# according to Regulation (EC) No. 1907/2006 (REACH)



**Trade name :** PUR-Verdünnung 5103, Farblos

(5103.-.0100)

**Revision date:** 16.02.2023 **Version (Revision):** 14.0.0 (13.2.0)

**Print date :** 16.02.2023

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

# 1.1 Product identifier

PUR-Verdünnung 5103, Farblos (5103.-.0100)

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

For the thinning of paints and primers. Intended purpose see technical data sheet.

### Relevant identified uses

### **Products Category [PC]**

Coatings and paints, thinners, paint removers

#### Remark

The product is intended for professional use.

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

#### Supplier

Brillux GmbH & Co. KG, Industrielack www.brillux-industrielack.de

Street: Otto-Hahn-Straße 14

Postal code/City: D-59423 Unna (Germany)

**Telephone:** +49 2303 8805-0 **Telefax:** +49 2303 8805-119

Information contact: E-mail address of the competent person for safety data sheets: sdb@brillux-

industrielack.de

### 1.4 Emergency telephone number

Giftinformationszentrum-Nord (poisons centre), consultation in german and english

Telephone: +49 551 19 24 0

# **SECTION 2: Hazards identification**

# 2.1 Classification of the substance or mixture

# Classification according to Regulation (EC) No 1272/2008 [CLP]

Flam. Liq. 3; H226 - Flammable liquids: Category 3; Flammable liquid and vapour. STOT SE 3; H336 - STOT-single exposure: Category 3; May cause drowsiness or dizziness.

# 2.2 Label elements

# Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms





Flame (GHS02) · Exclamation mark (GHS07)

# Signal word

Warning

### **Hazard components for labelling** N-BUTYL ACETATE ; CAS No. : 123-86-4

**Hazard statements** 

H226 Flammable liquid and vapour. H336 May cause drowsiness or dizziness.

**Precautionary statements** 

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

smoking.

P233 Keep container tightly closed. P261 Avoid breathing vapours.

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

P312 Call a POISON CENTER or a doctor if you feel unwell.

P403+P235 Store in a well-ventilated place. Keep cool.

Supplemental hazard information

EUH066 Repeated exposure may cause skin dryness or cracking.

#### 2.3 Other hazards

None

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

#### 3.2 Mixtures

#### **Hazardous ingredients**

N-BUTYL ACETATE; REACH No.: 01-2119485493-29; EC No.: 204-658-1; CAS No.: 123-86-4

Weight fraction :  $\geq$  95 - < 100 %

Classification 1272/2008 [CLP]: Flam. Liq. 3; H226 STOT SE 3; H336

**Additional information** 

For full text of Hazard- and EU Hazard-statements: see SECTION 16.

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

### 4.1 Description of first aid measures

#### **General information**

Change contaminated, saturated clothing. When in doubt or if symptoms are observed, get medical advice. If unconscious but breathing normally, place in recovery position and seek medical advice.

### Following inhalation

Remove casualty to fresh air and keep warm and at rest. If breathing is irregular or stopped, administer artificial respiration. In case of respiratory tract irritation, consult a physician.

### In case of skin contact

Wash immediately with: Water and soap Rub greasy ointment into the skin.

### After eye contact

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately. Protect uninjured eye.

### Following ingestion

If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention. Keep at rest. Do NOT induce vomiting. No direct artificial respiration to be given by first aider.

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

No information available.

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

None

# **SECTION 5: Firefighting measures**

### 5.1 Extinguishing media

# Suitable extinguishing media

Extinguishing powder, alcohol resistant foam, carbon dioxide (CO<sub>2</sub>), water spray.

# Unsuitable extinguishing media

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Full water jet

# 5.2 Special hazards arising from the substance or mixture

### **Hazardous combustion products**

In case of fire may be liberated: Nitrogen oxides (NOx), carbon monoxide (CO), carbon dioxide (CO2) and pyrolysis products, toxic.

### 5.3 Advice for firefighters

# Special protective equipment for firefighters

Use suitable breathing apparatus.

# 5.4 Additional information

Use water spray jet to protect personnel and to cool endangered containers. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

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

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

Remove all sources of ignition. Provide adequate ventilation. See protective measures under point 7 and 8. Special danger of slipping by leaking/spilling product.

#### 6.2 Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains. Prevent spread over a wide area (e.g. by containment or oil barriers). Make sure spills can be contained, e.g. in sump pallets or kerbed areas.

