Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 11.10.2021 Version number 6 (replaces version 5) Revision: 20.05.2020

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

1.1 Product identifier

Trade name PUR TOP M PLUS

Article number: 6735

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

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:

Remmers GmbH
Bernhard-Remmers-Str. 13
D-49624 Löningen / Germany
Tel.: +49(0)5432/83-0
Fax: +49(0)5432/3985

Remmers (UK) Limited
Unit 4 , Lloyds Court
Manor Royal, Crawley – West Sussex RH10 9QU
fon +44 (0) 1293 594 010
fax +44 (0) 1293 594 037

Information department:
Product Safety department: Phone: +44 (0) 1293 594 010
Email: sales@remmers.co.ukk

1.4 Emergency telephone number:

National Poisons Information Service (NPIS):
In England and Wales: NHS 111 - dial 111
In Scotland: NHS 24 - dial 111

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.
Repr. 1B	H360 May damage fertility or the unborn child.
STOT SE 3	H335 May cause respiratory irritation.
Aquatic Chronic 3	H412 Harmful to aquatic life with long lasting effects.

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 GHS08

Signal word Danger

Hazard-determining components of labelling:
hexamethylene diisocyanate, oligomers
dibutyltin dilaurate
bis(2,3-epoxypropyl)cyclohexane-1,2-dicarboxylate

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hexamethylene-di-isocyanate
bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate
alpha-3-(2H-Benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl)-omega-3-(3-(2H-benzo-triazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)
alpha-3-(3-(2H-Benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-omega-hydroxypoly(oxi-ethylen)
methyl 1,2,2,6,6-pentamethyl-4-piperidylsebacate

Hazard statements
H332 Harmful if inhaled.
H317 May cause an allergic skin reaction.
H360 May damage fertility or the unborn child.
H335 May cause respiratory irritation.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statements
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P403+P233 Store in a well-ventilated place. Keep container tightly closed.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Additional information:
Restricted to professional users.
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 Mixtures
Description: Mixture of the substances listed below with harmless additions.

Dangerous components [% w/w]:		
CAS: 28182-81-2 NLP: 500-060-2 Reg.nr.: 01-2119485796-17-XXXX	hexamethylene diisocyanate, oligomers Acute Tox. 4, H332; Skin Sens. 1, H317; STOT SE 3, H335	≥60-<80%
EC number: 939-340-8 Reg.nr.: 01-2119970543-34-XXXX	hexamethylene diisocyanate, oligomers Acute Tox. 4, H332; Skin Sens. 1, H317; STOT SE 3, H335	≥10-<20%
CAS: 5493-45-8 EINECS: 226-826-3	bis(2,3-epoxypropyl)cyclohexane-1,2-dicarboxylate Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; Aquatic Chronic 3, H412	≥2.5-<5%
CAS: 108-32-7 EINECS: 203-572-1 Index number: 607-194-00-1	propylene carbonate Eye Irrit. 2, H319	≥2.5-<5%
CAS: 41556-26-7 EINECS: 255-437-1	bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Skin Sens. 1, H317	≥1-<2.5%
CAS: 104810-47-1	alpha-3-(2H-Benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl)-omega-3-(3-(2H-benzo-triazol-2-yl)-5-tert-butyl-4-hydroxyphenyl) Aquatic Chronic 2, H411; Skin Sens. 1, H317	≥1-<2.5%

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CAS: 104810-48-2	alpha-3-(3-(2H-Benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-omega-hydroxypoly(oxi-ethylen) Aquatic Chronic 2, H411; Skin Sens. 1, H317	≥1-<2.5%
CAS: 77-58-7 EINECS: 201-039-8	dibutyltin dilaurate Acute Tox. 3, H301; Muta. 2, H341; Repr. 1B, H360; STOT RE 1, H372; Skin Corr. 1B, H314; Aquatic Acute 1, H400; Aquatic Chronic 1, H410	≥0.3-≤0.5%
CAS: 82919-37-7 EINECS: 280-060-4	methyl 1,2,2,6,6-pentamethyl-4-piperidylsebacate Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Skin Sens. 1, H317	≥0.25-≤0.5%
CAS: 822-06-0 EINECS: 212-485-8 Index number: 615-011-00-1 Reg.nr.: 01-2119457571-37-XXXX	hexamethylene-di-isocyanate Acute Tox. 2, H330; Resp. Sens. 1, H334; Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; STOT SE 3, H335, EUH204 Specific concentration limits: Resp. Sens. 1; H334: C ≥ 0.5 % Skin Sens. 1; H317: C ≥ 0.5 %	≤0.1%

