for the formulation of specifications.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008

Hazard categories: Acute toxicity: Acute Tox. 4 Acute toxicity: Acute Tox. 4 Skin corrosion/irritation: Skin Corr. 1B Serious eye damage/eye irritation: Eye Dam. 1 Hazard Statements: Harmful if swallowed. Harmful if inhaled. Causes severe skin burns and eye damage. Causes serious eye damage.

2.2. Label elements

Regulation (EC) No. 1272/2008

Hazard components for labelling

Formic acid Paraffinöle, sulfochloriert Isotridecanolethoxylate

Signal word:

Pictograms:



according to Regulation (EC) No 1907/2006

FADEX H+

Revision date: 30.04.2018

Product code: 5102

Page 2 of 10

Hazard statements

H302+H332	Harmful if swallowed or if inhaled.
H314	Causes severe skin burns and eye damage.

Precautionary statements

P260 Do not breathe gas/Mist/Vapour/aerosol. P280 Wear protective gloves/protective clothing/eye protection/face protection. P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor. P310 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Special labelling of certain mixtures

Corrosive to the respiratory tract.

2.3. Other hazards

None known.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous components

CAS No	Chemical name				
	EC No	Index No	REACH No		
	GHS Classification	-			
64-18-6	Formic acid			45 - < 50 %	
	200-579-1	607-001-00-0	01-2119491174-37		
	Flam. Liq. 3, Acute Tox. 3, Acute EUH071	Tox. 4, Skin Corr. 1A, Eye Dam. 1;	H226 H331 H302 H314 H318		
68188-18-1	Paraffinöle, sulfochloriert			15 - < 20 %	
	269-144-1				
	Acute Tox. 4, Skin Irrit. 2, Eye Irri	t. 2, Aquatic Chronic 3; H302 H315	H319 H412		
69011-36-5	Isotridecanolethoxylate			1 - < 5 %	
	Acute Tox. 4, Eye Dam. 1; H302	H318			

Full text of H and EUH statements: see section 16.

Labelling for contents according to Regulation (EC) No 648/2004

15 % - < 30 % anionic surfactants, < 5 % non-ionic surfactants.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

First aider needs to protect himself.

After inhalation

Move to fresh air. Consult a physician after significant exposure.

After contact with skin

Wash off with plenty of water. Take off all contaminated clothing immediately. Remove and wash contaminated clothing and gloves, including the inside, before re-use. If skin irritation persists, call a physician.

according to Regulation (EC) No 1907/2006

FADEX H+

Revision date: 30.04.2018

Product code: 5102

Page 3 of 10

After contact with eyes

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Call a physician immediately.

After ingestion

Clean mouth with water and drink afterwards plenty of water. Do NOT induce vomiting. Call a physician immediately.

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

See chapter 2.1

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable extinguishing media

High volume water jet

5.2. Special hazards arising from the substance or mixture

The product is not flammable. Vapours may form explosive mixtures with air. Burning produces irritant fumes.

5.3. Advice for firefighters

Wear full protective clothing and self-contained breathing apparatus.

Additional information

Keep containers and surroundings cool with water spray. Suppress (knock down) gases/vapours/mists with a water spray jet. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Prevent fire extinguishing water from contaminating surface water or the ground water system.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Avoid breathing vapours, mist or gas. Avoid contact with skin, eyes and clothing. Use personal protective equipment.

P363 - Wash contaminated clothing before reuse.

6.2. Environmental precautions

Do not flush into surface water or sanitary sewer system.

6.3. Methods and material for containment and cleaning up

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Treat recovered material as described in the section "Disposal considerations".

6.4. Reference to other sections

see chapter 7. Handling and storage For personal protection see section 8. see chapter 13. Disposal considerations

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Handle in accordance with good industrial hygiene and safety practice. When using, do not eat, drink or smoke. Use only in area provided with appropriate exhaust ventilation. Avoid breathing vapours, mist or gas. P271 - Use only outdoors or in a well-ventilated area.

according to Regulation (EC) No 1907/2006

FADEX H+

Revision date: 30.04.2018

Product code: 5102

Page 4 of 10

Advice on protection against fire and explosion

No special protective measures against fire required.

Further information on handling

Wash hands before breaks and immediately after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep tightly closed. Keep locked up or in an area accessible only to qualified or authorised persons. Provide adequate ventilation.

Hints on joint storage

Keep away from food, drink and animal feedingstuffs.

Further information on storage conditions

Keep away from heat.