# 6.3 Methods and material for containment and cleaning up

### For cleaning up

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

# 6.4 Reference to other sections

None

# **SECTION 7: Handling and storage**

### 7.1 Precautions for safe handling

# **Protective measures**

Avoid: Inhalation of vapours or spray/mists, Skin contact, Eye contact. Only use the material in places where open light, fire and other flammable sources can be kept away. If handled uncovered, arrangements with local exhaust ventilation should be used if possible. If local exhaust ventilation is not possible or not sufficient, the entire working area must be ventilated by technical means. Never use pressure to empty container. Only allow access to authorised staff.

### Measures to prevent fire

Keep away from sources of ignition - No smoking. Keep away from sources of heat (e.g. hot surfaces), sparks and open flames. Vapours are heavier than air, spread along floors and form explosive mixtures with air. Take precautionary measures against static discharges. Wear anti-static footwear and clothing Use only antistatically equipped (spark-free) tools.

# **Environmental precautions**

Provide for retaining containers, e.g. floor pan without outflow.

### Advices on general occupational hygiene

Wear personal protection equipment (refer to section 8). When using do not eat, drink, smoke, sniff. Always close containers tightly after the removal of product.

# 7.2 Conditions for safe storage, including any incompatibilities

### Requirements for storage rooms and vessels

Use explosion-proof machinery, apparatus, ventilation facilities, tools etc. Floors should be impervious, resistant to liquids and easy to clean. Provide adequate ventilation as well as local exhaustion at critical locations. Keep container tightly closed.

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# Hints on joint storage

Storage class (TRGS 510): 3 Do not store together with

Strong acid, strong alkali, oxidising agent, food and feedingstuffs.

# Further information on storage conditions

Keep only in the original container in a cool, well-ventilated place.

Protect against: Heat. Humidity.

# 7.3 Specific end use(s)

For the thinning of paints and primers. Intended purpose see technical data sheet.

### **Industrial sector specific solutions**

Note DGUV-Rule 100-500, section 2.29 (processing coating materials).

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

# 8.1 Control parameters

# Occupational exposure limit values

N-BUTYL ACETATE; CAS No.: 123-86-4

Peak limitation: 2(I)
Remark: Y
Version: 02.07.2021
Limit value type (country of origin): STEL ( EC )

Limit value :  $150 \text{ ppm} / 723 \text{ mg/m}^3$ 

 $\label{eq:Version:20.06.2019} \mbox{Limit value type (country of origin)}: \mbox{ TWA ( EC )}$ 

Limit value: 50 ppm / 241 mg/m<sup>3</sup>

Version: 20.06.2019

# **DNEL-/PNEC-values**

### **DNEL/DMEL**

N-BUTYL ACETATE; CAS No.: 123-86-4

Limit value type : DNEL Consumer (systemic)

Exposure route: Inhalation
Exposure frequency: Long-term
Limit value: 102,34 mg/m³
Limit value type: DNEL/DMEL (Industrial)

Exposure route: Inhalation
Exposure frequency: Short-term
Limit value: 96 mg/kg

Limit value type : DNEL/DMEL (Industrial)

Exposure route : Inhalation
Exposure frequency : Long-term
Limit value : 48 mg/m³

Limit value type : DNEL/DMEL (Industrial)

Exposure route : Dermal Exposure frequency : Long-term Limit value : 7 mg/kg

Limit value type : DNEL/DMEL (Industrial)

Exposure route: Inhalation
Exposure frequency: Long-term
Limit value: 480 mg/m³

**PNEC** 

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N-BUTYL ACETATE; CAS No.: 123-86-4

Limit value type : PNEC (Aquatic, freshwater)
Exposure route : Water (Including sewage plant)

Limit value : 0,18 mg/l

Limit value type : PNEC (Aquatic, intermittent release)
Exposure route : Water (Including sewage plant)

Limit value: 0,36 mg/l

Limit value type: PNEC (Aquatic, marine water)
Exposure route: Water (Including sewage plant)

Limit value : 0,018 mg/l

Limit value type : PNEC (Sediment, freshwater)

Exposure route: Soil

Limit value : 0,981 mg/kg

Limit value type : PNEC (Sediment, marine water)

Exposure route : Soil

Limit value : 0,0981 mg/kg
Limit value type : PNEC soil
Exposure route : Soil
Limit value : 0,0903 mg/kg

Limit value type: PNEC (Sewage treatment plant)
Exposure route: Water (Including sewage plant)

Limit value: 35,6 mg/l

### 8.2 Exposure controls

### Personal protection equipment

# Eye/face protection

### Suitable eye protection

goggles (EN 166)

### Remark

Note DGUV-Rule 112-192.

