

# Safety Data Sheet

acc. to OSHA HCS

Printing date 01/22/2014

Reviewed on 01/22/2014

## 1 Identification

### Product identifier

- Trade name: **Solid Wax**
- Article number: 11900 / 11905
- Relevant identified uses of the substance or mixture and uses advised against: No further relevant information available.
- Application of the substance / the mixture: Maintenance product

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

- Manufacturer/Supplier: AKEMI chemisch technische Spezialfabrik GmbH  
Lechstrasse 28  
D 90451 Nürnberg  
Tel. +49(0)911-642960  
Fax. +49(0)911-644456  
e-mail info@akemi.de
- Information department: Laboratory
- Emergency telephone number: Product Safety Department AKEMI chemisch technische Spezialfabrik GmbH  
Tel. +49(0)911-64296-59  
Reachable during the following office hours:  
Monday – Thursday from 07:30 a.m. to 16:30 p.m.  
Friday from 07:30 a.m. to 13:30 p.m.

## 2 Hazard(s) identification

### Classification of the substance or mixture



GHS08 Health hazard

Carc. 2 H351 Suspected of causing cancer.

H227 Combustible liquid.

### Classification according to Directive 67/548/EEC or Directive 1999/45/EC



Harmful

Limited evidence of a carcinogenic effect.



Dangerous for the environment

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

### 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.

### Classification system:

The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.

### Label elements

#### Labelling according to EU guidelines:

The product has been classified and marked in accordance with directives on hazardous materials.

#### Code letter and hazard designation of product:



Xn Harmful

N Dangerous for the environment

#### Hazard-determining components of labeling:

tetrachloroethylene

#### Risk phrases:

Limited evidence of a carcinogenic effect.

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

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· Safety phrases: Keep out of the reach of children.  
Do not breathe vapour.  
Avoid contact with skin and eyes.  
In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water and soap.  
Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point  
Wear suitable protective clothing, gloves and eye/face protection.  
In case of insufficient ventilation, wear suitable respiratory equipment.  
If swallowed, seek medical advice immediately and show this container or label.  
Avoid release to the environment. Refer to special instructions/Safety data sheets

· **Classification system:**  
· NFPA ratings (scale 0 - 4)



· HMS-ratings (scale 0 - 4)



· **Other hazards**  
· Results of PBT and vPvB assessment  
· PBT: Not applicable.  
· vPvB: Not applicable.

**3 Composition/information on ingredients**

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

· Dangerous components:

CAS: 127-18-4 EINECS: 204-825-9 Index number: 602-028-00-4	tetrachloroethylene	Xn R40; N R51/53 Carc. Cat. 3 Carc. 2, H351	50-100%
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· Additional information: For the wording of the listed risk phrases refer to section 16.

**4 First-aid measures**

· **Description of first aid measures**

· General information: Immediately remove any clothing soiled by the product.  
· After inhalation: Supply fresh air; consult doctor in case of complaints.  
· After skin contact: Immediately wash with water and soap and rinse thoroughly.  
· After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.  
· After swallowing: If symptoms persist consult doctor.  
· Information for doctor:  
· Most important symptoms and effects, both acute and delayed No further relevant information available.  
· Indication of any immediate medical attention and special treatment needed No further relevant information available.

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### 5 Fire-fighting measures

- **Extinguishing media**
- Suitable extinguishing agents: CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- Protective equipment: No special measures required.

### 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Not required.
- **Environmental precautions:** 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.  
Do not allow to enter sewers/ surface or ground water.
- **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.
- **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.

### 7 Handling and storage

- **Handling:**
- Precautions for safe handling Ensure good ventilation/exhaustion at the workplace.
- Information about protection against explosions and fires: No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- Storage:
- Requirements to be met by storerooms and receptacles: No special requirements.
- Information about storage in one common storage facility: Not required.
- Further information about storage conditions: None.
- **Specific end use(s)** No further relevant information available.

### 8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Control parameters**

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

**127-18-4 tetrachloroethylene**

PEL	Long-term value: 100 ppm Ceiling limit value: 200; 300* ppm *5-min peak in any 3 hrs
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REL	Minimize workplace exp. concs.; Pocket Guide App. A
TLV	Short-term value: 685 mg/m <sup>3</sup> , 100 ppm Long-term value: 170 mg/m <sup>3</sup> , 25 ppm BEI

· Ingredients with biological limit values:

**127-18-4 tetrachloroethylene**

BEI	3 ppm Medium: end-exhaled air Time: prior to shift Parameter: Tetrachloroethylene
	0.5 mg/L Medium: blood Time: prior to shift Parameter: Tetrachloroethylene

· Additional information:

The lists that were valid during the creation were used as basis.

