

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 30.07.2018

Version number 4

Revision: 30.07.2018

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1 Product identifier**Trade name **PUR Aqua Top 2K M Plus, Comp. B**

Article number: 3631

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

No further relevant information available.

Application of the substance / the mixture Sealing**Uses advised against** No further relevant information available.**1.3 Details of the supplier of the safety data sheet****Manufacturer/Supplier:**

Remmers GmbH
Postfach 1255
D-49624 Lönningen / Germany
Tel.: +49(0)5432/83-0
Fax: +49(0)5432/3985

Remmers (UK) Limited
Unit B1 The Fleming Centre
West Sussex RH10 9NN
fon +44 (0) 1293 594 010
fax +44 (0) 1293 594 037

Information department:

Product Safety department: Tel.: Steve Dunn Tel.: +44 (0) 1293 594 010
E-Mail: sales@remmers.co.uk

1.4 Emergency telephone number:

during working hours:

U.K.: Tel.: +44 (0) 1293 594 010

sales@remmers.co.uk

Head Office Germany: Tel.: +49 (0)5432 83 187

info@remmers.de

after working hours: Tel.: +49 (0)171 21 34 091

24h-Transport Emergency Contact Phone Number:

within USA and Canada: 1-800-424-9300

outside USA and Canada: 001-703-527-3887

SECTION 2: Hazards identification**2.1 Classification of the substance or mixture****Classification according to Regulation (EC) No 1272/2008**

Acute Tox. 4 H332 Harmful if inhaled.

Skin Sens. 1 H317 May cause an allergic skin reaction.

STOT SE 3 H335 May cause respiratory irritation.

2.2 Label elements**Labelling according to Regulation (EC) No 1272/2008**

The product is classified and labelled according to the CLP regulation.

Hazard pictograms

GHS07

Signal word Warning**Hazard-determining components of labelling:**

aliphatic polyisocyanate

aliphatic polyisocyanate

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 30.07.2018

Version number 4

Revision: 30.07.2018

Trade name **PUR Aqua Top 2K M Plus, Comp. B**

(Contd. of page 1)

Hazard statements

H332 Harmful if inhaled.
 H317 May cause an allergic skin reaction.
 H335 May cause respiratory irritation.

Precautionary statements

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
 P280 Wear protective gloves.
 P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
 P312 Call a POISON CENTER/doctor if you feel unwell.
 P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
 P362+P364 Take off contaminated clothing and wash it before reuse.
 P403+P233 Store in a well-ventilated place. Keep container tightly closed.

Additional information:

EUH204 Contains isocyanates. May produce an allergic reaction.

2.3 Other hazards**Results of PBT and vPvB assessment**

PBT: Not applicable.

vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

3.2 Chemical characterisation: Mixtures

Description: Mixture of the substances listed below with harmless additions.

Dangerous components:		
CAS: 28182-81-2 NLP: 500-060-2	aliphatic polyisocyanate ----- Acute Tox. 4, H332; Skin Sens. 1, H317; STOT SE 3, H335	60-80%
CAS: 666723-27-9	aliphatic polyisocyanate ----- Acute Tox. 3, H331; Skin Sens. 1, H317; STOT SE 3, H335; Aquatic Chronic 3, H412	10-20%

Additional information For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information Immediately remove any clothing soiled by the product.

After inhalation

Supply fresh air and call for doctor for safety reasons.
 In case of unconsciousness bring patient into stable side position for transport.

After skin contact

If skin irritation continues, consult a doctor.
 Wash immediately with water and soap and rinse thoroughly.

After eye contact Rinse opened eye for several minutes under running water.

After swallowing Do not induce vomiting; call for medical help immediately.

4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed

symptomatic treatment

SECTION 5: Firefighting measures

5.1 Extinguishing media**Suitable extinguishing agents**

Carbon dioxide

Foam

Fire-extinguishing powder

For larger fires also sprayed water.

Use fire fighting measures that suit the environment.

For safety reasons unsuitable extinguishing agents Water with a full water jet.

5.2 Special hazards arising from the substance or mixture

May be released in case of fire

Carbon monoxide (CO)

Carbon dioxide

(Contd. on page 3)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 30.07.2018

Version number 4

Revision: 30.07.2018

Trade name **PUR Aqua Top 2K M Plus, Comp. B**

(Contd. of page 2)

Nitrogen oxides (NOx)
 Isocyanate fumes
 Hydrogen cyanide (HCN)
 (Traces)
 further harmful conflagration gases and fumes

5.3 Advice for firefighters**Protective equipment:**

Wear self-contained breathing apparatus.
 Wear full protective suit.
 Put on breathing apparatus.