7.3. Specific end use(s)

See chapter 1

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m³	fibres/ml	Category	Origin
64-18-6	Formic acid	5	9.6		TWA (8 h)	WEL

8.2. Exposure controls



Appropriate engineering controls

Use only in area provided with appropriate exhaust ventilation. Avoid breathing vapours, mist or gas.

Protective and hygiene measures

Take off contaminated clothing and shoes immediately. Preventive skin protection. Wash hands and face before breaks and immediately after handling the product. When using do not eat or drink.

Eye/face protection

Tightly fitting safety goggles.

Hand protection

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Skin protection

Long sleeved clothing.

Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	liquid
Colour:	yellow
Odour:	stinging

according to Regulation (EC) No 1907/2006

	FADEX H+	
Revision date: 30.04.2018	Product code: 5102	Page 5 of 10
pH-Value (at 20 °C):	1% in H2O: 2,0	
Changes in the physical state		
Melting point:	not determined	
Initial boiling point and boiling range:	not determined	
Flash point:	not determined	
Flammability		
Solid:	not applicable	
Gas:	not applicable	
Lower explosion limits:	not determined	
Upper explosion limits:	not determined	
Auto-ignition temperature		
Solid: Gas:	not applicable	
	not applicable not determined	
Decomposition temperature:	not determined	
Oxidizing properties The product has been shown not to be oxidising properties).	oxidising in a test following Directive 67/548/EEC (Method A1	17,
Vapour pressure:	not determined	
Density:	not determined	
Water solubility:	soluble	
Solubility in other solvents not determined		
Partition coefficient:	not determined	
Vapour density:	not determined	
Evaporation rate:	not determined	
9.2. Other information		
Solid content:	not determined	
SECTION 10: Stability and reactivity		
10.1. Reactivity No dangerous reaction known under on 10.2. Chemical stability Stable at normal ambient temperature		
10.3. Possibility of hazardous reactions None known.		
10.4. Conditions to avoid none		
10.5. Incompatible materials None known.		
10.6. Hazardous decomposition products		

No decomposition if stored and applied as directed.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

according to Regulation (EC) No 1907/2006

FADEX H+

Revision date: 30.04.2018

Product code: 5102

Page 6 of 10

Acute toxicity

Harmful if swallowed or if inhaled.

ATEmix calculated

ATE (oral) 1209,7 mg/kg; ATE (inhalation vapour) 15,86 mg/l; ATE (inhalation aerosol) 1,010 mg/l

CAS No	Chemical name	Chemical name					
	Exposure route	Dose		Species	Source	Method	
64-18-6	Formic acid	Formic acid					
	oral	LD50	730 mg/kg	rat	OECD 401		
	inhalation (4 h) vapour	LC50	7,85 mg/l	rat	BASF Test		
	inhalation aerosol	ATE	0,5 mg/l				
68188-18-1	Paraffinöle, sulfochloriert						
	oral	LD50 mg/kg	1271	rat	OECD 401 Acute oral		
	dermal	LD50 mg/kg	>5000	rat	OECD 402 Acute oral		
69011-36-5	Isotridecanolethoxylate						
	oral	LD50 mg/kg	>5000	rat			
	dermal	LD50 mg/kg	>2000	rat			

Irritation and corrosivity

Causes severe skin burns and eye damage.

Sensitising effects

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

Carcinogenic/mutagenic/toxic effects for reproduction

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

STOT-single exposure

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

STOT-repeated exposure

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

Aspiration hazard

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

Additional information on tests

The product is classified as dangerous in accordance with Regulation (EC) No. 1272/2008. Handle in accordance with good industrial hygiene and safety practice. Other dangerous properties can not be excluded.

SECTION 12: Ecological information

12.1. Toxicity

This product has no known eco-toxicological effects.

according to Regulation (EC) No 1907/2006

FADEX H+

Revision date: 30.04.2018

Product code: 5102

Page 7 of 10

CAS No	Chemical name						
	Aquatic toxicity	Dose		[h] [d]	Species	Source	Method
64-18-6	Formic acid						
	Acute fish toxicity	LC50	130 mg/l	96 h	Brachydanio rerio	OECD 203	
	Acute algae toxicity	ErC50 mg/l	1240		Slenastrum capricornutum	OECD 201	
	Acute crustacea toxicity	EC50	365 mg/l	48 h	Daphnia magna	OECD 203	
68188-18-1	Paraffinöle, sulfochloriert						
	Acute fish toxicity	LC50	4,16 mg/l	96 h	Danio rerio		
	Acute crustacea toxicity	EC50	4,72 mg/l	48 h	Daphnia magna		
	Fish toxicity	NOEC	1 mg/l	22 d			
69011-36-5	Isotridecanolethoxylate						
	Acute fish toxicity	LC50 mg/l	>1-10	96 h	Oncorhynchus mykiss		
	Acute algae toxicity	ErC50	1-10 mg/l	72 h			
	Acute crustacea toxicity	EC50 mg/l	>1-10	48 h			
	Crustacea toxicity	NOEC	>1 mg/l		Information taken from reference works and the literature.		