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
If symptoms occur or in case of doubt, seek medical attention. In case of unconsciousness, do not administer anything orally.
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
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 Wash immediately with water and soap and rinse thoroughly.
After eye contact Rinse opened eye for several minutes under running water.
After swallowing Seek immediate medical advice.
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 Use fire fighting measures that suit the environment.
5.2 Special hazards arising from the substance or mixture
Formation of toxic gases is possible during heating or in case of fire.
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

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6.2 Environmental precautions:
Do not allow to enter the ground/soil.
Inform responsible authorities in case product reaches bodies of water or sewage system.
Dilute with plenty of water.
6.3 Methods and material for containment and cleaning up:
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose of contaminated material as waste according to item 13.
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.

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SECTION 7: Handling and storage

7.1 Precautions for safe handling
Use only in well ventilated areas.
Ensure good ventilation/exhaust in workplaces.
Avoid the formation of aerosols.
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.
Information on storage in a common storage facility: none
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

8.1 Control parameters

Components with limit values that require monitoring at the workplace:	
CAS: 77-58-7 dibutyltin dilaurate	
WEL	Short-term value: 0.2 mg/m³ Long-term value: 0.1 mg/m³ as Sn; Sk
CAS: 822-06-0 hexamethylene-di-isocyanate	
WEL	Short-term value: 0.07 mg/m³ Long-term value: 0.02 mg/m³ Sen; as -NCO

Ingredients with biological limit values:	
CAS: 822-06-0 hexamethylene-di-isocyanate	
BMGV	1 µmol creatinine/mol Medium: urine Sampling time: At the end of the period od exposure Parameter: isocyanate-derived diamine

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

8.2 Exposure controls
Appropriate engineering controls Use only in well-ventilated areas.
Individual protection measures, such as personal protective equipment
General protective and hygienic measures
Use skin protection cream for preventive skin protection.
The handling of this product ist not recommended for persons with respiratory system and skin hypersensitivity (asthma, chronic bronchitis, chronic skin disease).

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Keep away from food, beverages and animal feed.
Immediately remove soiled, saturated clothing.
Wash hands before pauses and after work.
The following indication regarding the personal protective equipment are to be considered as suggestions.The selection of the necessary personal protective equipment is to be evalutated by the employer depending on the types of operations and the local circumstances.If a risk assessment on-site shows that there is no risk for employees, the personal protective euiqment is not required or the amount of the PPE can be adpated accordingly.

Respiratory equipment:
Short term filter device:
Filter A/P2.
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.

Hand protection
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 16523-1:2015 are not performed under practical conditions. Therefore a maximum wearing time, which corresponds to 50% of the penetration time, is recommended.
The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye/face protection Face protection
Body protection: Protective work clothing.

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SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information	
Colour:	According to product specification
Odour:	Characteristic
Odour threshold:	Not determined.
Melting point/freezing point:	Not determined
Boiling point or initial boiling point and boiling range	Not determined
Flammability	Not applicable.
Lower and upper explosion limit	
Lower:	Not determined.
Upper:	Not determined.
Flash point:	180 °C
Decomposition temperature:	Not determined.
pH	Not determined.
Viscosity:	
Kinematic viscosity	Not determined.
dynamic:	Not determined.
Solubility	
Water:	Fully miscible
Partition coefficient n-octanol/water (log value)	Not determined.
Vapour pressure:	Not determined.
Density and/or relative density	
Density at 20 °C:	1.159 g/cm³
Relative density	Not determined.

