Telefax: +49 (621) 8504200



Safety Data Sheet

according to Regulation (EC) No 1907/2006

Rhepanol Grundierung 2 S

Print date: 31.07.2015 Product code: RCSO-FDT-010 Page 1 of 13

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

1.1. Product identifier

Rhepanol Grundierung 2 S

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

Use of the substance/mixture

priming

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

e-mail: kundenservice@fdt.de

- Kanasiis K

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

Reproductive toxicity: Repr. 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.
Suspected of damaging the unborn child.

2.2. Label elements

Hazardous components which must be listed on the label

butanone; ethyl methyl ketone

n-butyl acetate

toluene

Signal word: Danger

Pictograms:



Hazard statements

H225 Highly flammable liquid and vapour.



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H319 Causes serious eye irritation.
 H336 May cause drowsiness or dizziness.
 H361d Suspected of damaging the unborn child.

Precautionary statements

P202 Do not handle until all safety precautions have been read and understood.

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

smoking

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

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.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up.

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	Chemical name				
	EC No	Index No	REACH No			
	Classification according	g to Regulation (EC) No. 1272/200	8 [CLP]			
78-93-3	butanone; ethyl methy	l ketone		50-100 %		
	201-159-0	606-002-00-3				
	Flam. Liq. 2, Eye Irrit. 2, STOT SE 3; H225 H319 H336 EUH066					
123-86-4	n-butyl acetate					
	204-658-1	607-025-00-1				
	Flam. Liq. 3, STOT SE 3; H226 H336 EUH066					
108-88-3	toluene			2,5-<10 %		
	203-625-9	601-021-00-3				
	Flam. Liq. 2, Repr. 2, H373 H304	Skin Irrit. 2, STOT SE 3, STOT RE	2, Asp. Tox. 1; H225 H361d H315	5 H336		

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.





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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. Call a physician immediately.

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. If eye irritation persists: Get medical advice/attention.

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

Causes serious eye irritation.

Possible risk of harm to the unborn child.

May cause drowsiness or dizziness.

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). Sand. 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

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.

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. Provide adequate ventilation.

6.4. Reference to other sections

Safe handling: see section 7

Personal precautions: refer to section 8.

Disposal: see section 13





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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 container with care.

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)

priming

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m³	fibres/ml	Category	Origin
78-93-3	Butan-2-one (methyl ethyl ketone)	200	600		TWA (8 h)	WEL
İ		300	899		STEL (15 min)	WEL
123-86-4	Butyl acetate	150	724		TWA (8 h)	WEL
1		200	966		STEL (15 min)	WEL
108-88-3	Toluene	50	191		TWA (8 h)	WEL
1		100	384		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



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DNEL/DMEL values

CAS No	Substance			
DNEL type		Exposure route	Effect	Value
78-93-3	butanone; ethyl methyl ketone			
Consumer DN	IEL, long-term	oral		31 mg/kg bw/day
Consumer DN	IEL, long-term	dermal		412 mg/kg bw/day
Worker DNEL	, long-term	dermal		1161 mg/kg bw/day
Consumer DN	IEL, long-term	inhalation		106 mg/m³
Worker DNEL, long-term		inhalation		600 mg/m³
123-86-4	n-butyl acetate			·
Consumer DN	IEL, acute	inhalation		859,7 mg/m³
Consumer DNEL, long-term		inhalation		102,34 mg/m³
Worker DNEL	, acute	inhalation		960 mg/m³
Worker DNEL	, long-term	inhalation		480 mg/m³
108-88-3	toluene			
Consumer DN	IEL, long-term	oral		8,13 mg/kg bw/day
Consumer DN	IEL, long-term	dermal		226 mg/kg bw/day
Worker DNEL	, long-term	dermal		384 mg/kg bw/day
Consumer DNEL, acute		inhalation		226 mg/m³
Consumer DN	IEL, long-term	inhalation		56,5 mg/m³
Worker DNEL	, acute	inhalation		343 mg/m³
Worker DNEL	, long-term	inhalation		192 mg/m³



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PNEC values

CAS No	Substance				
Environment	Environmental compartment				
78-93-3	butanone; ethyl methyl ketone				
Freshwater		55,8 mg/l			
Marine water		55,8 mg/l			
Soil		22,5 mg/kg			
Marine sedim	287,7 mg/kg				
Freshwater sediment		284,7 mg/kg			
123-86-4	n-butyl acetate				
Freshwater		0,18 mg/l			
Marine water		0,018 mg/l			
Soil		0,0903 mg/kg			
Marine sedim	nent	0,0981 mg/kg			
Freshwater s	ediment	0,981 mg/kg			
Micro-organis	sms in sewage treatment plants (STP)	35,6 mg/l			
108-88-3	toluene				
Freshwater		0,68 mg/l			
Soil		2,89 mg/kg			
Freshwater sediment		16,39 mg/kg			
Micro-organis	sms in sewage treatment plants (STP)	13,61 mg/l			

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.

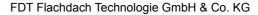
Suitable material: Butyl rubber, FKM (fluoro rubber)

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.





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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: liquid Colour: clear

Odour: characteristic

Test method

pH-Value: not determined

Changes in the physical state

Melting point:
Initial boiling point and boiling range:
Flash point:

not determined
79 °C
-4 °C

Flammability

Gas: not determined

Explosive properties

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

Lower explosion limits: 1,0 vol. % Upper explosion limits: 11,5 vol. % Ignition temperature: 370 °C

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): 0,87 g/cm³ EN ISO 2811-1

Water solubility: insoluble
Partition coefficient: not determined

Viscosity / dynamic: 165 mPa·s ISO 2555

(at 20 °C)

Viscosity / kinematic: not determined

Vapour density: not determined

Solvent content: not determined

9.2. Other information

No further information available.