#### Skin protection

### **Hand protection**

Use safety gloves according to EN 374. Suitable glove materials: fluoro-rubber, butyl-rubber or nitrile-rubber. Please pay attention to the glove penetration times of the substances named below in section 2, according to the glove manufactures.

**Remark**: After washing hands replace lost skin fat by fat containing skin creams. Note DGUV-Rule 112-195. Note TRGS 401.

### **Body protection**

**Required properties**: Antistatic, non-melting.

Recommended material: Natural fibres (e.g. cotton), heat-resistant synthetic fibres.

Remark: Note DGUV-Rule 112-189. Note TRGS 401.

### Respiratory protection

Respiratory protection necessary at: Insufficient ventilation, insufficient exhaust or spray application.

### Suitable respiratory protection apparatus

Filter mask with filter type A for short-term work.

European Committee for Standardization (CEN) standards EN 136, 140 and 405 provide respirator masks and EN 149 and 143 provide filter recommendations.

### Remark

Observe the wear time limits according GefStoffV in combination with the rules for using respiratory protection apparatus (BGR 190). Note TRGS 402.

### Other protection measures

Technical measures and the application of suitable work processes have priority over personal protection equipment.

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

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# 9.1 Information on basic physical and chemical properties

# **Appearance**

Physical state: Liquid

Colour: According to product identification.

**Odour** Like solvent.

# **Safety characteristics**

Melting point/freezing point :			No data available		
Initial boiling point and boiling range:	( 1013 hPa )	ca	120 - 200	°C	
Decomposition temperature :			No data available		
Flash point :		>	23 - 60	°C	
Auto-ignition temperature :			No data available		
Lower explosion limit :		ca	1	Vol-%	
Upper explosion limit :		ca	10	Vol-%	
Vapour pressure :	(50 °C)	<	100	hPa	
Density:	( 20 °C )		0,8 - 1	g/cm <sup>3</sup>	
Solvent separation test :	( 20 °C )		not applicable		
Water solubility:	( 20 °C )		No data available		
pH:			No data available		
Flow time :	( 20 °C )	<	13	S	DIN-cup 4 mm
Kinematic viscosity:	( 23 °C )	<	20	mm²/s	
Solid content :			not applicable		

# 9.2 Other information

The physical specifications are approximate values and refer to the used safety relevant component(s).

# **SECTION 10: Stability and reactivity**

# 10.1 Reactivity

No information available.

### 10.2 Chemical stability

Stable under recommended storage and handling conditions (see section 7).

# 10.3 Possibility of hazardous reactions

No information available.

### 10.4 Conditions to avoid

No information available.

# 10.5 Incompatible materials

Exothermic reaction with: Alkali (lye), concentrated. Acid, concentrated. Oxidizing agent.

### 10.6 Hazardous decomposition products

Does not decompose when used for intended uses.

# **SECTION 11: Toxicological information**

# 11.1 Information on toxicological effects

# **Acute toxicity**

**Acute oral toxicity** 

LD50 (N-BUTYL ACETATE; CAS No.: 123-86-4) Parameter:

Oral Exposure route: Species: Rat 10760 mg/kg Effective dose:

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**Acute dermal toxicity** 

Parameter: LD50 ( N-BUTYL ACETATE ; CAS No. : 123-86-4 )

Exposure route: Dermal
Species: Rabbit
Effective dose: > 14000 mg/kg

Acute inhalation toxicity

Parameter: LC50 ( N-BUTYL ACETATE ; CAS No. : 123-86-4 )

Exposure route: Inhalation
Species: Rat
Effective dose: 23,4 mg/kg
Exposure time: 4 h

Corrosion

**Irritation to respiratory tract**May cause respiratory irritation.

STOT-single exposure

STOT SE 3

**Narcotic effects** 

Vapours may cause drowsiness and dizziness.

### 11.3 Symptoms related to the physical, chemical and toxicological characteristics

In case of skin contact

Repeated exposure may cause skin dryness or cracking.

