Safety Data Sheet
according to Regulation (EC) No. 1907/2006 (REACH)
according to Regulation (EU) 2015/830

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

1.1. **Product identifier**

Article No. (manufacturer/supplier)	282
Trade name/designation	BLENDA-PUR PU-Streichlack WV-282 matt

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

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

supplier (manufacturer/importer/downstream user/distributor)

Vismara Unternehmungen CH-5000 Aarau www.farbladen.ch

Dept. responsible for information:
laboratory Manager

E-mail (competent person)	info@knuchel.ch

1.4. **Emergency telephone number**

Emergency telephone number	145 (+41 (0)44 251 51 51)

SECTION 2: Hazards identification

2.1. **Classification of the substance or mixture**

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

The mixture is classified as not hazardous according to regulation (EC) No 1272/2008 [CLP].

2.2. **Label elements**

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

Hazard pictograms

Hazard statements

not applicable

Precautionary statements

P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P103	Read label before use.

Hazard components for labelling

not applicable

Supplemental Hazard information (EU)

EUH208	Contains 1,2-benzisothiazol-3(2H)-one. May produce an allergic reaction.
EUH210	Safety data sheet available on request.

2.3. **Other hazards**

No information available.

SECTION 3: Composition / information on ingredients

3.2. **Mixtures**

Description waterborne acryl/PUR resin, containing the following hazardous substances:

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

EC No. CAS No. INDEX No.	REACH No. Designation classification: // Remark	Wt %
203-961-6	01-2119475104-44	
112-34-5	2-(2-butoxyethoxy)ethanol	1 - 2.5
603-096-00-8	Eye Irrit. 2 H319	

Additional information

Full text of H-phrases: see section 16.

SECTION 4: First aid measures

4.1. **Description of first aid measures**

General information

In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness give nothing by mouth, place in recovery position and seek medical advice.

In case of inhalation

Remove casualty to fresh air and keep warm and at rest. In case of irregular breathing or respiratory arrest provide artificial respiration.

Following skin contact

Take off immediately all contaminated clothing. After contact with skin, wash immediately with plenty of water and soap. Do not use solvents or thinners.

After eye contact

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek medical advice immediately.

After ingestion

If swallowed, rinse mouth with water (only if the person is conscious). Seek medical advice immediately. Keep victim calm. Do NOT induce vomiting.

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

In all cases of doubt, or when symptoms persist, seek medical advice.

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

First Aid, decontamination, treatment of symptoms.

SECTION 5: Firefighting measures

5.1. **Extinguishing media**

Suitable extinguishing media

alcohol resistant foam, carbon dioxide, Powder, spray mist, (water)

Unsuitable extinguishing media

strong water jet

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

Dense black smoke occurs during fire. Inhaling hazardous decomposing products can cause serious health damage.

5.3. **Advice for firefighters**

Provide a conveniently located respiratory protective device.Cool closed containers that are near the source of the fire. Do not allow water used to extinguish fire to enter drains, ground or waterways.

SECTION 6: Accidental release measures

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

Ventilate affected area. Do not breathe vapours.

6.2. **Environmental precautions**

Do not allow to enter into surface water or drains. If the product contaminates lakes, rivers or sewages, inform competent authorities in accordance with local regulations.

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

Isolate leaked material using non-flammable absorption agent (e.g. sand, earth, vermiculit, diatomaceous earth) and collect it for disposal in appropriate containers in accordance with the local regulations (see section 13). Clean using cleansing agents. Do not use solvents.

6.4. **Reference to other sections**

Observe protective provisions (see section 7 and 8).

SECTION 7: Handling and storage

7.1. **Precautions for safe handling**

Advices on safe handling

Avoid contact with skin, eyes and clothes. Avoid respiration of swarf. When using do not eat, drink or smoke. Personal protection equipment: refer to section 8. Do not empty containers with pressure - no pressure vessel! Always keep in containers that correspond to the material of the original container. Follow the legal protection and safety regulations.

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

Requirements for storage rooms and vessels

Storage in accordance with the Ordinance on Industrial Safety and Health (BetrSiVO). Keep container tightly closed. Do not empty containers with pressure - no pressure vessel! Smoking is forbidden. Access only for authorised persons. Store carefully closed containers upright to prevent any leaks.

Hints on joint storage

Keep away from strongly acidic and alkaline materials as well as oxidizers.

Further information on storage conditions

Store in a well-ventilated and dry room at temperatures between 15 °C and 30 °C. Keep container tightly closed. Smoking is forbidden. Access only for authorised persons. Store carefully closed containers upright to prevent any leaks.

7.3. **Specific end use(s)**

Observe technical data sheet. Observe instructions for use.

