

# SAFETY DATA SHEET

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

### 1.1. Product identifier

**Trade name**

PAKOL

**Product no.**

-

**REACH registration number**

Not applicable

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

**Relevant identified uses of the substance or mixture**

Sealant

**Uses advised against**

-

The full text of any mentioned and identified use categories are given in section 16

### 1.3. Details of the supplier of the safety data sheet

**Company and address**

Unipak A/S  
Marktoften 3C  
8464 Galten  
Denmark

**E-mail**

sales@unipak.dk

**SDS date**

2017-01-11

**SDS Version**

2.0

### 1.4. Emergency telephone number

+45 8626 1177 (normal opening time)

These services are only available to health professionals.

The UK National Poisons Emergency number is 0870 600 6266

Contact The National Poisons Information Service (dial 111, 24 h service). See section 4 "First aid measures".

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

Flam. Liq. 3; H226

See full text of H-phrases in section 2.2.

### 2.2. Label elements

**Hazard pictogram(s)**



**Signal word**

Warning

**Hazard statement(s)**

Flammable liquid and vapour. (H226)

### Safety statement(s)

General	-
Prevention	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. (P210). Keep container tightly closed. (P233).
Response	-
Storage	Store in a well-ventilated place. Keep cool. (P403+P235).
Disposal	Dispose of contents/container to an approved waste disposal plant. (P501).

### Identity of the substances primarily responsible for the major health hazards

-

### 2.3. Other hazards

This product contains an organic solvent.

### Additional labelling

-

### Additional warnings

-

### VOC

352 g/l

## SECTION 3: Composition/information on ingredients

### 3.1/3.2. Substances/Mixtures

NAME: ethanol ethyl alcohol  
 IDENTIFICATION NOS.: CAS-no: 64-17-5 EC-no: 200-578-6 Index-no: 603-002-00-5  
 CONTENT: 25-40%  
 CLP CLASSIFICATION: Flam. Liq. 2  
 H225  
 NOTE: S

NAME: glycerol  
 IDENTIFICATION NOS.: CAS-no: 56-81-5 EC-no: 200-289-5  
 CONTENT: 15-25%  
 CLP CLASSIFICATION: NA

NAME: talc (Mg<sub>3</sub>H<sub>2</sub>(SiO<sub>3</sub>)<sub>4</sub>)  
 IDENTIFICATION NOS.: CAS-no: 14807-96-6 EC-no: 238-877-9  
 CONTENT: 10-15%  
 CLP CLASSIFICATION: NA

NAME: TiO<sub>2</sub>  
 IDENTIFICATION NOS.: CAS-no: 13463-67-7 EC-no: 236-675-5  
 CONTENT: 3-5%  
 CLP CLASSIFICATION: NA

(\*) See full text of H-phrases in chapter 16. Occupational exposure limits are listed in section 8, if these are available.  
 S = Organic solvent

### Other information

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## SECTION 4: First aid measures

### 4.1. Description of first aid measures

#### General information

In the case of accident: Contact a doctor or casualty department – take the label or this safety data sheet. The doctor can contact The National Poisons Information Service (dial 111, 24 h service). Contact a doctor if in doubt about the injured person's condition or if the symptoms persist. Never give an unconscious person water or other drink.

#### Inhalation

Bring the injured person into fresh air. Make sure the injured person is continuously monitored. Prevent shock by keeping the injured person warm and calm. If breathing ceases, give mouth-to-mouth resuscitation. If unconscious, roll the injured person into recovery position. Call an ambulance.

#### Skin contact

Immediately remove contaminated clothing and shoes. Ensure that skin, which has been exposed to the

material, is washed thoroughly with water and soap. Skin cleanser can be used. DO NOT use solvents or thinners.

#### **Eye contact**

Remove contact lenses. Flush eyes immediately with plenty of water or isotonic water (20-30°C) for at least 15 minutes and continue until irritation stops. Make sure to flush under upper and lower eyelids. If irritation continues, contact a doctor. Continue flushing during transport.

#### **Ingestion**

Provide plenty of water for the person to drink and stay with him/her. In case of malaise, seek medical advice immediately and bring the safety data sheet or label from the product. Do not induce vomiting, unless recommended by the doctor. Have the victim lean forward with head down to avoid inhalation of- or choking on vomited material.

