Printing date 24.09.2007 Revision: 04.08.2006

1 Identification of the substance/preparation and of the company/ undertaking

- · Product details
- · Trade name: TILCAPUR PU foam
- · Application of the substance / the preparation PU foam gun grade (B3)
- · Manufacturer/Supplier:

Egli, Fischer & Co. AG, Gotthardstrasse 6, Postfach, CH – 8022 Zürich

· Further information obtainable from:

Phone +41 44 209 82 22 Fax +41 44 201 68 46

· Information in case of emergency: Phone +41 44 251 51 51 Swiss toxicological centre of information (24h)

2 Hazards identification

Hazard description:

Xn Harmful

F+ Extremely flammable

· Information concerning particular hazards for human and environment:

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

Warning! Pressurized container.

R 12 Extremely flammable.

R 20/22 Harmful by inhalation and if swallowed.

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

R 42/43 May cause sensitisation by inhalation and skin contact.

Contains isocyanates. See information supplied by the manufacturer

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use.

Keep out of the reach of children

· Classification system:

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

3 Composition/information on ingredients

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

· Dangerous components:			
CAS: 9016-87-9	diphenylmethanediisocyanate,isomeres and homologues Xn, Xi; R 20-36/37/38-42/43	40-60%	
CAS: 115-10-6 EINECS: 204-065-8	dimethyl ether F+; R 12	1-10%	
CAS: 68476-85-7 EINECS: 270-704-2	Petroleum gases, liquefied F+; R 12	1-10%	
(Contd. on nogo.)			

(Contd. on page 2)

Printing date 24.09.2007 Revision: 04.08.2006

Trade name: TILCAPUR PU - foam

(Contd. of page 1)

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

4 First aid measures

General information:

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: 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.

5 Fire-fighting measures

· Suitable extinguishing agents:

Foam

CO2, sand, extinguishing powder. Do not use water.

- · For safety reasons unsuitable extinguishing agents: Water with full jet
- Special hazards caused by the substance, its products of combustion or resulting gases:

In case of fire, the following can be released:

Nitrogen oxides (NOx)

Carbon monoxide (CO)

Hydrogen cyanide (HCN)

- · **Protective equipment:** Mouth respiratory protective device.
- Additional information

Cool endangered receptacles with water spray.

Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

6 Accidental release measures

· Person-related safety precautions:

Keep away from ignition sources.

Ensure adequate ventilation

Wear protective equipment. Keep unprotected persons away.

Measures for environmental protection:

Do not allow to enter sewers/ surface or ground water.

Do not allow product to reach sewage system or any water course.

Inform respective authorities in case of seepage into water course or sewage system.

Measures for cleaning/collecting:

Dispose contaminated material as waste according to item 13.

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

(Contd. on page 3)

Printing date 24.09.2007 Revision: 04.08.2006

Trade name: TILCAPUR PU - foam

(Contd. of page 2)

Do not flush with water or aqueous cleansing agents Ensure adequate ventilation.

7 Handling and storage

· Handling:

· Information for safe handling:

Ensure that suitable extractors are available on processing machines

Ensure good ventilation/exhaustion at the workplace.

Open and handle receptacle with care.

· Information about fire - and explosion protection:

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

· Storage:

· Requirements to be met by storerooms and receptacles:

Store in a cool location.

Observe official regulations on storing packagings with pressurized containers.

· Information about storage in one common storage facility:

Do not store together with acids.

Do not store together with alkalis (caustic solutions).

Store away from oxidizing agents.

· Further information about storage conditions:

Store in a cool place. Heat will increase pressure and may lead to the receptacle bursting.

Protect from humidity and water.

Keep container tightly sealed.

Store in cool, dry conditions in well sealed receptacles.

Protect from heat and direct sunlight.

8 Exposure controls/personal protection

· Additional information about design of technical facilities:

No further data; see item 7.

· Ingredients with limit values that require monitoring at the workplace:

9016-87-9 diphenylmethanediisocyanate, isomeres and homologues

WEL Short-term value: 0.07 mg/m³ Long-term value: 0.02 mg/m³

68476-85-7 Petroleum gases, liquefied

WEL Short-term value: 2180 mg/m³, 1250 ppm Long-term value: 1750 mg/m³, 1000 ppm

115-10-6 dimethyl ether

WEL Short-term value: 958 mg/m³, 500 ppm Long-term value: 766 mg/m³, 400 ppm

- · Additional information: The lists valid during the making were used as basis.
- Personal protective equipment:
- · General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

(Contd. on page 4)

Printing date 24.09.2007 Revision: 04.08.2006

Trade name: TILCAPUR PU - foam

(Contd. of page 3)

Wash hands before breaks and at the end of work.