SECTION 8: Exposure controls/personal protection

8.1. **Control parameters** *

Occupational exposure limit values:

2-(2-butoxyethoxy)ethanol
INDEX No. 603-096-00-8 / EC No. 203-961-6 / CAS No. 112-34-5

WEL, TWA: 67.5 mg/m3; 10 ppm
WEL, STEL: 101.2 mg/m3; 15 ppm

Additional information

TWA : long-term occupational exposure limit value
STEL : short-term occupational exposure limit value
Ceiling : peak limitation

DNEL:

2-(2-butoxyethoxy)ethanol
INDEX No. 603-096-00-8 / EC No. 203-961-6 / CAS No. 112-34-5
DNEL long-term oral (repeated), Workers: 1,25 mg/kg
DNEL long-term dermal (systemic), Workers: 20 mg/kg bw/day
DNEL acute inhalative (local), Workers: 101,2 mg/m³
DNEL long-term inhalative (local), Workers: 67,5 mg/m³
DNEL long-term inhalative (systemic), Workers: 67,5 mg/m³
DNEL long-term dermal (systemic), Consumer: 10 mg/kg bw/day
DNEL acute inhalative (local), Consumer: 7,5 mg/m³
DNEL long-term inhalative (local), Consumer: 34 mg/m³
DNEL long-term inhalative (systemic), Consumer: 34 mg/m³

PNEC:

2-(2-butoxyethoxy)ethanol
INDEX No. 603-096-00-8 / EC No. 203-961-6 / CAS No. 112-34-5
PNEC aquatic, freshwater: 1 mg/l
PNEC aquatic, marine water: 0,1 mg/l
PNEC aquatic, intermittent release: 3,9 mg/l
PNEC sediment, freshwater: 4,4 mg/kg
PNEC sediment, marine water: 0,44 mg/kg
PNEC, soil: 0,32 mg/kg dw
PNEC sewage treatment plant (STP): 200 mg/l

8.2. **Exposure controls**

Provide good ventilation. This can be achieved with local or room suction.

Personal protection equipment

Respiratory protection

Not applicable.

Hand protection

For prolonged or repeated handling the following glove material must be used: NBR (Nitrile rubber)
Thickness of the glove material 0,4 mm Breakthrough time (maximum wearing time) 30 min
Observe the instructions and details for use, storage, maintenance and replacement provided by the protective glove manufacturer. Penetration time of glove material depending on intensity and duration of exposure to skin: Recommended

glove articles EN ISO 374
Barrier creams can help protecting exposed skin areas. In no case should they be used after contact.

Eye/face protection
Wear closely fitting protective glasses in case of splashes.

Body protection
Wear suitable protective clothing and gloves.

Protective measures
After contact clean skin thoroughly with water and soap or use appropriate cleanser.

Environmental exposure controls
Do not allow to enter into surface water or drains. See section 7. No additional measures necessary.

SECTION 9: Physical and chemical properties

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

Appearance:	
Physical state:	**Liquid**
Colour:	**refer to label**
Odour:	**characteristic**
Odour threshold:	**not applicable**
pH at 20 °C:	**not applicable**
Melting point/freezing point:	**not applicable**
Initial boiling point and boiling range:	**100 °C** Source: Wasser
Flash point:	**not applicable** Method: DIN 53213
Evaporation rate:	**not applicable**
flammability	
Burning time (s):	**not applicable**
Upper/lower flammability or explosive limits:	
Lower explosion limit:	**0.8 Vol-%**
Upper explosion limit:	**not applicable**
Vapour pressure at 20 °C:	**23 mbar** Source: Wasser
Vapour density:	**not applicable**
Relative density:	
Density at 20 °C:	**1.21 g/cm³**
Solubility(ies):	
Water solubility (g/L) at 20 °C:	**partially soluble**
Partition coefficient: n-octanol/water:	**see section 12**
Auto-ignition temperature:	**225 °C** Source: 2-(2-butoxyethoxy)ethanol
Decomposition temperature:	**not applicable**
Viscosity at °C:	**1600 - 1800 mPas**
Explosive properties:	**not applicable**
Oxidising properties:	**not applicable**

9.2. **Other information**

Solid content (%):	**50 Wt %**
solvent content:	
Organic solvents:	**2 Wt %**
Water:	**47 Wt %**

SECTION 10: Stability and reactivity

10.1. **Reactivity**

No information available.

10.2. **Chemical stability**
Stable when applying the recommended regulations for storage and handling. Further information on correct storage: refer to section 7.

10.3. **Possibility of hazardous reactions**
Keep away from strong acids, strong bases and strong oxidizing agents to avoid exothermic reactions.