#### **Burns**

Rinse with water until pain stops then continue to rinse for 30 minutes.

#### **4.2. Most important symptoms and effects, both acute and delayed**

Neurotoxic effects: This product contains organic solvents, which may cause adverse effects to the nervous system. Symptoms of neurotoxicity include: loss of appetite, headache, dizziness, ringing in ears, tingling sensations of skin, sensitivity to the cold, cramps, difficulty in concentrating, tiredness, etc. Repeated exposure to solvents can result in the breaking down of the skin's natural fat layer and may result in an increased absorption potential of other hazardous substances at the area of exposure.

#### **4.3. Indication of any immediate medical attention and special treatment needed**

No special

#### **Information to medics**

Bring this safety data sheet.

### **SECTION 5: Firefighting measures**

#### **5.1. Extinguishing media**

Recommended: alcohol-resistant foam, carbonic acid, powder, water mist. Waterjets should not be used, since they can spread the fire.

#### **5.2. Special hazards arising from the substance or mixture**

If the product is exposed to high temperatures, e.g. in the event of fire, dangerous catabolic substances are produced. These are: Carbon oxides. Fire will result in dense black smoke. Exposure to combustion products may harm your health. Fire fighters should wear appropriate protection equipment. Closed containers, which are exposed to fire, should be cooled with water. Do not allow fire-extinguishing water to enter the sewage system and nearby surface waters.

#### **5.3. Advice for firefighters**

Wear self-contained breathing apparatus and protective clothing to prevent contact. Upon direct exposure contact The National Poisons Information Service (dial 111, 24 h service) in order to obtain further advice.

### **SECTION 6: Accidental release measures**

#### **6.1. Personal precautions, protective equipment and emergency procedures**

Storages not yet ignited must be cooled by water mist. Remove flammable materials if conditions allow it. Ensure sufficient ventilation.

#### **6.2. Environmental precautions**

No specific requirements.

#### **6.3. Methods and material for containment and cleaning up**

Use sand, sawdust, earth, vermiculite, diatomaceous earth to contain and collect non-combustible absorbent materials and place in container for disposal, according to local regulations. To the extent possible cleaning is performed with normal cleaning agents. Avoid use of solvents.

#### **6.4. Reference to other sections**

See section on "Disposal considerations" in regard of handling of waste. See section on 'Exposure controls/personal protection' for protective measures.

### **SECTION 7: Handling and storage**

#### **7.1. Precautions for safe handling**

Avoid static electricity. Protect electrical equipment in accordance with current standards. To divert static electricity during transmission, containers must be grounded and connected by wire with the receiving containers. Do not use spark-forming tools.

Smoking, storage of tobacco, consumption and storage of food or liquids are not allowed in the workrooms. See section on 'Exposure controls/personal protection' for information on personal protection.

### 7.2. Conditions for safe storage, including any incompatibilities

Always store in containers of the same material as the original container.

Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

Must be stored in a cool and well-ventilated area, away from possible sources of ignition.

Local regulations for storage of flammable materials must be followed.

#### Storage temperature

No data available.

### 7.3. Specific end use(s)

This product should only be used for applications quoted in section 1.2

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### OEL

TiO<sub>2</sub> (EH40, 2005)

Long-term exposure limit (8-hour TWA reference period): - ppm | - mg/m<sup>3</sup>

Short-term exposure limit (15-minute reference period): - ppm | - mg/m<sup>3</sup>

talc (Mg<sub>3</sub>H<sub>2</sub>(SiO<sub>3</sub>)<sub>4</sub>) (EH40, 2005)

Long-term exposure limit (8-hour TWA reference period): - ppm | 1 mg/m<sup>3</sup>

Short-term exposure limit (15-minute reference period): - ppm | - mg/m<sup>3</sup>

glycerol (EH40, 2005)

Long-term exposure limit (8-hour TWA reference period): - ppm | 10 mg/m<sup>3</sup>

Short-term exposure limit (15-minute reference period): - ppm | - mg/m<sup>3</sup>

ethanol ethyl alcohol (EH40, 2005)

Long-term exposure limit (8-hour TWA reference period): 1000 ppm | 1920 mg/m<sup>3</sup>

Short-term exposure limit (15-minute reference period): - ppm | - mg/m<sup>3</sup>