12.2. Persistence and degradability

No data is available on the product itself.

12.3. Bioaccumulative potential

No data is available on the product itself.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
64-18-6	Formic acid	-0,54
68188-18-1	Paraffinöle, sulfochloriert	2,27

12.4. Mobility in soil

No data is available on the product itself.

12.5. Results of PBT and vPvB assessment

No data is available on the product itself.

12.6. Other adverse effects

None known.

Further information

Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Advice on disposal

The product should not be allowed to enter drains, water courses or the soil. Disposal together with normal waste is not allowed. Special disposal required according to local regulations.

SECTION 14: Transport information

Land transport (ADR/RID)

according to Regulation (EC) No 1907/2006

FADEX H+Revision date: 30.04.2018Product code: 5102Page 8 of 10				
<u>14.1. UN number:</u>	UN 1760	-		
14.2. UN proper shipping name:	CORROSIVE LIQUID, N.O.S. (Formic acid, Solution)			
14.3. Transport hazard class(es):	8			
14.4. Packing group:				
Hazard label:	8			
Classification code:	C9			
Special Provisions:	274			
Limited quantity:	5 L			
Excepted quantity:	E1			
Transport category:	3			
Hazard No:	80			
Tunnel restriction code:	E			
nland waterways transport (ADN)				
<u>14.1. UN number:</u>	UN 1760			
14.2. UN proper shipping name:	CORROSIVE LIQUID, N.O.S. (Formic acid, Solution)			
14.3. Transport hazard class(es):	8			
14.4. Packing group:	III			
Hazard label:	8			
Classification code:	C9 C9			
Special Provisions:	274			
Limited quantity:	5 L E1			
Excepted quantity:	EI			
Marine transport (IMDG)				
14.1. UN number:	UN 1760			
14.2. UN proper shipping name:	CORROSIVE LIQUID, N.O.S. (FORMIC ACID, SOLUTION)			
14.3. Transport hazard class(es):	8			
14.4. Packing group:	III			
Hazard label:	8			
	8			
Special Provisions:	223, 274			
Limited quantity:	5 L			
Excepted quantity:	E1			
EmS:	F-A, S-B			
14.5. Environmental hazards				
ENVIRONMENTALLY HAZARDOUS:	no			
14.6. Special precautions for user				
This information is not available.				
14.7. Transport in bulk according to Anr	nex II of Marpol and the IBC Code			

according to Regulation (EC) No 1907/2006

FADEX H+

Revision date: 30.04.2018

Product code: 5102

Page 9 of 10

SECTION 15: Regulatory information

15.1. Safety, health and environmenta	I regulations/legislation specific for the substance or mixture
EU regulatory information	
2010/75/EU (VOC):	49,5 %
2004/42/EC (VOC):	49,5 %
National regulatory information	
Employment restrictions:	Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.
Water contaminating class (D): 15.2. Chemical safety assessment	1 - slightly water contaminating

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road) IMDG: International Maritime Code for Dangerous Goods IATA: International Air Transport Association GHS: Globally Harmonized System of Classification and Labelling of Chemicals EINECS: European Inventory of Existing Commercial Chemical Substances ELINCS: European List of Notified Chemical Substances CAS: Chemical Abstracts Service LC50: Lethal concentration, 50% LD50: Lethal dose, 50%

Classification for mixtures and used evaluation method according to Regulation (EC) No. 1272/2008 [CLP]

Classification	Classification procedure
Acute Tox. 4; H302	Calculation method
Acute Tox. 4; H332	Calculation method
Skin Corr. 1B; H314	Calculation method
Eye Dam. 1; H318	Calculation method

Relevant H and EUH statements (number and full text)

H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H302+H332	Harmful if swallowed or if inhaled.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H412	Harmful to aquatic life with long lasting effects.
EUH071	Corrosive to the respiratory tract.

Further Information

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such

according to Regulation (EC) No 1907/2006

FADEX H+

Revision date: 30.04.2018

Product code: 5102

Page 10 of 10

material used in combination with any other materials or in any process, unless specified in the text.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)