

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 27.01.2023

Version number 2

Revision: 02.03.2022

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

- **1.1 Product identifier**
- **Trade name:** TYTAN PROFESSIONAL PU FIX Klej montażowy
- **Article number:** A-438
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
- **Product category** PC1 Adhesives, sealants
- **Application of the substance / the mixture**
Construction chemicals
Fast-drying contact adhesive
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
TP
Selena S.A.
ul. Legnicka 48A, 54 -202 Wrocław, Poland
e-mail: kontakt@selena.com
Selena Contact Center 801 350 500
BDO: 000015312
- **Further information obtainable from:** msds@selena.pl
- **1.4 Emergency telephone number:** European emergency number: 112 (24h)

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**



GHS08 health hazard

Resp. Sens. 1 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Carc. 2 H351 Suspected of causing cancer.

STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.



GHS07

Acute Tox. 4 H332 Harmful if inhaled.

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2 H319 Causes serious eye irritation.

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 GB CLP regulation.

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· Hazard pictograms



GHS07 GHS08

· Signal word Danger

· Hazard-determining components of labelling:

diphenylmethanediisocyanate, isomers and homologues
methylenediphenyl diisocyanate

· Hazard statements

H332 Harmful if inhaled.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H317 May cause an allergic skin reaction.
H351 Suspected of causing cancer.
H335 May cause respiratory irritation.
H373 May cause damage to organs through prolonged or repeated exposure.

· Precautionary statements

P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
P285 In case of inadequate ventilation wear respiratory protection.
P302+P352 IF ON SKIN: Wash with plenty of soap and water.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P403+P233 Store in a well-ventilated place. Keep container tightly closed.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· Additional information:

As from 24 August 2023 adequate training is required before industrial or professional use. Further information at: www.feica.eu/PUinfo

Persons already sensitised to diisocyanates may develop allergic reactions when using this product.

Persons suffering from asthma, eczema or skin problems should avoid contact, including dermal contact, with this product.

This product should not be used under conditions of poor ventilation unless a protective mask with an appropriate gas filter (i.e. type A1 according to standard EN 14387) is used.

EUH204 Contains isocyanates. May produce an allergic reaction.

· 2.3 Other hazards

· Results of PBT and vPvB assessment

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

· Determination of endocrine-disrupting properties

CAS: 1244733-77-4 tris(2-chloro-1-methylethyl)phosphate

List II

SECTION 3: Composition/information on ingredients

· 3.2 Mixtures

· **Description:** Mixture of substances listed below with nonhazardous additions.

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Dangerous components:

CAS: 9016-87-9 EC number: 618-498-9	diphenylmethanediisocyanate, isomers and homologues ⚠ Resp. Sens. 1, H334; Carc. 2, H351; STOT RE 2, H373; ⚠ Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; STOT SE 3, H335, EUH204 Specific concentration limits: Skin Irrit. 2; H315: C ≥ 5 % Eye Irrit. 2; H319: C ≥ 5 % Resp. Sens. 1; H334: C ≥ 0.1 % STOT SE 3; C ≥ 5 %	<20%
CAS: 1244733-77-4 EC number: 911-815-4 Reg.nr.: 01-2119486772-26-0004	tris(2-chloro-1-methylethyl)phosphate ⚠ Acute Tox. 4, H302	<5%
CAS: 1305-78-8 EINECS: 215-138-9	Calcium oxide ⚠ Eye Dam. 1, H318; ⚠ Skin Irrit. 2, H315; STOT SE 3, H335	<3%
CAS: 26447-40-5 EINECS: 247-714-0 Reg.nr.: 01-2119457015-45-XXXX	methylenediphenyl diisocyanate ⚠ Resp. Sens. 1, H334; Carc. 2, H351; STOT RE 2, H373; ⚠ Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; STOT SE 3, H335	<5%
EC number: 907-495-0 Reg.nr.: 01-2119545465-35-XXXX	Reaction mass of Octadecanamide, 12-hydroxy-N-[2-[(1-oxodecyl) amino]ethyl]- and N,N'-ethane-1,2-diylbis(12-hydroxyoctadecan-1-amide) and Decanamide, N,N'-1,2-ethanedylbis- Aquatic Chronic 3, H412	<2%
CAS: 6425-39-4 Reg.nr.: 01-2119969278-20-0001	2,2-dimorpholinodiethylether ⚠ Eye Irrit. 2, H319	<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:

Take affected persons out of danger area and lay down.

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 to be sure call for a doctor.

In case of unconsciousness place patient stably in side position for transportation.

After skin contact:

If skin irritation continues, consult a doctor.

Immediately wash with water and soap and rinse thoroughly.

After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

After swallowing:

If symptoms persist consult doctor.

A person vomiting while laying on their back should be turned onto their side.

Do not induce vomiting; call for medical help immediately.

4.2 Most important symptoms and effects, both acute and delayed

No data available.

