

according to Regulation (EC) No 1907/2006

### Rhepanol h-Nahtreiniger

Print date: 31.07.2015 Product code: RCSO-FDT-024 Page 1 of 12

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

#### 1.1. Product identifier

Rhepanol h-Nahtreiniger

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

#### Use of the substance/mixture

cleaner

#### Uses advised against

Only use for the intended purpose.

The product is intended for professional use.

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

Company name: FDT Flachdach Technologie GmbH & Co. KG

Street: Eisenbahnstraße 6-8
Place: D-68199 Mannheim
Telephone: +49 (621) 8504100

phone: +49 (621) 8504100 Telefax: +49 (621) 8504200

e-mail: kundenservice@fdt.de

Contact person: Marco Anderer Telephone: +49 (621) 8504563

e-mail: marco.anderer@fdt.de
Internet: http://www.fdt.de

Responsible Department: Arbeitssicherheit und Umweltschutz

1.4. Emergency telephone Poison Control Center (Mayence, GER) +49 (0)6131-19240 (24h - de, en)

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

### 2.1. Classification of the substance or mixture

Hazard categories:

Flammable liquid: Flam. Liq. 2

Serious eye damage/eye irritation: Eye Irrit. 2

Specific target organ toxicity - single exposure: STOT SE 3

Hazard Statements:

Highly flammable liquid and vapour. Causes serious eye irritation. May cause drowsiness or dizziness.

## 2.2. Label elements

## Hazardous components which must be listed on the label

butanone; ethyl methyl ketone

1-methoxy-2-propanol; monopropylene glycol methyl ether

Signal word: Danger

Pictograms:



### **Hazard statements**

H225 Highly flammable liquid and vapour.
 H319 Causes serious eye irritation.
 H336 May cause drowsiness or dizziness.



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#### **Precautionary statements**

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No

smoking.

P243 Take precautionary measures against static discharge.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with

water/shower

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

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

present and easy to do. Continue rinsing.

P501 Dispose of contents/container in accordance with national disposal regulations.

### Special labelling of certain mixtures

EUH066 Repeated exposure may cause skin dryness or cracking.

#### 2.3. Other hazards

The components in this mixture do not meet the criteria for classification as PBT or vPvB.

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

#### 3.2. Mixtures

#### **Hazardous components**

CAS No	Chemical name				
	EC No	Index No	REACH No		
	Classification according to Regulati	on (EC) No. 1272/2008 [CLP]	•		
78-93-3	butanone; ethyl methyl ketone			55 %	
	201-159-0	606-002-00-3	01-2119457290-43		
	Flam. Liq. 2, Eye Irrit. 2, STOT SE 3; H225 H319 H336 EUH066				
107-98-2	1-methoxy-2-propanol; monopropylene glycol methyl ether				
	203-539-1	603-064-00-3	01-2119457435-35		
	Flam. Liq. 3, STOT SE 3; H226 H3				
1589-47-5	2-methoxypropanol				
	216-455-5	603-106-00-0			
	Flam. Liq. 3, Repr. 1B, STOT SE 3, Skin Irrit. 2, Eye Dam. 1; H226 H360D *** H335 H315 H318				

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

### **SECTION 4: First aid measures**

### 4.1. Description of first aid measures

#### General information

In case of troubles or persistent symptoms, consult an doctor/physician.

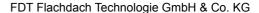
Remove persons from danger area and lie them down. Never orally infuse something to an unconscious person. No special first aid measures necessary. A vomiting, supine person must be brought into recovery position.

#### After inhalation

Provide fresh air. In case of respiratory tract irritation, consult a physician. In case of irregular breathing or respiratory arrest, perform artificial respiration.

## After contact with skin

After contact with skin, wash immediately with plenty of water and soap. Change contaminated clothing. In case of skin irritation, consult a physician.





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#### After contact with eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.

#### After ingestion

Rinse mouth, spit liquid again. Do NOT induce vomiting. Let water be drunken in little sips (dilution effect). Call a physician immediately.

