

Material Safety Data Sheet

according to 1907/2006/EC, Article 31

Printing date 28.01.2009

Revision: 27.07.2007

1 Identification of substance

- **Product details**
- **Trade name** PUR Roof Coat TC
- **Article number:** 9007
- **Application of the substance / the preparation** Coating
- **Manufacturer/Supplier:**
Remmers Baustofftechnik GmbH
Postfach 1255
D-49624 Lönningen / Germany
Tel.: 05432/83-0
Fax: 05432/3985
- **Informing department:**
Product Safety department: Tel.: +49 (0)5432/83-138/-538
E-Mail: sales@remmers.co.uk
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U.K.: Tel.: +44 (0) 845 373 0103
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2 Hazards identification

- **Hazard designation:**



Xi Irritant

- **Information pertaining to particular dangers for man and environment**
R 10 Flammable.
R 43 May cause sensitisation by skin contact.
R 52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- **Classification system**
The classification is in line with current EC lists. It is expanded, however, by information from technical literature and by information furnished by supplier companies.

3 Composition/information on ingredients

- **Chemical characterization**
- **Description:** Aliphatic Polyisocyanate in organic solvents

- **Dangerous components:**

CAS: 108-65-6 EINECS: 203-603-9	2-methoxy-1-methylethyl acetate Xi; R 10-36	10-<20%
CAS: 28182-81-2	aliphatic polyisocyanate Xi; R 43	2.5-<5%
	Solvent naphtha (mineral oil), slight aromatic Xn; R 65	2.5-<5%

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CAS: 95-63-6 EINECS: 202-436-9	1,2,4-trimethylbenzene Xn, Xi, N; R 10-20-36/37/38-51/53	1-<2.5%
CAS: 108-67-8 EINECS: 203-604-4	mesitylene Xi, N; R 10-37-51/53	≤1.0%

· **Additional information** For the wording of the listed risk phrases refer to section 16.

4 First aid measures

· General information

Immediately remove any clothing soiled by the product.

If symptoms occur or in case of doubt, seek medical attention. In case of unconsciousness, do not administer anything orally.

In case of irregular breathing or respiratory arrest, provide artificial respiration.

· After inhalation

Take affected persons into the open air and position comfortably

Call a doctor immediately.

· After skin contact

Wipe off with a dry towel.

Wash immediately with water and soap and rinse thoroughly.

If skin irritation continues, consult a doctor.

· After eye contact

Rinse opened eye for several minutes under running water. Then consult doctor.

· After swallowing

Rinse out mouth immediately with plenty of water and administer plenty of water in small swallows (diluting effect).

Do not induce vomiting; call for medical help immediately.

· Information for doctor

· The following symptoms may occur:

In case of prolonged/repeated exposure or in high concentrations:

Headache

Dizziness

nausea

Unconsciousness

Dry skin

Skin contact may cause irritation.

Inhalation may have an irritating effect on mucous membranes.

May cause irritation of the eyes.

· **Danger** Long-term or repeated exposure may cause inflammation of the skin (dermatitis).

· **Treatment**

symptomatic treatment

To avoid dermatitis (skin inflammation), use skin cream.

5 Fire fighting measures

· Suitable extinguishing agents

Foam

Water spray jet

Water mist

Dry extinguishing agents, carbon dioxide, sand or earth should only be used for small fires.

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

· **Special hazards caused by the material, its products of combustion or flue gases:**

Formation of poisonous gases during heating or in fires.

· **Protective equipment:**

Wear self-contained breathing apparatus.

Wear full protective suit.

· **Additional information**

Cool endangered containers with water spray jet.

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Collect contaminated fire fighting water separately. It must not enter drains.
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

6 Accidental release measures

- **Person-related safety precautions:**

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

Keep away from ignition sources

- **Measures for environmental protection:**

Do not allow to enter the ground/soil.

Do not allow to enter sewage system, surface or ground water.

- **Measures for cleaning/collecting:**

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

Send for recovery or disposal in suitable containers.

- **Additional information:**

See Section 13 for information on disposal.

Fumes can combine with air to form an explosive mixture.

7 Handling and storage

- **Handling**

- **Information for safe handling:**

Always avoid direct contact with the product!

Ensure good ventilation, if necessary extract air in work places.

- **Information about protection against explosions and fires:**

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

Fumes can combine with air to form an explosive mixture.

- **Storage**

- **Requirements to be met by storerooms and containers:** Store in cool location.

- **Information on storage in a common storage facility:**

Suitable material for containers and pipes: Light metals and their alloys.

- **Further information about storage conditions:**

Store cool and dry in tightly closed containers.

Store container in a well ventilated position.

Protect from heat and direct sunlight.

Protect from humidity and keep away from water.

8 Exposure controls and personal protection

- **Additional information about design of technical systems:** Use only in well-ventilated areas.