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4.3 Indication of any immediate medical attention and special treatment needed

Symptomatic treatment (detoxification, maintenance of vital functions), no specific antidote is known. To prevent pulmonary oedema from severe exposure: corticosteroid containing dosing aerosol.

SECTION 5: Firefighting measures

5.1 Extinguishing media**Suitable extinguishing agents:**

Foam.

Fire-extinguishing powder.

Carbon dioxide.

Water spray.

Use fire extinguishing methods suitable to surrounding conditions.

For safety reasons unsuitable extinguishing agents: Water with full jet.**5.2 Special hazards arising from the substance or mixture**

In case of fire, the following can be released:

Nitrogen oxides (NO_x).

Carbon monoxide (CO).

Under certain fire conditions, traces of other toxic gases cannot be excluded, e.g.:

Hydrogen cyanide (HCN)

Isocyanates

5.3 Advice for firefighters**Protective equipment:** Wear fully protective suit.**Additional information**

Cool endangered receptacles with water spray.

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 people at a distance and stay on the windward side.

Wear protective clothing.

Use respiratory protective device against the effects of fumes / dust / aerosol.

Ensure adequate ventilation.

6.2 Environmental precautions: Do not allow to enter sewers / surface or ground water.**6.3 Methods and material for containment and cleaning up:**

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

Dispose 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 disposal information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Provide good ventilation.

Avoid contact with respiratory system, skin and eyes. See also section 8.

At work do not eat, drink or smoke.

Protect from moisture.

Ensure good ventilation / exhaustion at the workplace.

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- Prevent formation of aerosols.
- **Information about fire - and explosion protection:** No special measures required.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**
Store only in the original receptacle.
Keep away from water and moisture.
- **Information about storage in one common storage facility:**
Store away from water.
Store away from foodstuffs.
- **Further information about storage conditions:** Keep container tightly sealed.
- **7.3 Specific end use(s)** No data available.

SECTION 8: Exposure controls/personal protection

• 8.1 Control parameters

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

CAS: 9016-87-9 diphenylmethanediisocyanate, isomers and homologues

WEL	Short-term value: 0.07 mg/m ³ Long-term value: 0.02 mg/m ³ Sen; as -NCO
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• 8.2 Exposure controls

- **Appropriate engineering controls** No further data; see item 7.
- **Individual protection measures, such as personal protective equipment**
- **General protective and hygienic measures:**
Do not eat, drink, smoke or sniff while working.
Do not breathe vapours.
Exposure for pregnant women must be strictly avoided.
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.
- **Respiratory protection:**
Use suitable respiratory protective device only when aerosol or mist is formed.
Filter A/P2
People suffering from respiratory tract and skin hypersensitivity (asthma, chronic bronchitis and chronic skin disease) should avoid contact with the product.
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
- **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

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Chloroprene rubber, CR
EN 374.

Nitrile rubber.

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**

≥ 480 min

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

• **Eye/face protection**

EN 166



Tightly sealed goggles

• **Body protection:**

Protective work clothing.

Work shoes.

CE cat. II; CEN: EN ISO 13287, EN 20347

SECTION 9: Physical and chemical properties

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

• **General Information**

• **Physical state**

Liquid

• **Colour:**

Beige

• **Odour:**

Product specific

• **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:**

Not applicable

• **Decomposition temperature:**

Not determined

• **pH**

Not determined

• **Viscosity:**

• **Kinematic viscosity**

Not determined

• **Dynamic:**

Not determined

• **Solubility**

• **water:**

Reacts with water

• **Partition coefficient n-octanol/water (log value)**

Not determined

• **Vapour pressure:**

Not determined

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SECTION 10: Stability and reactivity

· 10.1 Reactivity

No hazardous reactions if the regulations / notes for storage and handling of the product will be respected.

10.2 Chemical stability

· **Thermal decomposition / conditions to be avoided:**

No decomposition if used according to specifications.

10.3 Possibility of hazardous reactions

The product produces carbon dioxide in reaction with water. Risk of burst in closed containers due to increased pressure.

- **10.4 Conditions to avoid**

Avoid moisture from the air - release of CO₂ in closed containers can increase in pressure, danger of bursting containers.

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• **10.5 Incompatible materials:**

Strongly reacts with water and other substances containing an active hydrogen atom.

Strong acids and bases.

Amines, alcohols and water

• **10.6 Hazardous decomposition products:**

Hazardous decomposition products are not known if the regulations/ guidelines for storage and handling of the product are followed.

SECTION 11: Toxicological information

• **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**

• **Acute toxicity**

Harmful if inhaled.

• **LD/LC50 values relevant for classification:**

CAS: 9016-87-9 diphenylmethanediisocyanate, isomers and homologues

Oral	LD50	>10000 mg/kg (rat)
Dermal	LD50	>10000 mg/kg (rabbit)

CAS: 26447-40-5 methylenediphenyl diisocyanate

Oral	LD50	> 2.000 mg/kg mg/kg (rat)
Dermal	LD50	> 9.400 mg/kg mg/kg (rabbit)
Inhalative	LC50	> 2.24 mg/l/1h mg/l (rat)

CAS: 6425-39-4 2,2-dimorpholinodiethylether

Oral	LD50	2025 mg/kg (rat)
Dermal	LD50	3038 mg/kg (rabbit)

• **Skin corrosion/irritation**

Causes skin irritation.