10.4. **Conditions to avoid**
Stable when applying the recommended regulations for storage and handling. Further information on correct storage: refer to section 7. Hazardous decomposition byproducts may form with exposure to high temperatures.

10.5. **Incompatible materials**
not applicable

10.6. **Hazardous decomposition products**
Hazardous decomposition byproducts may form with exposure to high temperatures, e.g.: carbon dioxide, carbon monoxide, smoke, nitrogen oxides.

SECTION 11: Toxicological information

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

11.1. **Information on toxicological effects** *

Acute toxicity

2-(2-butoxyethoxy)ethanol
oral, LD50, Rat: > 200 mg/kg
dermal, LD50, Rabbit: 2764 mg/kg
Method: OECD 402
oral, Mouse: 2410 mg/kg
Method: OECD 401
inhalative (dust and mist), LC50, Rat: 29 ppm (2 h)
Method: OECD 403
No mortality within the stated exposure time in animal studies.

Skin corrosion/irritation; Serious eye damage/eye irritation

2-(2-butoxyethoxy)ethanol
Skin (4 h)
Method: OECD 404
No skin irritation
eyes
Method: OECD 405
Irritating to eyes.

Respiratory or skin sensitisation

2-(2-butoxyethoxy)ethanol
Skin, Guinea pig: ; evaluation not sensitising.
Method: OECD 406
Maximization test; dermal

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

2-(2-butoxyethoxy)ethanol
Germ cell mutagenicity; evaluation Did not show any mutagenic effects in animal experiments.
Tests with bacterial or mammalian cell cultures showed no evidence of mutagenic activity.
Carcinogenicity; evaluation The chemical structure does not give rise to any particular suspicion of a carcinogenic effect.
Reproductive toxicity; evaluation No effect on fertility in animal studies.
analogy
teratogenicity; evaluation Did not show any fruit-damaging effect in animal experiments.

STOT-single exposure; STOT-repeated exposure

2-(2-butoxyethoxy)ethanol
Specific target organ toxicity (single exposure)
Based on available data, the classification criteria are not met.
Specific target organ toxicity (repeated exposure) evaluation Based on available data, the classification criteria are not met.
Continued skin contact may cause skin degreasing and dermatitis.

Aspiration hazard

2-(2-butoxyethoxy)ethanol
Aspiration hazard
not applicable
Experiences with human exposure.
Chronic exposure damages the brain and the central nervous system.

Practical experience/human evidence

Inhaling of solvent components above the MWC-value can lead to health damage, e.g. irritation of the mucous membrane and respiratory organs, as well as damage to the liver, kidneys and the central nerve system. Indications for this are: headache, dizziness, fatigue, amyosthenia, drowsiness, in serious cases: unconsciousness. Solvents may cause some of the aforementioned effects through skin resorption. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and/or absorption through skin. Splashing may cause eye irritation and reversible damage.

Overall Assessment on CMR properties

The ingredients in this mixture do not meet the criteria for classification as CMR category 1A or 1B according to CLP.

SECTION 12: Ecological information

Classification according to Regulation (EC) No 1272/2008 [CLP]
Do not allow to enter into surface water or drains.

12.1. **Toxicity** *

2-(2-butoxyethoxy)ethanol
Fish toxicity, LC50, Leuciscus idus (golden orfe): > 100 mg/l (96 h)
Static test
Daphnia toxicity, EC50, Daphnia magna: > 100 mg/l (48 h)
Static test; Directive 67/548/EEC, Annex V, C.2 ; The statement about the toxic effects refers to the norminal concentration level.
Fish toxicity, LC50, Lepomis macrochirus (Bluegill): 1300 mg/l (96 h)
Method: OECD 203
Static test; The statement about the toxic effects refers to the norminal concentration level.
Algae toxicity, EC50, Scenedesmus subspicatus: > 100 mg/l (96 h)
Method: OECD 201
Static test; The statement about the toxic effects refers to the norminal concentration level.
Bacterial toxicity:, EC10, Activated sludge: > 1995 mg/l (30 min)
Method: OECD 209
The statement about the toxic effects refers to the norminal concentration level.

Long-term Ecotoxicity

Toxicological data are not available.