Additional information

Cool endangered containers with water spray jet.
 Collect contaminated fire fighting water separately. It must not enter drains.
 Ensure adequate means of retaining the water used for extinguishing
 Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

SECTION 6: Accidental release measures**6.1 Personal precautions, protective equipment and emergency procedures**

Keep away from ignition sources
 Ensure adequate ventilation

6.2 Environmental precautions: Do not allow to enter the ground/soil.**6.3 Methods and material for containment and cleaning up:**

Remove mechanically: Cover remains with damp, liquid-binding material (e.g. sawdust, chemical binders on a calcium silicate-hydrate base, sand). After approx. 1 hour, take up and place in refuse container. Do not close (CO₂-development!) Keep damp and allow to stand in a safe place outdoors for several days.

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
 Ensure adequate ventilation.

6.4 Reference to other sections

See Section 7 for information on safe handling
 See Section 8 for information on personal protection equipment.
 See Section 13 for information on disposal.

SECTION 7: Handling and storage**7.1 Precautions for safe handling**

Use only in well ventilated areas.
 Ensure good ventilation, if necessary extract air in work places.
 Ensure good ventilation/exhaust in workplaces.

Information about protection against explosions and fires:

Fumes can combine with air to form an explosive mixture.

7.2 Conditions for safe storage, including any incompatibilities**Storage****Requirements to be met by storerooms and containers:**

Store only in the original container.
 Prevent any penetration into the ground.

Further information about storage conditions:

Store container in a well ventilated position.
 Protect from humidity and keep away from water.
 Protect from frost.
 Keep container tightly closed.

7.3 Specific end use(s) No further relevant information available.**SECTION 8: Exposure controls/personal protection****Additional information about design of technical systems:** Use only in well-ventilated areas.**8.1 Control parameters****Components with limit values that require monitoring at the workplace:**

The product does not contain any relevant quantities of materials with limit values that have to be monitored at the workplace.

Additional information: The lists that were valid during compilation were used as a basis.

(Contd. on page 4)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 30.07.2018

Version number 4

Revision: 30.07.2018

Trade name **PUR Aqua Top 2K M Plus, Comp. B**

(Contd. of page 3)

8.2 Exposure controls**Personal protective equipment****General protective and hygienic measures**

Use skin protection cream for preventive skin protection.

The handling of this product is not recommended for persons with respiratory system and skin hypersensitivity (asthma, chronic bronchitis, chronic skin disease).

Keep away from food, beverages and animal feed.

Immediately remove soiled, saturated clothing.

Wash hands before pauses and after work.

Respiratory equipment:

In case of a risk of inhaling, wear half-mask with combination filter for organic vapours and particles. Filter A/P2.

Only use ambient air independent respiratory equipment in pits, shafts and silos!

In case of brief exposure or low pollution load, use respiratory protection equipment with filter. In case of intensive or longer exposure, use self-contained respiratory protection equipment.

Protection of hands:

Impervious gloves

Protective gloves.

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Material of gloves

Butyl rubber, BR

Nitrile rubber, NBR

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material

The determined penetration times according to EN 374 part III are not performed under practical conditions. Therefore a maximum wearing time, which corresponds to 50% of the penetration time, is recommended.

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection: Face protection**Body protection:** Protective work clothing.**SECTION 9: Physical and chemical properties****9.1 Information on basic physical and chemical properties****General Information****Appearance:**

Form:	Fluid
Colour:	clear
Odour:	Odourless
Odour threshold:	Not determined.

pH-value: Not determined.**Change in condition**

Melting point/freezing point:	Not determined
Initial boiling point and boiling range:	Not determined

Flash point: ca. 185 °C**Inflammability (solid, gaseous)** Not applicable.**Ignition temperature:** ca. 445 °C**Decomposition temperature:** ca. 181 °C**Self-inflammability:** Product is not self-igniting.**Explosive properties:** Product is not explosive.

(Contd. on page 5)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 30.07.2018

Version number 4

Revision: 30.07.2018

Trade name **PUR Aqua Top 2K M Plus, Comp. B**

(Contd. of page 4)

Explosive Limits:	
Lower:	Not determined.
Upper:	Not determined.
Vapour pressure at 20 °C:	ca. 5 hPa
Density at 20 °C:	ca. 1.15 g/cm ³
Relative density	Not determined.
Vapour density	Not determined.
Evaporation rate	Not determined.
Solubility in / Miscibility with Water:	Not miscible or difficult to mix
Distribution coefficient (n-octanol/water):	Not determined.
Viscosity:	
dynamic at 20 °C:	570-730 mPas
kinematic:	Not determined.
Solvent separation test	< 3 %
9.2 Other information	No further relevant information available.

SECTION 10: Stability and reactivity

10.1 Reactivity No further relevant information available.

10.2 Chemical stability

Thermal decomposition / conditions to be avoided:

No decomposition if handled and stored according to specifications.

10.3 Possibility of hazardous reactions

Exothermic reaction with amines and alcohols.

With water carbon dioxide development, pressure build-up in closed containers.