• **Serious eye damage/irritation**

Causes serious eye irritation.

• **Respiratory or skin sensitisation**

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

May cause an allergic skin reaction.

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

• **Carcinogenicity**

Suspected of causing cancer.

• **Reproductive toxicity** Based on available data, the classification criteria are not met.

• **STOT-single exposure**

May cause respiratory irritation.

• **STOT-repeated exposure**

May cause damage to organs through prolonged or repeated exposure.

• **Aspiration hazard** Based on available data, the classification criteria are not met.

• **Additional toxicological information:**

• **Sensitisation** Sensitizing mixture.

• **Repeated dose toxicity** Repeated inhalation of even small doses can cause lung damage.

• **11.2 Information on other hazards**

• **Endocrine disrupting properties**

CAS: 1244733-77-4	tris(2-chloro-1-methylethyl)phosphate	List II
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SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity:

CAS: 9016-87-9 diphenylmethanediisocyanate, isomers and homologues

EC50	1640 mg/kg (algae) >500 mg/kg (daphnia)
LC50	>1000 mg/l (fish)

CAS: 26447-40-5 methylenediphenyl diisocyanate

EC50	>1.640 mg/l/72h mg/kg (algae) >1.000 mg/l/24h mg/kg (daphnia)
LC50	>1.000 mg/l/96h mg/l (fish)

CAS: 6425-39-4 2,2-dimorpholinodiethylether

EC50 (static)	>1000 mg/kg (bacteria) >100 mg/kg (daphnia)
LC50 (static)	2150 mg/l (fish)

Reaction mass of Octadecanamide, 12-hydroxy-N-[2-[(1-oxodecyl) amino]ethyl]- and N,N'-ethane-1,2-diylbis(12-hydroxyoctadecan-1-amide) and Decanamide, N,N'-1,2-ethanediylbis-

EC50	43.2 mg/kg (algae) 94.6 mg/kg (daphnia)
LC50	>100 mg/l (fish)

12.2 Persistence and degradability No data.

12.3 Bioaccumulative potential No data available.

12.4 Mobility in soil No data 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

Additional ecological information:

General notes:

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water.

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system. Do not allow to enter surface or ground water.

Assigning a code from the waste catalogue depends on the sector, in which the user operates, as well as on arrangements made between the waste generator and a competent environment protection department.

Substance/mixture as a waste compound brings hazardous properties HP: 4, 5, 7, 13

Dispose of in a safe manner in accordance with local / national regulations.

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- **Uncleaned packaging:**
- **Recommendation:** Packaging may be reused or recycled after cleaning.

SECTION 14: Transport information

· 14.1 UN number or ID number	
· ADR, ADN, IMDG, IATA	Not applicable
· 14.2 UN proper shipping name	
· ADR, ADN, IMDG, IATA	Not applicable
· 14.3 Transport hazard class(es)	
· ADR, ADN, IMDG, IATA	
· Class	Not applicable
· 14.4 Packing group	
· ADR, IMDG, IATA	Not applicable
· 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 classified as dangerous under transport regulations.
· UN "Model Regulation":	Not applicable

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
1907/2006/CE Regulation, UK REACH
1272/2008/CE Regulation, GB CLP
2020/878/UE Regulation
- **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3, 56, 74
- **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.
- **REGULATION (EU) 2019/1148**
- **Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))**
None of the ingredients is listed.
- **Annex II - REPORTABLE EXPLOSIVES PRECURSORS**
None of the ingredients is listed.

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• **Regulation (EC) No 273/2004 on drug precursors**

None of the ingredients is listed.

• **Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors**

None of the ingredients is listed.

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

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

• **Relevant phrases**

- H302 Harmful if swallowed.
- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H318 Causes serious eye damage.
- H319 Causes serious eye irritation.
- H332 Harmful if inhaled.
- H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- H335 May cause respiratory irritation.
- H351 Suspected of causing cancer.
- H373 May cause damage to organs through prolonged or repeated exposure.
- H412 Harmful to aquatic life with long lasting effects.
- EUH204 Contains isocyanates. May produce an allergic reaction.

• **Recommended restriction of use** Information in the appropriate technical data sheet of product.

• **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. 4: Acute toxicity – Category 4
 Skin Irrit. 2: Skin corrosion/irritation – Category 2
 Eye Dam. 1: Serious eye damage/eye irritation – Category 1
 Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
 Resp. Sens. 1: Respiratory sensitisation – Category 1
 Skin Sens. 1: Skin sensitisation – Category 1
 Carc. 2: Carcinogenicity – Category 2
 STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
 STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2
 Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3