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.



FDT Flachdach Technologie GmbH & Co. KG

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10.4. Conditions to avoid

No information available.

10.5. Incompatible materials

No information available.

10.6. Hazardous decomposition products

Pyrolysis products, toxic chlorine compounds

SECTION 11: Toxicological information

11.1. Information on toxicological effects

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	3300 mg/kg	Rat			
	dermal	LD50	5000 mg/kg				
	inhalative (4 h) vapour	LC50	10000 mg/l	Rat			
123-86-4	n-butyl acetate						
	oral	LD50	13100 mg/kg	Rat			
	dermal	LD50	>17600 mg/kg	Rabbit			
	inhalative (4 h) vapour	LC50	>21 mg/l	Rat			
108-88-3	toluene						
	oral	LD50	>5000 mg/kg	Rat			
	dermal	LD50	>5000 mg/kg	Rabbit			
	inhalative (4 h) vapour	LC50	31 mg/l	Rat			

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), (n-butyl acetate), (toluene)

Severe effects after repeated or prolonged exposure

Repeated exposure may cause skin dryness or cracking.

Carcinogenic/mutagenic/toxic effects for reproduction

Suspected of damaging the unborn child. (toluene)

Aspiration hazard

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

SECTION 12: Ecological information

12.1. Toxicity

No information is available on the mixture itself.



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CAS No	Chemical name									
	Aquatic toxicity	Method	Dose	[h] [d]	Species	Source				
78-93-3	butanone; ethyl methyl ketone	butanone; ethyl methyl ketone								
	Acute fish toxicity	LC50	3220 mg/l	96 h	Pimephales promelas					
	Acute crustacea toxicity	EC50	>100 mg/l	48 h	Daphnia magna					
123-86-4	n-butyl acetate									
	Acute fish toxicity	LC50	62 mg/l		Leuciscus idus (golden orfe)					
	Acute algae toxicity	ErC50	674 mg/l	72 h	Scenedesmus subspicatus					
108-88-3	toluene									
	Acute fish toxicity	LC50	24 mg/l	96 h	Oncorhynchus mykiss (Rainbow trout)					
	Acute algae toxicity	ErC50	12 mg/l	72 h	Pseudokirchneriella subcapitata					
	Acute crustacea toxicity	EC50	11,5 mg/l	48 h	Daphnia magna					
	Acute bacteria toxicity	(29 mg/l)			Pseudomonas putida					

12.2. Persistence and degradability

No data available.

12.3. Bioaccumulative potential

No data available.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
108-88-3	toluene	2,73

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

080111 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU and removal of paint and varnish; waste paint and varnish containing organic

solvents or other dangerous substances 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.



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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 126314.2. UN proper shipping name:Paint14.3. Transport hazard class(es):314.4. Packing group:IIHazard label:3



Classification code: F1

Special Provisions: 163 640D 650

Limited quantity: 5 L
Excepted quantity: E2
Transport category: 2
Hazard No: 33
Tunnel restriction code: D/E

Inland waterways transport (ADN)

14.1. UN number:UN 126314.2. UN proper shipping name:Paint14.3. Transport hazard class(es):314.4. Packing group:IIHazard label:3



Classification code: F1

Special Provisions: 163 640D 650

Limited quantity: 5 L Excepted quantity: E2

Marine transport (IMDG)

14.1. UN number:UN 126314.2. UN proper shipping name:Paint14.3. Transport hazard class(es):314.4. Packing group:IIHazard label:3



Marine pollutant: Nein Special Provisions: 163 Limited quantity: 5 L



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Excepted quantity: E2 EmS: F-E, S-E

Air transport (ICAO)

14.1. UN number:UN 126314.2. UN proper shipping name:Paint14.3. Transport hazard class(es):314.4. Packing group:IIHazard label:3



Special Provisions:

Limited quantity Passenger:

Passenger LQ:

Excepted quantity:

A3 A72

1 L

Y341

Excepted quantity:

IATA-packing instructions - Passenger: 353
IATA-max. quantity - Passenger: 5 L
IATA-packing instructions - Cargo: 364
IATA-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): 85%

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

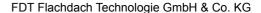
This mixture contains the following substances of very high concern (SVHC) which are subject to authorisation according to Annex XIV of REACH: none

National regulatory information

Water contaminating class (D): 2 - water contaminating

15.2. Chemical safety assessment

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





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SECTION 16: Other information

Changes

Version 1.00 - Creation - 26.01.2012

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

revision - 15.06.2015

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)

H225 Highly flammable liquid and vapour. H226 Flammable liquid and vapour.

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation. H319 Causes serious eve ir

H319 Causes serious eye irritation.
 H336 May cause drowsiness or dizziness.
 H361d Suspected of damaging the unborn child.

H373 May cause damage to organs through prolonged or repeated exposure.

EUH066 Repeated exposure may cause skin dryness or cracking.

Further Information

The information given in this safety data sheet is to describe the product's safety regulations. It is not





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for guaranteeing certain characteristics and is based on today's knowledge. The safety data sheet was generated upon information of pre-suppliers by:

REACheck Solutions GmbH, Mühlstraße 94a, 63741 Aschaffenburg, Germany Phone: +49 (0)6021 - 1 50 86-0, Fax: +49 (0)6021 - 1 50 86-77, E-Mail: eu-sds@reacheck.eu, www.reacheck.eu

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