Danger of bursting

10.4 Conditions to avoid No further relevant information available.

10.5 Incompatible materials:

Amines

Alcohols

10.6 Hazardous decomposition products:

None if used properly.

None if stored properly.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity:

Harmful if inhaled.

LD/LC50 values that are relevant for classification:

ATE (Acute Toxicity Estimates)

Inhalative	LC50/4 h	7.17 mg/l
------------	----------	-----------

Skin corrosion/irritation: Dries skin out.

Serious eye damage/irritation: Based on available data, the classification criteria are not met.

Sensitisation:

May cause an allergic skin reaction.

Additional toxicological information:

Special characteristics/effects of isocyanates:

In case of over-exposure - especially when spraying isocyanate based varnishes without protective measures - there is a danger of a concentration-dependent, irritating effect on eyes, nose, throat, and respiratory tract. The delayed appearance of symptoms and the development of hypersensitivity (trouble breathing, cough, asthma) are possible. For hypersensitive persons, reactions may be triggered by very low isocyanate concentrations, also below the TLV value. In case of prolonged contact with skin, tanning and irritating effects are possible.

Germ cell mutagenicity: Based on available data, the classification criteria are not met.

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

(Contd. on page 6)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 30.07.2018

Version number 4

Revision: 30.07.2018

Trade name **PUR Aqua Top 2K M Plus, Comp. B**

(Contd. of page 5)

Reproductive toxicity: Based on available data, the classification criteria are not met.**STOT-single exposure:**

May cause respiratory irritation.

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.**SECTION 12: Ecological information****12.1 Toxicity****Aquatic toxicity:** No further relevant information available.**12.2 Persistence and degradability** No further relevant information available.**12.3 Bioaccumulative potential** No further relevant information available.**12.4 Mobility in soil** No further relevant information available.**Additional ecological information:****General notes:**

Do not allow product to reach ground water, bodies of water or sewage system.

Do not allow undiluted or larger quantities of the product to reach ground water, bodies of water or sewage system.

12.5 Results of PBT and vPvB assessment**PBT:** Not applicable.**vPvB:** Not applicable.**12.6 Other adverse effects** No further relevant information available.**SECTION 13: Disposal considerations****Recommendation**

Not hardened material must be disposed of as hazardous waste according to official regulations.

Hardened product remains may be disposed of as building rubble or put into household garbage.

The given refuse codes are recommendations based upon the intended use of the product. Because of special use and disposal conditions at the user's, other codes may apply under other conditions.

European waste catalogue	
08 05 01*	waste isocyanates

Uncleaned packaging:**Recommendation:** Disposal must be made according to official regulations.**SECTION 14: Transport information**

14.1 UN-Number ADR, ADN, IMDG, IATA	Void
14.2 UN proper shipping name ADR, ADN, IMDG, IATA	Void
14.3 Transport hazard class(es) ADR, ADN, IMDG, IATA Class	Void
14.4 Packing group ADR, IMDG, IATA	Void
14.5 Environmental hazards: Marine pollutant:	No
14.6 Special precautions for user	Not applicable.
14.7 Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable.
Transport/Additional information:	Not a hazardous good according to the above regulations.
UN "Model Regulation":	Void

(Contd. on page 7)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 30.07.2018

Version number 4

Revision: 30.07.2018

Trade name **PUR Aqua Top 2K M Plus, Comp. B**

(Contd. of page 6)

SECTION 15: Regulatory information

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

Directive 2012/18/EU

Named dangerous substances - ANNEX I None of the ingredients is listed.

REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3

National regulations

Other regulations, limitations and prohibition ordinances

From the European Committee of the Associations for varnish, printing ink and artistry paint producers - CEPE - the following information is given for isocyanate based coating materials:

Ready-to-use coating materials that contain isocyanates may have an irritating effect on mucous membranes - especially on respiratory organs - and cause hypersensitivity reactions. There is a risk of sensitization if vapours or sprayed mist are inhaled. When handling isocyanate based coating materials, all measures for solvent based coating materials must be strictly observed. Sprayed mist and vapours especially should not be inhaled.

Persons with allergies or asthma who have a tendency for respiratory tract ailments should not be allowed to work with isocyanate based coating materials.

15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

Delivery specifications are found in the respective Technical Information Sheets.

This data is based on our present state of knowledge. However, it does not constitute a guarantee for any specific product features and does not establish a legally valid contractual relationship.

Relevant phrases

H317 May cause an allergic skin reaction.

H331 Toxic if inhaled.

H332 Harmful if inhaled.

H335 May cause respiratory irritation.

H412 Harmful to aquatic life with long lasting effects.

Department issuing data specification sheet: Product Safety department / EHS

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 Harmonised 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 (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Acute Tox. 3: Acute toxicity – Category 3

Acute Tox. 4: Acute toxicity – Category 4

Skin Sens. 1: Skin sensitisation – Category 1

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3