· **Exposure controls**

· Personal protective equipment:

· General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.  
Immediately remove all soiled and contaminated clothing.  
Wash hands before breaks and at the end of work.  
Do not inhale gases / fumes / aerosols.

· Breathing equipment:

Short term filter device:  
Filter A/P2

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

· Protection of hands:

Preventive skin protection by use of skin-protecting agents is recommended.

After use of gloves apply skin-cleaning agents and skin cosmetics.

Akemi skin protection agent recommendation for preventive skin shelter in application and combination of protective gloves:

STOKO EMULSION (<http://www.stoko.com>)

Akemi skin protection recommendation for skin cleaning after product handling:

SLIG SPEZIAL (<http://www.stoko.com>)

Akemi skin protection agent recommendation for skin aftercare:

STOKO VITAN (<http://www.stoko.com>)

The protection gloves to be used have to comply with the specifications of the directive 89/686/EC and the directive derived decree EN374, respectively, e.g. the above listed protection glove type. The mentioned permeation times' data were generated and verified with material samples of the recommended protection glove type in the scope of laboratory analyses of the company KCL GmbH in compliance with EN374.

This recommendation refers exclusively to the material safety data sheet referenced product delivered by Akemi and the indicated field of application. In case of product dilution or in case of mixture with different substances or chemicals, and in condition of EN374 deviation the producer of CE-approved protection gloves must be contacted for detailed information (e.g., KCL GmbH, Germany, 36124 Eichenzell, internet: <http://www.kcl.de>).



Protective gloves

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

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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: Goggles recommended during refilling.

**9 Physical and chemical properties****· Information on basic physical and chemical properties****· General Information****· Appearance:**

<u>Form:</u>	Pasty
<u>Color:</u>	Transparent White
<b>· Odor:</b>	Characteristic

**· Change in condition**

<u>Melting point/Melting range:</u>	Undetermined.
<u>Boiling point/Boiling range:</u>	121 °C (250 °F)

· Flash point: > 61 °C (> 142 °F)

· Auto igniting: Product is not selfigniting.

· Danger of explosion: Product does not present an explosion hazard.

· Vapor pressure at 20 °C (68 °F): 19 hPa (14 mm Hg)

· Density at 20 °C (68 °F): 1.4 g/cm<sup>3</sup> (11.683 lbs/gal)

· Specific gravity at 20 °C (68 °F): 1.4 g/cm<sup>3</sup> (11.683 lbs/gal)

**· Solubility in / Miscibility with**

Water: Not miscible or difficult to mix.

**· Viscosity:**

Dynamic: Not determined.  
Kinematic: Not determined.

**· Solvent content:**

Organic solvents: 70.0 %

**· Other information**

No further relevant information available.

**10 Stability and reactivity****· Reactivity****· Chemical stability****· Thermal decomposition / conditions to be avoided:**

No decomposition if used according to specifications.

**· Possibility of hazardous reactions**

No dangerous reactions known.

**· Conditions to avoid**

No further relevant information available.

**· Incompatible materials:**

No further relevant information available.

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**Hazardous decomposition products:** No dangerous decomposition products known.

**11 Toxicological information**

**Information on toxicological effects**

Acute toxicity:

LD/LC50 values that are relevant for classification:

**127-18-4 tetrachloroethylene**

Inhalative	LC50/4h	4000 mg/m3 (rat)
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Primary irritant effect:

on the skin: No irritant effect.

on the eye: No irritating effect.

Sensitization: No sensitizing effects known.

Additional toxicological information:

The product shows the following dangers according to internally approved calculation methods for preparations:

Carcinogenic categories

IARC (International Agency for Research on Cancer)

127-18-4	tetrachloroethylene	2A
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NTP (National Toxicology Program)

127-18-4	tetrachloroethylene	R
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**12 Ecological information**

**Toxicity**

Aquatic toxicity:

**127-18-4 tetrachloroethylene**

EC50/48h	18 mg/l (daphnia magna)
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**Persistence and degradability** No further relevant information available.

**Behavior in environmental systems:**

Bioaccumulative potential No further relevant information available.

Mobility in soil No further relevant information available.

**Ecotoxicological effects:**

Remark: Toxic for fish

**Additional ecological information:**

General notes: Water hazard class 3 (Self-assessment): extremely hazardous for water  
Do not allow product to reach ground water, water course or sewage system, even in small quantities.  
Danger to drinking water if even small quantities leak into the ground.  
Also poisonous for fish and plankton in water bodies.  
Toxic for aquatic organisms

**Results of PBT and vPvB assessment**

PBT: Not applicable.

vPvB: Not applicable.