Do not inhale dust / smoke / mist.

Avoid contact with the eyes and skin.

· Respiratory protection:

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.

· Protection of hands:



Protective gloves

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

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

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

· Material of gloves

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

· Eye protection:



Tightly sealed goggles

9 Physical and chemical properties			
· General Information			
Form: Colour: Odour:	Aerosol According to product specification Characteristic		
 Change in condition Melting point/Melting range: Boiling point/Boiling range: 	Undetermined. Undetermined.		
· Flash point:	Not applicable. Not applicable, as aerosol.		
· Ignition temperature:	199°C		
· Self-igniting:	Product is not selfigniting.		
· Danger of explosion:	Heating may cause an explosion.		
		(Contd. on page	

Printing date 24.09.2007 Revision: 04.08.2006

Trade name: TILCAPUR PU - foam

(Contd. of page 4)

· Explosion limits:

Lower: Upper: 3.0 Vol % 18.6 Vol %

· Density:

Not determined.

· Solubility in / Miscibility with

water:

Insoluble.

Solvent content:

VOC (EC) 17 %

10 Stability and reactivity

• Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications.

- · Dangerous reactions No dangerous reactions known.
- · Dangerous decomposition products:

Hydrogen cyanide (prussic acid)

Carbon monoxide

Nitrogen oxides (NOx)

11 Toxicological information

- · Acute toxicity:
- · LD/LC50 values relevant for classification:

115-10-6 dimethyl ether

Inhalative LC50/4 h 308 mg/l (rat)

- · Primary irritant effect:
- · on the skin: Irritant to skin and mucous membranes.
- · on the eye: Irritating effect.
- · Sensitization:

Sensitization possible through inhalation.

Sensitization possible through skin contact.

· Additional toxicological information:

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

Harmful

Irritant

· Sensitisation May cause sensitisation by inhalation and skin contact.

12 Ecological information

· General notes:

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water (Contd. on page 6)

Revision: 04.08.2006 Printing date 24.09.2007

Trade name: TILCAPUR PU - foam

(Contd. of page 5)

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

13 Disposal considerations

- · Product:
- · Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

- Uncleaned packaging:
- · Recommendation: Disposal must be made according to official regulations.

14 Transport information

· Land transport ADR/RID (cross-border)



· ADR/RID class:

2 5F Gases.

· UN-Number:

1950

Packaging group:

· Hazard label:

2.1

· Description of goods: 1950 AEROSOLS

· Remarks:

LQ:2

· Maritime transport IMDG:



· IMDG Class:

2.1

· UN Number:

1950

2.1

· Label

· Packaging group:

· EMS Number:

F-D,S-U

· Marine pollutant:

· Proper shipping name: AEROSOLS

· Air transport ICAO-TI and IATA-DGR:



· ICAO/IATA Class:

2.1

· UN/ID Number:

1950

· Label

2.1

· Packaging group:

(Contd. on page 7)

Printing date 24.09.2007 Revision: 04.08.2006

Trade name: TILCAPUR PU - foam

(Contd. of page 6)

· Proper shipping name: AEROSOLS, flammable

15 Regulatory information

· Labelling according to EU guidelines:

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

· Code letter and hazard designation of product:





Xn Harmful

F+ Extremely flammable

· Hazard-determining components of labelling:

diphenylmethanediisocyanate, isomeres and homologues

· Risk phrases:

12 Extremely flammable.

20/22 Harmful by inhalation and if swallowed.

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

42/43 May cause sensitisation by inhalation and skin contact.

· Safety phrases:

- 2 Keep out of the reach of children.
- 16 Keep away from sources of ignition No smoking.
- 23 Do not breathe gas
- 28 After contact with skin, wash immediately with plenty of soap and water.

36/37 Wear suitable protective clothing and gloves.

- 46 If swallowed, seek medical advice immediately and show this container or label.
- 51 Use only in well-ventilated areas.

· Special labelling of certain preparations:

Contains isocyanates. See information supplied by the manufacturer

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use.

Keep out of the reach of children

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 R-phrases

12 Extremely flammable.

20 Harmful by inhalation.

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

42/43 May cause sensitisation by inhalation and skin contact.