# **SECTION 12: Ecological information**

# 12.1 Toxicity

# **Aquatic toxicity**

Acute (short-term) fish toxicity

Parameter: LC50 ( N-BUTYL ACETATE ; CAS No. : 123-86-4 )
Species: Pimephales promelas (fathead minnow)

Effective dose : 18 mg/l Exposure time : 96 h Acute (short-term) toxicity to crustacea

Parameter: EC50 ( N-BUTYL ACETATE ; CAS No. : 123-86-4 )

Species: Daphnia magna (Big water flea)

Effective dose : 44 mg/l Exposure time : 48 h

Acute (short-term) toxicity to algae and cyanobacteria

Parameter: EC50 ( N-BUTYL ACETATE ; CAS No. : 123-86-4 )

Species: Desmodesmus subspicatus

Effective dose : 647,7 mg/l Exposure time : 72 h

Parameter: EL50 ( N-BUTYL ACETATE ; CAS No. : 123-86-4 )

Species: Desmodesmus subspicatus

Effective dose : 200 mg/l

# 12.2 Persistence and degradability

# Biodegradation

Biodegradable.

### 12.3 Bioaccumulative potential

No information available.

### 12.4 Mobility in soil

No information available.

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#### 12.5 Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

#### 12.6 Other adverse effects

No information available.

### 12.7 Additional ecotoxicological information

#### **Additional information**

Do not allow uncontrolled discharge of product into the environment.

# **SECTION 13: Disposal considerations**

#### 13.1 Waste treatment methods

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process. Dispose of waste according to applicable legislation.

### **Directive 2008/98/EC (Waste Framework Directive)**

#### Before intended use

### Waste codes/waste designations according to EWC/AVV

14 06 03\* (Other solvents and solvent mixtures)

#### After intended use

### Waste codes/waste designations according to EWC/AVV

Uncleaned packaging: 15 01 10\* (Packaging containing residues of or contaminated by dangerous substances) Cleaned packaging: 15 01 04 (Metallic packaging)

#### Other disposal recommendations

Completely emptied packages can be recycled.

### 13.2 Additional information

Note sections 7 and 8.

# **SECTION 14: Transport information**

#### 14.1 UN number

UN 1263

### 14.2 UN proper shipping name

#### Land transport (ADR/RID)

PAINT RELATED MATERIAL

### Sea transport (IMDG)

PAINT RELATED MATERIAL

# Air transport (ICAO-TI / IATA-DGR)

PAINT RELATED MATERIAL

# 14.3 Transport hazard class(es)

### Land transport (ADR/RID)

Class(es): Classification code: F1 Hazard identification number (Kemler 30 No.): **Tunnel restriction code:** D/E Special provisions: LQ 5 | · E 1 Hazard label(s):

Sea transport (IMDG)

Class(es): EmS-No.: F-E / S-D Special provisions: LQ 5 | · E 1 3

Hazard label(s):

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Air transport (ICAO-TI / IATA-DGR)

Class(es): 3
Special provisions: E 1
Hazard label(s): 3

14.4 Packing group

III

14.5 Environmental hazards

Land transport (ADR/RID): No Sea transport (IMDG): No

Air transport (ICAO-TI / IATA-DGR): No

14.6 Special precautions for user

None

# **SECTION 15: Regulatory information**

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

### **EU** legislation

#### Authorisations and/or restrictions on use

Restrictions on use

Use restriction according to REACH annex XVII, no.: 3, 40

#### **Restrictions of occupation**

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.

#### **National regulations**

### Water hazard class

Classification according to AwSV - Class: 1 (Slightly hazardous to water)

# Other regulations, restrictions and prohibition regulations

Note TRGS 001. Note TRGS 400.

# 15.2 Chemical Safety Assessment

A chemical safety assessment has not been carried out.

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

### 16.1 Indication of changes

None

### 16.2 Abbreviations and acronyms

AwSV: Ordinance on plants for the handling of substances hazardous to water. BGR(I): Rule (Information) from the german employers liability insurance association. DGUV: German Statutory Accident Insurance. EWC: European Waste Catalogue. TRGS: German Technical Rule for Hazardous Substances. VCI: German chemical industry association.

### 16.3 Key literature references and sources for data

None

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

Calculation method.

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

H226 Flammable liquid and vapour. H336 May cause drowsiness or dizziness.

# 16.6 Training advice

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None

# 16.7 Additional information

None

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

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