#### DNEL / PNEC

DNEL (TiO<sub>2</sub>): 10 mg/m<sup>3</sup>

Exposure: Inhalation

Duration of Exposure: Long term

PNEC (TiO<sub>2</sub>): 0,127 mg/L

Exposure: Freshwater

PNEC (TiO<sub>2</sub>): >= 1 mg/L

Exposure: Marine water

PNEC (TiO<sub>2</sub>): 0,61 mg/L

Exposure: Water

PNEC (TiO<sub>2</sub>): >= 1000 mg/L

Exposure: Freshwater sediment

PNEC (TiO<sub>2</sub>): >= 100 mg/L

Exposure: Marine water sediment

PNEC (TiO<sub>2</sub>): 100 mg/L

Exposure: Soil

PNEC (TiO<sub>2</sub>): >= 100 mg/L

Exposure: Sewage Treatment Plant

### 8.2. Exposure controls

Compliance with the given occupational exposure limits values should be controlled on a regular basis.

#### General recommendations

Observe general occupational hygiene standards.

#### Exposure scenarios

In the event exposure scenarios are appended to the safety data sheet, the operational conditions and risk management measures in these shall be complied with.

#### Exposure limits

Professional users are subjected to the legally set maximum concentrations for occupational exposure. See occupational hygiene limit values above.

#### Appropriate technical measures

Airborne gas and dust concentrations must be kept at a minimum and below current limit values (see above). Installation of an exhaust system if normal air flow in the work room is not sufficient is recommended. Ensure emergency eyewash and -showers are clearly marked.

### Hygiene measures

In between use of the product and at the end of the working day all exposed areas of the body must be washed thoroughly. Always wash hands, forearms and face.

### Measures to avoid environmental exposure

No specific requirements.

### Individual protection measures, such as personal protective equipment

#### Generally

Use only CE marked protective equipment.

#### Respiratory Equipment

Recommended: AX.

#### Skin protection

Wear appropriate protection clothing, e.g. coveralls in polypropylene approved type 6 and Category III.

#### Hand protection

Recommended: Butyl rubber. Can be reused after cleaning

#### Eye protection

Wear safety glasses with side shields.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Form	Liquid
Colour	Brown
Odour	Alcohol odor
pH	No data available.
Viscosity (40°C)	No data available.
Density (g/cm <sup>3</sup> )	1,1

#### Phase changes

Melting point (°C)	No data available.
Boiling point (°C)	No data available.
Vapour pressure	No data available.

#### Data on fire and explosion hazards

Flashpoint (°C)	35
Ignition (°C)	No data available.
Self-ignition (°C)	No data available.
Explosion limits (Vol %)	No data available.

#### Solubility

Solubility in water	Soluble
n-octanol/water coefficient	No data available.

### 9.2. Other information

Solubility in fat (g/L)	No data available.
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## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No data available

### 10.2. Chemical stability

The product is stable under the conditions, noted in the section "Handling and storage".

### 10.3. Possibility of hazardous reactions

No special

### 10.4. Conditions to avoid

Avoid static electricity. Do not expose to any forms of heat (e.g. solar radiation). May lead to excess pressure.

### 10.5. Incompatible materials

Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

### 10.6. Hazardous decomposition products

The product is not degraded when used as specified in section 1.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

#### Acute toxicity

Substance	Species	Test	Route of exposure	Result
TiO <sub>2</sub>	Rat	LD50	Oral	> 5000 mg/kg
TiO <sub>2</sub>	Rat	LC50	Inhalation	> 6,8 mg/L/4h
glycerol	Rat	LD50	Oral	12600 mg/kg

#### Skin corrosion/irritation

No data available.

#### Serious eye damage/irritation

No data available.

#### Respiratory or skin sensitisation

No data available. Data on substance: TiO<sub>2</sub>

Organism: Rat

#### Germ cell mutagenicity

No data available.

#### Carcinogenicity

Data on substance: TiO<sub>2</sub>

#### Reproductive toxicity

No data available.

#### STOT-single exposure

No data available.

#### STOT-repeated exposure

No data available.

#### Aspiration hazard

No data available.