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

Following eye contact: Causes serious eye irritation.
Following inhalation: May cause drowsiness or dizziness.
Repeated exposure may cause skin dryness or cracking.

#### 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

Carbon dioxide (CO2). Extinguishing powder. Water spray. Fight larger fires with water spray jet or alcohol-resistant foam.

#### Unsuitable extinguishing media

High power water jet.

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

Vapours may form explosive mixtures with air. Vapours are heavier than air and will spread at floor level. Thermal decomposition can lead to harmful gases and vapours.

#### 5.3. Advice for firefighters

Co-ordinate fire-fighting measures to the fire surroundings. Wear a self-contained breathing apparatus and chemical protective clothing.

### Additional information

Do not allow to enter into surface water or drains. Use water spray jet to protect personnel and to cool endangered containers.

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

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

Provide adequate ventilation. Keep away from sources of ignition - No smoking. Avoid contact with skin, eyes and clothes. Wear personal protection equipment.

#### 6.2. Environmental precautions

Do not allow to enter into surface water or drains.

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

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

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

#### 6.4. Reference to other sections

Safe handling: see section 7

Personal precautions: refer to section 8.

Disposal: see section 13

### **SECTION 7: Handling and storage**

### 7.1. Precautions for safe handling

### Advice on safe handling

Provide adequate ventilation as well as local exhaustion at critical locations. Handle and open



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container with care. Avoid the formation of aerosol.

#### Advice on protection against fire and explosion

Keep away from sources of ignition. - No smoking. Take precautionary measures against static discharges.

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

#### Requirements for storage rooms and vessels

Store only in original container. Keep container tightly closed in a cool, well-ventilated place.

### 7.3. Specific end use(s)

cleaner

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

### 8.1. Control parameters

### **Exposure limits (EH40)**

CAS No	Substance	ppm	mg/m³	fibres/ml	Category	Origin
107-98-2	1-Methoxypropan-2-ol	100	375		TWA (8 h)	WEL
		150	560		STEL (15 min)	WEL
78-93-3	Butan-2-one (methyl ethyl ketone)	200	600		TWA (8 h)	WEL
		300	899		STEL (15 min)	WEL

### **Biological Monitoring Guidance Values (EH40)**

CAS No	Substance	Parameter	Value	Test material	Sampling time
78-93-3	Butan-2-one	butan-2-one	70 μmol/L	urine	Post shift

#### **DNEL/DMEL values**

CAS No	Substance					
DNEL type	DNEL type		Effect	Value		
78-93-3	butanone; ethyl methyl ketone					
Worker DNEL,	long-term	dermal	systemic	1161 mg/kg bw/day		
Worker DNEL,	long-term	inhalation	systemic	600 mg/m³		
Consumer DNE	EL, acute	dermal	local	412		
Consumer DNE	EL, long-term	inhalation	systemic	106 mg/m³		
Consumer DNEL, long-term		oral	systemic	31 mg/kg bw/day		
107-98-2	1-methoxy-2-propanol; monopropylene glycol methyl ether					
Worker DNEL, acute		inhalation	local	553,5 mg/m³		
Worker DNEL,	long-term	dermal	systemic	50,6 mg/kg bw/day		
Worker DNEL, long-term		inhalation	systemic	369 mg/m³		
Consumer DNEL, long-term		dermal	systemic	18,1 mg/kg bw/day		
Consumer DNEL, long-term		inhalation	systemic	43,9 mg/m³		
Consumer DNEL, long-term		oral	systemic	3,3 mg/kg bw/day		



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#### **PNEC** values

CAS No	Substance	
Environment	al compartment	Value
78-93-3	butanone; ethyl methyl ketone	
Freshwater		55,8 mg/l
Marine water		55,8 mg/l
Micro-organi	sms in sewage treatment plants (STP)	709 mg/l
Soil	Soil	
107-98-2	1-methoxy-2-propanol; monopropylene glycol methyl ether	
Freshwater	Freshwater	
Marine water	Marine water	
Micro-organi	Micro-organisms in sewage treatment plants (STP)	
Freshwater sediment		41,6 mg/kg
Marine sediment		4,17 mg/kg
Soil	Soil 2,	

#### 8.2. Exposure controls

### Protective and hygiene measures

Change contaminated clothing. Wash hands before breaks and after work. When using do not eat or drink. Avoid skin, eye and clothing contact. After contact with skin, wash immediately with plenty of water and soap or a suitable cleaning agent.