12.2. **Persistence and degradability** *

2-(2-butoxyethoxy)ethanol
Persistence and degradability:
No data available
Biodegradation: > 70 % (28 d); evaluation Readily biodegradable (according to OECD criteria).
Method: OECD 301E
aerobic; activated sludge; 10 mg/l
Biodegradation: > 100 % (28 d); evaluation Readily biodegradable (according to OECD criteria).
Method: OECD 302B
aerobic; activated sludge; 500 mg/l
Biodegradation:: 80 - 90 %; evaluation Readily biodegradable (according to OECD criteria).
Method: OECD 301C
aerobic; mixed inoculum; based on: Theoretical oxygen demand
Biodegradation: 76 % (28 d); evaluation Readily biodegradable (according to OECD criteria).
Method: OECD 301D
Biodegradation: 90 - 100 % (8 d); evaluation Readily biodegradable (according to OECD criteria).
Method: OECD 302B
Biodegradation: 90 - 100 % (14 d); evaluation Readily biodegradable (according to OECD criteria).
Method: OECD 301E

12.3. **Bioaccumulative potential** *

2-(2-butoxyethoxy)ethanol
Distribution coefficient n-octanol/water (log KOW): 1
Method: OECD 117
The product has a low bioaccumulation potential

Bioconcentration factor (BCF)

Toxicological data are not available.

12.4. **Mobility in soil** *

2-(2-butoxyethoxy)ethanol
Water: evaluation The product is water soluble.
Air: evaluation The substance does not evaporate from the water surface into the atmosphere.
soil: evaluation A binding to the solid ground phase is not to be expected.

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.

SECTION 13: Disposal considerations

13.1. **Waste treatment methods**

Appropriate disposal / Product
Recommendation
Do not allow to enter into surface water or drains. This material and its container must be disposed of in a safe way. Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste.

List of proposed waste codes/waste designations in accordance with EWC
080112 waste paint and varnish other than those mentioned in 08 01 11

Appropriate disposal / Package
Recommendation
Non-contaminated packages may be recycled. Vessels not properly emptied are special waste.

SECTION 14: Transport information

This mixture is not classified as dangerous according to international transport regulations (ADR/RID, IMDG, ICAO/IATA).
No dangerous good in sense of this transport regulation.

14.1. **UN number**

not applicable

14.2. **UN proper shipping name**

14.3. **Transport hazard class(es)**

not applicable

14.4. **Packing group**

not applicable

14.5. **Environmental hazards**

Land transport (ADR/RID)	not applicable
Marine pollutant	not applicable

14.6. **Special precautions for user**

Transport always in closed, upright and safe containers. Make sure that persons transporting the product know what to do in case of an accident or leakage.
Advices on safe handling: see parts 6 - 8

Further information

Land transport (ADR/RID)

tunnel restriction code	-

Sea transport (IMDG)

EmS-No.	not applicable

14.7. **Transport in bulk according to Annex II of MARPOL 73/78 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 legislation

Directive 2010/75/EU on industrial emissions

VOC-value (in g/L): 31

National regulations

Restrictions of occupation

Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.
Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC).

Other regulations, restrictions and prohibition regulations

15.2. **Chemical Safety Assessment**

For the following substances of this mixture a chemical safety assessment has been carried out:

EC No. CAS No.	Designation	REACH No.
203-961-6 112-34-5	2-(2-butoxyethoxy)ethanol	01-2119475104-44

SECTION 16: Other information

Full text of classification in section 3

Eye Irrit. 2 / H319	Serious eye damage/eye irritation	Causes serious eye irritation.

Abbreviations and acronyms

ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
OEL	Occupational Exposure Limit Value
BLV	Biological Limit Value
CAS	Chemical Abstracts Service
CLP	Classification, Labelling and Packaging
CMR	Carcinogenic, Mutagenic and Reprotoxic
DIN	German Institute for Standardization / German industrial standard
DNEL	Derived No-Effect Level
EAKV	European Waste Catalogue Directive
EC	Effective Concentration
EC	European Community
EN	European Standard
IATA-DGR	International Air Transport Association – Dangerous Goods Regulations
IBC Code	International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
ICAO-TI	International Civil Aviation Organization Technical Instructions for the Safe Transport of Dangerous Goods by Air
IMDG Code	International Maritime Code for Dangerous Goods
ISO	International Organization for Standardization
LC	Lethal Concentration
LD	Lethal Dose
MARPOL	Maritime Pollution: The International Convention for the Prevention of Pollution from Ships
OECD	Organisation for Economic Cooperation and Development
PBT	persistent, bioaccumulative, toxic
PNEC	Predicted No Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
UN	United Nations
VOC	Volatile Organic Compounds
vPvB	very persistent and very bioaccumulative

Further information

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

The information supplied on this safety data sheet complies with our current level of knowledge as well as with national and EU regulations. Without written approval, the product must not be used for purposes different from those mentioned in

chapter 1. It is always the user's duty to take any necessary measures for meeting the requirements laid down by local rules and regulations. The details in this safety data sheet describe the safety requirements of our product and are not to be regarded as guaranteed attributes of the product.

* Data changed compared with the previous version