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Vapour density	Not determined.
9.2 Other information	
Appearance:	
Form:	Liquid
Important information on protection of health and environment, and on safety.	
Ignition temperature:	not applicable
Explosive properties:	Product is not explosive.
Solvent separation test	< 3 %
VOC EU	39.6 g/l
Solid content:	37.3 %
Change in condition	
Evaporation rate	Not determined.
Information with regard to physical hazard classes	
Explosives	Void
Flammable gases	Void
Aerosols	Void
Oxidising gases	Void
Gases under pressure	Void
Flammable liquids	Void
Flammable solids	Void
Self-reactive substances and mixtures	Void
Pyrophoric liquids	Void
Pyrophoric solids	Void
Self-heating substances and mixtures	Void
Substances and mixtures, which emit flammable gases in contact with water	Void
Oxidising liquids	Void
Oxidising solids	Void
Organic peroxides	Void
Corrosive to metals	Void
Desensitised explosives	Void

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 hazard classes as defined in Regulation (EC) No 1272/2008
Acute toxicity:
Harmful if inhaled.

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LD/LC50 values that are relevant for classification:		
CAS: 28182-81-2 hexamethylene diisocyanate, oligomers		
Oral	LD50	>5,000 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rat)
CAS: 77-58-7 dibutyltin dilaurate		
Oral	LD50	175 mg/kg (rat)

Skin corrosion/irritation: Based on available data, the classification criteria are not met.
Serious eye damage/irritation: Based on available data, the classification criteria are not met.
Sensitisation:
May cause an allergic skin reaction.
Germ cell mutagenicity: Based on available data, the classification criteria are not met.
Carcinogenicity: Based on available data, the classification criteria are not met.
Reproductive toxicity:
May damage fertility or the unborn child.
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.
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.
11.2 Information on other hazards

Endocrine disrupting properties
None of the ingredients is listed.

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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.
12.5 Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.
12.6 Endocrine disrupting properties
For information on endocrine disrupting properties see section 11.
12.7 Other adverse effects
Remark: Harmful to fish
Additional ecological information:
General notes:
Do not allow product to reach ground water, bodies of water or sewage system.
Harmful to aquatic organisms

*
SECTION 13: Disposal considerations

Recommendation
Do not dispose of together with household garbage. Do not allow product to reach sewage system.
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 04 09*	waste adhesives and sealants containing organic solvents or other hazardous substances
08 04 10	waste adhesives and sealants other than those mentioned in 08 04 09

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Uncleaned packaging:
Recommendation:
Packaging can be reused or recycled after cleaning.
Disposal must be made according to official regulations.
Recommended cleaning agent: Water, if necessary with cleaning agent.

SECTION 14: Transport information

14.1 UN number or ID 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 Maritime transport in bulk according to IMO instruments	Not applicable.
Transport/Additional information:	Not a hazardous good according to the above regulations.
UN "Model Regulation":	Void

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, 20, 30, 74

Regulation (EU) No 649/2012		
CAS: 77-58-7	dibutyltin dilaurate	Annex I Part 1

DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II

None of the ingredients is listed.

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.

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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
H301 Toxic if swallowed.
H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H330 Fatal if inhaled.
H332 Harmful if inhaled.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335 May cause respiratory irritation.
H341 Suspected of causing genetic defects.
H360 May damage fertility or the unborn child.
H372 Causes damage to organs through prolonged or repeated exposure.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
H411 Toxic to aquatic life with long lasting effects.
H412 Harmful to aquatic life with long lasting effects.
EUH204 Contains isocyanates. May produce an allergic reaction.
Classification according to Regulation (EC) No 1272/2008 Calculation method

Department issuing data specification sheet: Product Safety department / EHS
Version number of previous version: 5
Abbreviations and acronyms:
ADR: Accord relatif au transport international 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. 2: Acute toxicity – Category 2
Acute Tox. 4: Acute toxicity – Category 4
Skin Corr. 1B: Skin corrosion/irritation – Category 1B
Skin Irrit. 2: Skin corrosion/irritation – Category 2
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
Resp. Sens. 1: Respiratory sensitisation – Category 1
Skin Sens. 1: Skin sensitisation – Category 1
Muta. 2: Germ cell mutagenicity – Category 2
Repr. 1B: Reproductive toxicity – Category 1B
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
STOT RE 1: Specific target organ toxicity (repeated exposure) – Category 1
Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1
Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1
Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2
Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3