#### Eye/face protection

Tighty fitting safety glasses with side shields.

### Hand protection

Protect skin by using skin protective cream. Wear suitable gloves.

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits.

The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances.

Suitable material: Butyl rubber. NBR (Nitrile rubber). NR (Natural rubber (Caoutchouc), Natural latex). PVC (Polyvinyl chloride).

penetration time (maximum wearing period): >240 minutes

#### Skin protection

Full cover clothing covering arms and legs.

### Respiratory protection

Use protective filter mask in case of short-term and low exposure; in case of intense or longer exposure, use respiratory protection device operating independently from circulating air.

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

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

Physical state: liquid
Colour: colourless
Odour: characteristic

Test method

pH-Value: not determined



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Changes in the physical state

Melting point: not determined Initial boiling point and boiling range: 79  $^{\circ}$ C Flash point: -4  $^{\circ}$ C

**Flammability** 

Gas: not determined

**Explosive properties** 

The product is not explosive, however, formation of explosive mixtures are possible.

Lower explosion limits: 1,8 vol. % Upper explosion limits: 12,0 vol. %

Ignition temperature: 278 °C DIN 51794

**Auto-ignition temperature** 

Gas: not determined

Decomposition temperature: not determined

**Oxidizing properties** 

not determined

Vapour pressure: 95 hPa

(at 20 °C)

Density (at 20 °C): 0,863 g/cm³ DIN 53217

Water solubility:

Not mixable and/or hard to mix.

Partition coefficient:

not determined

Viscosity / dynamic: 1 mPa·s ISO 2555

(at 20 °C)

Viscosity / kinematic: not determined
Vapour density: not determined
Solvent content: 100,0%

#### 9.2. Other information

No further information availible.

## **SECTION 10: Stability and reactivity**

#### 10.1. Reactivity

No dangerous reactivity under regular conditions.

### 10.2. Chemical stability

The product is stable under regular conditions.

#### 10.3. Possibility of hazardous reactions

No known hazardous reactions.

#### 10.4. Conditions to avoid

Avoid heat, sparks, open flames and other ignition sources. Electrostatic charges.

#### 10.5. Incompatible materials

acid. Alkalis (alkalis). Oxidizing agents, strong.

#### 10.6. Hazardous decomposition products

Thermal decomposition can lead to harmful gases and vapours.

### **SECTION 11: Toxicological information**

## 11.1. Information on toxicological effects

Revision No: 1,01 GB - EN Revision date: 27.07.2015



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#### **Acute toxicity**

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

CAS No	Chemical name				
	Exposure routes	Method	Dose	Species	Source
78-93-3	butanone; ethyl methyl ketone				
	oral	LD50	>2193 mg/kg	Rat	OECD 423
	dermal	LD50	>5000 mg/kg	Rabbit	OECD 402
	inhalative (4 h) vapour	LC50	34 mg/l	Rat	
107-98-2	1-methoxy-2-propanol; monopropylene glycol methyl ether				
	oral	LD50	4016 mg/kg	Rat	
	dermal	LD50	>2000 mg/kg	Rabbit	

### Irritation and corrosivity

Causes serious eye irritation.

#### Sensitising effects

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

### STOT-single exposure

May cause drowsiness or dizziness. (butanone; ethyl methyl ketone), (1-methoxy-2-propanol; monopropylene glycol methyl ether)

#### Severe effects after repeated or prolonged exposure

Repeated exposure may cause skin dryness or cracking.