- **Components with limit values that require monitoring at the workplace:**

108-65-6 2-methoxy-1-methylethyl acetate

WEL Short-term value: 548 mg/m³, 100 ppm

Long-term value: 274 mg/m³, 50 ppm

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109-60-4 propyl acetate

WEL Short-term value: 1060 mg/m³, 250 ppm

Long-term value: 849 mg/m³, 200 ppm

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4098-71-9 3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate

WEL	Short-term value: 0.07 mg/m ³ Long-term value: 0.02 mg/m ³ Sen; as -NCO
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- **Additional information:** The lists that were valid during compilation were used as a basis.
- **Personal protective equipment**
- **General protective and hygienic measures**
Immediately remove soiled, saturated clothing.
Keep away from food, beverages and animal feed.
Do not eat, drink or smoke while working.
Store protective clothing separately.
Apply solvent-resistant skin protection preparation before beginning work.
Wash hands before pauses and after work.
Avoid contact with eyes and skin.
Do not inhale gases / vapours / aerosols.
The handling of this product ist not recommended for persons with respiratory system and skin hypersensitivity (asthma, chronic bronchitis, chronic skin disease).
- **Respiratory equipment:**
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.
Short term filter device:
Filter AX-P3
- **Protection of hands:** Solvent resistant gloves
- **Material of gloves**
Nitrile rubber, NBR
Neoprene gloves
PVC gloves
- **Penetration time of glove material**
The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.
Break through time: max. 240 min (DIN EN 374).
- **Eye protection:** Tightly sealed safety glasses.
- **Body protection:** Impervious protective clothing

9 Physical and chemical properties:· **General Information**

Form:	Fluid
Colour:	Black
Odour:	Characteristic

· **Change in condition**

Melting point/Melting range:	Not determined
Boiling point/Boiling range:	146°C

· Flash point:	44°C (Setaflash)
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· Ignition temperature:	315°C
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· Danger of explosion:	Product is not explosive. However, formation of dangerous explosive vapour/air mixtures is possible.
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· **Explosive Limits:**

Lower:	1.5 Vol %
Upper:	10.8 Vol %

· Density at 20°C	1.46 g/cm ³
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- **Solubility in / Miscibility with Water:** Insoluble

10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
No decomposition if handled and stored according to specifications.
Avoid: heat, flames, sparks
- **Materials to be avoided:**
Strong oxidising agents
strong acids
- **Dangerous decomposition products:**
During thermic decomposition, the formation of harmful gasses is possible.

11 Toxicological information

- **Acute toxicity:**

- **LD/LC50 values that are relevant for classification:**

108-65-6 2-methoxy-1-methylethyl acetate

Oral	LD50	8500 mg/kg (Ratte)
Inhalative	LC50/4 h	35.7 mg/l (Ratte)

Solvent naphtha (mineral oil), slight aromatic

Oral	LD50	> 2000 mg/kg (Ratte)
Dermal	LD50	> 2000 mg/kg (Kaninchen)
Inhalative	LC50/4 h	> 5 mg/l (Ratte)

- **Primary irritant effect:**
- **on the skin:**
No irritating effect.
Dries skin out.
- **on the eye:** No irritating effect.
- **Sensitisation:** The product may have a sensitising effect on sensitive persons.
- **Experience with humans:**
Frequent or longer lasting skin contact may degrease and dry out skin which may lead to skin irritation and inflammation (dermatitis).
High concentrations may cause tiredness and dizziness.
- **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.
- **Sensitisation** May cause sensitisation by skin contact.

12 Ecological information:

- **General notes:**
Water hazard class 2 : hazardous to water.
Do not allow product to reach ground water, bodies of water or sewage system.

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13 Notes on disposal:

- **Product:**
- **Recommendation** Must be specially treated in compliance with official regulations.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

- Land transport ADR/RID and GGVS/GGVE (cross-border/domestic)



- ADR/RID-GGVS/E Class: 3 (F1) Flammable liquids.
- Kemler Number: 30
- UN-Number: 1263
- Packaging group: III
- Danger sign: 3
- Designation of goods: 1263 PAINT
- Limited quantities (LQ) LQ7
- Tunnel restriction code E
- Remarks: TREM-Card No. 33

- Maritime transport IMDG/GGVSea:



- IMDG/GGVSea Class: 3
- UN Number: 1263
- Label 3
- Packaging group: III
- EMS Number: F-E,S-E
- Correct technical name: PAINT

- Air transport ICAO-TI and IATA-DGR:



- ICAO/IATA Class: 3
- UN/ID Number: 1263
- Label 3
- Packaging group: III
- Correct technical name: PAINT

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15 Regulatory information

· **Designation according to EC guidelines:**

The product has been classified and labelled in accordance with EC Guidelines / Ordinance on Hazardous Materials (GefStoffV)

· **Code letter and hazard designation of product:**



Xi Irritant

· **Hazard-determining components of labelling:**

aliphatic polyisocyanate

· **Risk phrases:**

10 Flammable.

43 May cause sensitisation by skin contact.

52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

· **Safety phrases:**

23 Do not breathe fumes/aerosol.

24/25 Avoid contact with skin and eyes.

29/35 Do not empty into drains; dispose of this material and its container in a safe way.

36/37 Wear suitable protective clothing and gloves.

38 In case of insufficient ventilation, wear suitable respiratory equipment.

51 Use only in well-ventilated areas.

· **National regulations**

· **Ordinance on hazardous incidents (StFV):**

Threshold quantity according to the ordinance on incidents should be observed.

Material group 3 (flammable liquids)

· **Water hazard class:**

German Water hazard class 2: hazardous to water.

according to appendix 4 VwVwS

· **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.

· **Professional Association (BG) Code of Practice:**

M 017 "Solvents"

M 044 "Polyurethane production/isocyanates"

16 Other information:

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. Delivery specifications are found in the respective Technical Information Sheets.

· **Relevant R-phrases**

10 Flammable.

20 Harmful by inhalation.

36 Irritating to eyes.

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36/37/38 Irritating to eyes, respiratory system and skin.

37 Irritating to respiratory system.

43 May cause sensitisation by skin contact.

51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

65 Harmful: may cause lung damage if swallowed.

· **Department issuing data specification sheet:** Product Safety department

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