**Other adverse effects** No further relevant information available.

**13 Disposal considerations**

**Waste treatment methods**

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

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**· Uncleaned packagings:**

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

**14 Transport information****· UN-Number**

· DOT, ADR, IMDG, IATA UN1897

**· UN proper shipping name**

· DOT Tetrachloroethylene, solution  
 · ADR 1897 Tetrachloroethylene, solution, ENVIRONMENTALLY HAZARDOUS  
 · IMDG TETRACHLOROETHYLENE, solution, MARINE POLLUTANT  
 · IATA TETRACHLOROETHYLENE, solution

**· Transport hazard class(es)****· DOT**

· Class 6.1 Toxic substances.  
 · Label 6.1

**· ADR**

· Class 6.1 (T1) Toxic substances  
 · Label 6.1

**· IMDG**

· Class 6.1 Toxic substances.  
 · Label 6.1

**· IATA**

· Class 6.1 Toxic substances.  
 · Label 6.1

**· Packing group**

· DOT, ADR, IMDG, IATA III

**· Environmental hazards:**

· Marine pollutant: Product contains environmentally hazardous substances:  
 Yes  
 Symbol (fish and tree)

**· Special marking (ADR):**

Symbol (fish and tree)

**· Special precautions for user**

Warning: Toxic substances

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· <u>Danger code (Kemler):</u>	60
· <u>EMS Number:</u>	F-A,S-A
· <u>Segregation groups</u>	Liquid halogenated hydrocarbons
· <b><u>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</u></b>	Not applicable.
· <b><u>Transport/Additional information:</u></b>	
· <u>DOT</u>	
· <u>Remarks:</u>	Special marking with the symbol (fish and tree).
· <b><u>UN "Model Regulation":</u></b>	UN1897, Tetrachloroethylene, solution, ENVIRONMENTALLY HAZARDOUS, 6.1, III

**15 Regulatory information**

· <b><u>Safety, health and environmental regulations/legislation specific for the substance or mixture</u></b>	
· <u>Sara</u>	
· <u>Section 355 (extremely hazardous substances):</u>	
None of the ingredient is listed.	
· <u>Section 313 (Specific toxic chemical listings):</u>	
All ingredients are listed.	
· <u>TSCA (Toxic Substances Control Act):</u>	
All ingredients are listed.	
· <u>Proposition 65</u>	
· <u>Chemicals known to cause cancer:</u>	
All ingredients are listed.	
· <u>Chemicals known to cause reproductive toxicity for females:</u>	
None of the ingredients is listed.	
· <u>Chemicals known to cause reproductive toxicity for males:</u>	
None of the ingredients is listed.	
· <u>Chemicals known to cause developmental toxicity:</u>	
None of the ingredients is listed.	
· <u>Carcinogenicity categories</u>	
· <u>EPA (Environmental Protection Agency)</u>	
127-18-4 tetrachloroethylene	L
· <u>TLV (Threshold Limit Value established by ACGIH)</u>	
127-18-4 tetrachloroethylene	A3
· <u>MAK (German Maximum Workplace Concentration)</u>	
127-18-4 tetrachloroethylene	3B
· <u>NIOSH-Ca (National Institute for Occupational Safety and Health)</u>	
All ingredients are listed.	
· <u>OSHA-Ca (Occupational Safety &amp; Health Administration)</u>	
None of the ingredients is listed.	
· <u>Product related hazard informations:</u>	The product has been classified and marked in accordance with directives on hazardous materials.

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**Trade name: Solid Wax**

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Hazard symbols:

Xn Harmful  
N Dangerous for the environment

Hazard-determining components of labeling:

tetrachloroethylene

Risk phrases:

Limited evidence of a carcinogenic effect.  
Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

Safety phrases:

Keep out of the reach of children.  
Do not breathe vapour.  
Avoid contact with skin and eyes.  
In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water and soap.  
Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point  
Wear suitable protective clothing, gloves and eye/face protection.  
In case of insufficient ventilation, wear suitable respiratory equipment.  
If swallowed, seek medical advice immediately and show this container or label.  
Avoid release to the environment. Refer to special instructions/Safety data sheets

National regulations:Water hazard class:

Water hazard class 3 (Self-assessment): extremely hazardous for water.

VOC USA

0.0 g/l

Chemical safety assessment:

A Chemical Safety Assessment has not been carried out.

**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.

Department issuing MSDS:

Laboratory

Contact:

Dieter Zimmermann

Date of preparation / last revision

01/22/2014 / -

Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)  
IMDG: International Maritime Code for Dangerous Goods  
DOT: US Department of Transportation  
IATA: International Air Transport Association  
ACGIH: American Conference of Governmental Industrial Hygienists  
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)  
NFPA: National Fire Protection Association (USA)  
HMIS: Hazardous Materials Identification System (USA)  
LC50: Lethal concentration, 50 percent  
LD50: Lethal dose, 50 percent

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