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1 Identification	
<ul> <li><u>Product identifier</u></li> <li>Trade name:</li> </ul>	Super Gloss
<ul> <li>Article number:</li> <li>Article number:</li> <li>Relevant identified uses of the substance or mixture and uses advised against</li> <li>Application of the substance / the mixture</li> </ul>	10976 No further relevant information available. Sealing
· Details of the supplier of the saf	-
Manufacturer/Supplier:	AKEMI chemisch technische Spezialfabrik GmbHTel. +49(0)911-642960Lechstrasse 28Fax. +49(0)911-644456D 90451 Nürnberge-mail info@akemi.de
<ul> <li>Information department:</li> <li>Emergency telephone number:</li> </ul>	Laboratory 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  • <u>Classification of the substance of</u>	or mixture
GHS08 Health hazard	
Carc. 2 H351 Suspected of causi	ng cancer.
H227 Combustible liquid.	
Harmful Limited evidence of a carcinogenic	e 67/548/EEC or Directive 1999/45/EC
Dangerous for the environme	nt
	ause long-term adverse effects in the aquatic environment.
Classification system:	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. The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.
· Label elements	······································
GHS label elements	The product is classified and labeled according to the Globally Harmonized System (GHS).
Hazard pictograms	
	GHS08
· Signal word	Warning
Hazard-determining components of labeling:     Hazard statements	tetrachloroethylene H227 Combustible liquid. H351 Suspected of causing cancer.
	(Contd. on page 2)

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# Safety Data Sheet acc. to OSHA HCS

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			Tteviewed C	100/10/2014
Trade name: Super Gloss				
<ul> <li>Precautionary statements</li> </ul>	P405	hand. Keep out of reach of Read label before us Wear protective gl protection. Use personal protec 3 IF exposed or conce Store locked up. 5 Store in a well-ventil Dispose of content	s needed, have product containe children. se. oves/protective clothing/eye pro tive equipment as required. erned: Get medical advice/attention ated place. Keep cool. s/container in accordance with lo	otection/face
Classification system.		national/internationa	l regulations.	
<ul> <li>Classification system:</li> <li>NFPA ratings (scale 0 - 4)</li> </ul>	220	Health = 2 Fire = 2 Reactivity = 0		
HMIS-ratings (scale 0 - 4)		Health = *2 Fire = 2 Reactivity = 0		
<ul> <li>Other hazards</li> </ul>				
Results of PBT and vPvB asses				
• <u>PBT:</u> • vPvB:	Not applica Not applica			
3 Composition/information on i • Chemical characterization: Mi • Description:	ixtures	he substances listed l	pelow with nonhazardous additions	\$
Dangerous components:				
EINECS: 204-825-9	etrachloroethyle	ne	Xn R40; 🌄 N R51/53 Carc. Cat. 3	50-100%
Index number: 602-028-00-4		ding of the listed risk	& Carc. 2, H351	
Additional information:	For the wol	ang of the listed risk	phrases refer to section 16.	
<ul> <li>4 First-aid measures</li> <li>Description of first aid measures</li> <li>After inhalation: <ul> <li>After skin contact:</li> </ul> </li> <li>After eye contact: <ul> <li>After swallowing:</li> </ul> </li> <li>Information for doctor: <ul> <li>Most important symptoms and effects, both acute and delayed</li> <li>Indication of any immediate</li> </ul> </li> </ul>	Supply fres Immediatel If skin irrita Rinse oper Immediatel Do not indu	y call a doctor.	t a doctor. nutes under running water. tely call for medical help.	
medical attention and special treatment needed	No further i	elevant information a	vailable.	
5 Fire-fighting measures				
• Extinguishing media	CO2 outin	auiching powdor or w	ator aprov. Fight larger fires with w	votor oprov or

• Suitable extinguishing agents:

CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.



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· Special hazards arising from the	(Contd. of page
substance or mixture	Formation of toxic gases is possible during heating or in case of fire.
· Advice for firefighters	
Protective equipment:	Do not inhale explosion gases or combustion gases.
6 Accidental release measures	
Personal precautions, protective	
equipment and emergency procedures	Kaan away from ignition courses
procedures	Keep away from ignition sources Use respiratory protective device against the effects of fumes/dust/aerosol.
	Wear protective equipment. Keep unprotected persons away.
· 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 seway
<b></b>	system.
• Methods and material for	Alexander with the discovery state of the track that the second state of the second st
containment and cleaning up:	Absorb with liquid-binding material (sand, diatomite, acid binders, univers 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.
' Handling and storage	
· Handling:	
Precautions for safe handling	Ensure good ventilation/exhaustion at the workplace.
	Prevent formation of aerosols.
<ul> <li>Information about protection</li> </ul>	
against explosions and fires:	No special measures required.
· Conditions for safe storage, inclu	uding any incompatibilities
· Storage:	
Requirements to be met by	Nie anderstellen en Verene etc.
storerooms and receptacles:	No special requirements.
Information about storage in one common storage facility:	Not required.
Further information about storage	
conditions:	Protect from frost.
Storage class:	6.1 C
<ul> <li>Specific end use(s)</li> </ul>	No further relevant information available.
Exposure controls/personal prot	action
• Additional information about	No further data and item 7
design of technical systems:	No further data; see item 7.
Control parameters	
Components with limit values that r	equire monitoring at the workplace:
127-18-4 tetrachloroethylene	
PEL Long-term value: 100 ppm	
Ceiling limit value: 200; 300*   *5-min peak in any 3 hrs	וווקט
	(Contd. on page