#### Long term effects

Neurotoxic effects: This product contains organic solvents, which may cause adverse effects to the nervous system. Symptoms of neurotoxicity include: loss of appetite, headache, dizziness, ringing in ears, tingling sensations of skin, sensitivity to the cold, cramps, difficulty in concentrating, tiredness, etc. Repeated exposure to solvents can result in the breaking down of the skin's natural fat layer and may result in an increased absorption potential of other hazardous substances at the area of exposure.

## SECTION 12: Ecological information

### 12.1. Toxicity

Substance	Species	Test	Duration	Result
TiO <sub>2</sub>	Fish	LC50	96h	> 1000 mg/L
TiO <sub>2</sub>	Daphnia	EC50	48h	> 1000 mg/L
TiO <sub>2</sub>	Algae	EC50	72h	61 mg/L
talc (Mg <sub>3</sub> H <sub>2</sub> (SiO <sub>3</sub> ) <sub>4</sub> )	Fish	LC50	24h	>100 mg/L

### 12.2. Persistence and degradability

Substance	Biodegradability	Test	Result
glycerol	Yes	No data available	No data available

### 12.3. Bioaccumulative potential

Substance	Potential bioaccumulation	LogPow	BCF
TiO <sub>2</sub>	No	No data available	No data available
glycerol	No	No data available	No data available

### 12.4. Mobility in soil

No data available

### 12.5. Results of PBT and vPvB assessment

No data available

### 12.6. Other adverse effects

No special

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Product is covered by the regulations on hazardous waste.

#### Waste

**EWC code**

08 04 99

wastes not otherwise specified

**Specific labelling**

-

**Contaminated packing**

Packaging containing residues of the product must be disposed of similarly to the product.

## SECTION 14: Transport information

### 14.1 – 14.4

This product is within scope of the regulations of transport of dangerous goods.

**ADR/RID**

<b>14.1. UN number</b>	1993
<b>14.2. UN proper shipping name</b>	FLAMMABLE LIQUID, N.O.S.
<b>14.3. Transport hazard class(es)</b>	3
<b>14.4. Packing group</b>	III
<b>Notes</b>	-
<b>Tunnel restriction code</b>	3 (D/E)

**IMDG**

<b>UN-no.</b>	1993
<b>Proper Shipping Name</b>	FLAMMABLE LIQUID, N.O.S.
<b>Class</b>	3
<b>PG*</b>	III
<b>EmS</b>	F-E, S-E
<b>MP**</b>	No
<b>Hazardous constituent</b>	Content ethanol

**IATA/ICAO**

<b>UN-no.</b>	1993
<b>Proper Shipping Name</b>	FLAMMABLE LIQUID, N.O.S.
<b>Class</b>	3
<b>PG*</b>	III

### 14.5. Environmental hazards

-

### 14.6. Special precautions for user

-

### 14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

No data available

(\*) Packing group

(\*\*) Marine pollutant

## SECTION 15: Regulatory information

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

**Restrictions for application**

People under the age of 18 shall not be exposed to this product cf. Council Directive 94/33/EC of 22 June 1994 on the protection of young people at work.

Pregnant women and women breastfeeding must not be exposed to this product. The risk, and possible technical precautions or design of the workplace needed to eliminate exposure, must be considered.

**Demands for specific education**

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**Additional information**

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**Sources**

Council Directive 94/33/EC of 22 June 1994 on the protection of young people at work.

The Control of Substances Hazardous to Health Regulations 2002. SI 2002/2677. The Stationery Office, 2002.

REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 (CLP). EC regulation 1907/2006 (REACH).

#### 15.2. Chemical safety assessment

No

### SECTION 16: Other information

#### Full text of H-phrases as mentioned in section 3

H225 - Highly flammable liquid and vapour.

#### The full text of identified uses as mentioned in section 1

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#### Other symbols mentioned in section 2

-

#### Other

In accordance with Regulation (EC) No. 1272/2008 (CLP) the evaluation of the classification of the mixture is based on:

The classification of the mixture in regard of physical hazards has been based on experimental data. It is recommended to hand over this safety data sheet to the actual user of the product. Information in this safety data sheet cannot be used as a product specification.

The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is not necessarily correct for use with other chemicals/products.

A change (in proportion to the last essential change (first cipher in SDS version, see section 1)) is marked with a blue triangle.

#### The safety data sheet is validated by

#### Date of last essential change (First cipher in SDS version)

2016-02-29

#### Date of last minor change (Last cipher in SDS version)

2016-02-29