## Carcinogenic/mutagenic/toxic effects for reproduction

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

#### **Aspiration hazard**

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

### **SECTION 12: Ecological information**

#### 12.1. Toxicity

No data available.

CAS No	Chemical name					
	Aquatic toxicity	Method	Dose	[h]   [d]	Species	Source
78-93-3	butanone; ethyl methyl ketone					
	Acute fish toxicity	LC50	2990 mg/l	96 h	Pimephales promelas	OECD 203
	Acute algae toxicity	ErC50	1972 mg/l		Pseudokirchneriella subcapitata	OECD 201
	Acute crustacea toxicity	EC50	308 mg/l	48 h	Daphnia magna	OECD 202
107-98-2	1-methoxy-2-propanol; monopro	pylene glyco	ol methyl ether			
	Acute fish toxicity	LC50	6812 mg/l	96 h	Leuciscus idus	
	Acute crustacea toxicity	EC50 mg/l	21100-25900	48 h	Daphnia magna	

## 12.2. Persistence and degradability

No data available.



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CAS No	Chemical name					
	Method Value d Source					
	Evaluation					
107-98-2	1-methoxy-2-propanol; monopropylene glycol methyl ether					
	OECD 301E	96%	28			

#### 12.3. Bioaccumulative potential

No data available.

#### Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
107-98-2	1-methoxy-2-propanol; monopropylene glycol methyl ether	0,37

#### 12.4. Mobility in soil

No data available.

#### 12.5. Results of PBT and vPvB assessment

The components in this mixture do not meet the criteria for classification as PBT or vPvB.

#### 12.6. Other adverse effects

No data available.

### **SECTION 13: Disposal considerations**

#### 13.1. Waste treatment methods

### Advice on disposal

Disposal according to official regulations.

Consult the local waste disposal expert about waste disposal. According to EAKV, allocation of waste identity numbers/waste descriptions must be carried out in a specific way for every industry and process.

### Waste disposal number of waste from residues/unused products

070104

WASTES FROM ORGANIC CHEMICAL PROCESSES; wastes from the manufacture, formulation, supply and use (MFSU) of basic organic chemicals; other organic solvents, washing liquids and mother liquors

Classified as hazardous waste.

### Waste disposal number of contaminated packaging

150110

WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by dangerous substances Classified as hazardous waste.

#### Contaminated packaging

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

## **SECTION 14: Transport information**

## Land transport (ADR/RID)

14.1. UN number: UN 1993

14.2. UN proper shipping name: FLAMMABLE LIQUID, N.O.S. (butanone; ethyl methyl ketone,

1-methoxy-2-propanol; monopropylene glycol methyl ether)

3 14.3. Transport hazard class(es):

Ш 14.4. Packing group: Hazard label: 3

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Classification code: F1

Special Provisions: 274 601 640D

Limited quantity: 1 L
Excepted quantity: E2
Transport category: 2
Hazard No: 33
Tunnel restriction code: D/E

Inland waterways transport (ADN)

**14.1. UN number:** UN 1993

14.2. UN proper shipping name: FLAMMABLE LIQUID, N.O.S. (butanone; ethyl methyl ketone,

1-methoxy-2-propanol; monopropylene glycol methyl ether)

14.3. Transport hazard class(es): 3
14.4. Packing group:

Hazard label: 3



Classification code: F1

Special Provisions: 274 601 640D

Limited quantity: 1 L
Excepted quantity: E2

Marine transport (IMDG)

**14.1. UN number:** UN 1993

14.2. UN proper shipping name: FLAMMABLE LIQUID, N.O.S. (butanone; ethyl methyl ketone,

1-methoxy-2-propanol; monopropylene glycol methyl ether)

14.3. Transport hazard class(es):314.4. Packing group:IIHazard label:3



Marine pollutant:
Special Provisions:

Limited quantity:
Excepted quantity:

E2

EmS:

Nein

274

1 L

E2

F-E, S-E

Air transport (ICAO)

Hazard label:

**14.1. UN number:** UN 1993

14.2. UN proper shipping name: FLAMMABLE LIQUID, N.O.S. (butanone; ethyl methyl ketone,

3

1-methoxy-2-propanol; monopropylene glycol methyl ether)

14.3. Transport hazard class(es):

14.4. Packing group:

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Special Provisions:

Limited quantity Passenger:

Passenger LQ:

Y341

Excepted quantity:

E2

IATA-packing instructions - Passenger:353IATA-max. quantity - Passenger:5 LIATA-packing instructions - Cargo:364IATA-max. quantity - Cargo:60 L

### 14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

#### 14.6. Special precautions for user

No special precautions known.

### 14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

not applicable

### **SECTION 15: Regulatory information**

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

#### **EU** regulatory information

2004/42/EC (VOC): 862,5 g/l

### **Additional information**

Regulation (EC) No. 1005/2009 on substances that lead to the depletion of the ozone layer: not applicable

Regulation (EC) No. 648/2004 (Detergents regulation): not applicable

REGULATION (EC) No 850/2004 on persistent organic pollutants: not applicable

REGULATION (EC) No 689/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL concerning the export and import of dangerous chemicals: This mix contains no chemicals that are subject to the export notification procedures (annex 1).

This mixture contains the following substances of very high concern (SVHC) which are included in the Candidate List according to Article 59 of REACH: none

This mixture contains the following substances of very high concern (SVHC) which are subject to authorisation according to Annex XIV of REACH: none

### National regulatory information

Employment restrictions: Observe employment restrictions for young people. Observe employment

restrictions for child bearing mothers and nursing. Observe employment

restrictions for women of child-bearing age.

Water contaminating class (D): 1 - slightly water contaminating

## 15.2. Chemical safety assessment

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

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

#### Changes

Version 1,00 - Creation - 07.08.2012

Version 1,01 - Classification/Labeling according Regulation No.1272/2008 (GHS/CLP) and general

revision - 27.07.2015



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#### 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)

BImSchV (Fed.Imm.Prot.Act): Directive on the Implementation of the Federal Immission Protection Act

CAS: Chemical Abstracts Service

EC: Effective Concentration

EG: European Community (Europäische Gemeinschaft)

EN: European Norm

IATA: International Air Transport Association

IBC Code: International Code for the Construction and Equipment of ships carrying Dangerous

Chemicals in Bulk

ICAO: International Civil Aviation Organization

IMDG: International Maritime Code for Dangerous Goods

CLP: Classification, Labeling, Packaging

IUCLID: International Uniform Chemical Information Database

LC: Lethal concentration

LD: Lethal dose

log Kow: Octanol/water partition coefficient

MARPOL: Maritime Pollution Convention = Convention for the Prevention of Maritime Pollution from

Ships

OECD: Organisation for Economic Co-operation and Development

PBT: Persistent, bio-cumulative, toxic

RID: Regulation Concerning the International Transport of Dangerous Goods by Rail

TRGS: Technische Regeln für Gefahrstoffe

VOC: Volatile Organic Compounds

vPvB: very persistent and very bio-cumulative

VwVwS: Administrative Regulation for Water Pollutants

WGK: German Water Hazard Class

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

**DNEL: Derived No Effect Level** 

PNEC: Predicted No Effect Concentration

TLV: Threshold Limiting Value STOT: Specific Target Organ Toxicity

## Relevant H- and EUH-phrases (Number and full text)

H226	Flammable liquid and vapour.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H360D	May damage the unborn child.

EUH066 Repeated exposure may cause skin dryness or cracking.

Highly flammable liquid and vapour.

## **Further Information**

H225

The information given in this safety data sheet is to describe the product's safety regulations. It is not for guaranteeing certain characteristics and is based on today's knowledge. The safety data sheet was generated upon information of pre-suppliers by:

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