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ade name: Super Gloss	
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REL Minimize workplace exp. co	
TLV Short-term value: 685 mg/n Long-term value: 170 mg/n BEI	
Ingredients with biological limit values	alues:
127-18-4 tetrachloroethylene	
BEI 3 ppm Medium: end-exhaled air Time: prior to shift Parameter: Tetrachloroethyl	lene
0.5 mg/L Medium: blood Time: prior to shift Parameter: Tetrachloroethyl	lene
· Additional information:	The lists that were valid during the creation were used as basis.
<ul> <li>Exposure controls</li> <li>Personal protective equipment:</li> <li>General protective and hygienic measures:</li> </ul>	Keep away from foodstuffs, beverages and feed. 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 i 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 i 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 th directive 89/686/EC and the directive derived decree EN374, respectively, e.g the above listed protection glove type. The mentioned permeation times´ dat were generated and verified with material samples of the recommende protection glove type in the scope of laboratory anylyses of the company KC GmbH in compliance with EN374.
	This recommendation refers exclusively to the material safety data sheer referenced product delivered by Akemi and the indicated field of application. I case of product dilution or in case of mixture with different substances of chemicals, and in condition of EN374 deviation the producer of CE-approve 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 th product/ the substance/ the preparation.

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### Trade name: Super Gloss

	(Contd. of page 4) 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	times, rates of diffusion and the degradation The selection of the suitable gloves does not only depend on the material, but
· Material of gloves	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.
<ul> <li>Penetration time of glove material</li> </ul>	The exact break trough time has to be found out by the manufacturer of the
	protective gloves and has to be observed.
<ul> <li>Eye protection:</li> </ul>	Goggles recommended during refilling.

### 9 Physical and chemical properties

Information on basic physical and	chemical properties	
General Information     Appearance:		
Form:	Fluid	
Color:	Colorless	
· Odor:	Specific type	
· Odour threshold:	Not determined.	
· pH-value:	Not determined.	
Change in condition		
Melting point/Melting range:	Undetermined.	
Boiling point/Boiling range:	121 °C (250 °F)	
· Flash point:	> 70 °C (> 158 °F)	
· Flammability (solid, gaseous):	Not applicable.	
Ignition temperature:		
Decomposition temperature:	Not determined.	
<ul> <li>Auto igniting:</li> </ul>	Product is not selfigniting.	
Danger of explosion:	Product does not present an explosion hazard.	
· Explosion limits:		
Lower:	Not determined.	
Upper:	Not determined.	
<ul> <li>Vapor pressure at 20 °C (68 °F):</li> </ul>	19 hPa (14 mm Hg)	
<ul> <li>Density at 20 °C (68 °F):</li> </ul>	1.46 g/cm <sup>3</sup> (12.184 lbs/gal)	
Specific gravity at 20 °C (68 °F):	1.46 g/cm <sup>3</sup> (12.184 lbs/gal)	
Relative density	Not determined.	
<ul> <li>Vapour density</li> </ul>	Not determined.	
<u>Evaporation rate</u>	Not determined.	
Solubility in / Miscibility with		
Water:	Not miscible or difficult to mix.	
Partition coefficient (n-octanol/water	<u>):</u> Not determined.	
· <u>Viscosity:</u>		
Dynamic:	Not determined.	
Kinematic:	Not determined.	
<u>Solvent content:</u>		
Organic solvents:	80.0 %	
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1 mining date 00/10/2014	
Trade name: Super Gloss	
	(Contd. of page 5
· Other information	No further relevant information available.
10 Stability and reactivity	
<ul> <li><u>Reactivity</u></li> <li>Chemical stability</li> </ul>	
Thermal decomposition /	
conditions to be avoided:	No decomposition if used according to specifications.
Possibility of hazardous	No. In the second second second second
reactions · Conditions to avoid	No dangerous reactions known. No further relevant information available.
· Incompatible materials:	No further relevant information available.
· Hazardous decomposition	
products:	Hydrogen chloride (HCI)
	Chlorine
	Phosgene
11 Toxicological information	
-	
Information on toxicological e	effects
<u>Acute toxicity:</u>	at for all a firstion.
LD/LC50 values that are relevant to the second	nt for classification:
127-18-4 tetrachloroethylene	
Inhalative LC50/4h 4000 mg/m	13 (rat)
<ul> <li>Primary irritant effect:</li> <li>on the skin:</li> </ul>	No irritant effect.
$\cdot$ on the eye:	No irritating effect.
Sensitization:	No sensitizing effects known.
<ul> <li>Additional toxicological</li> </ul>	-
information:	The product shows the following dangers according to internally approved
	calculation methods for preparations:
<ul> <li>Carcinogenic categories</li> </ul>	
IARC (International Agency for I	
127-18-4 tetrachloroethylene	2A
<ul> <li>NTP (National Toxicology Progr</li> </ul>	am)
127-18-4 tetrachloroethylene	R
· OSHA-Ca (Occupational Safety	& Health Administration)
None of the ingredients is listed	
12 Ecological information	
-	
• <u>Toxicity</u>	
Aquatic toxicity:	
127-18-4 tetrachloroethylene	
EC50/48h 18 mg/l (daphnia ma	
Persistence and degradability     Behavior in environmental systems	
Bioaccumulative potential	No further relevant information available.
• Mobility in soil	No further relevant information available.
Ecotoxical effects:	
Remark:	Toxic for fish

· Remark:

Toxic for fish

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Trade name: Super Gloss	
	(Contd. of page 6)
Additional ecological informa	
General notes:	Also poisonous for fish and plankton in water bodies.
Deputte of DDT and vDvD ace	Toxic for aquatic organisms
<ul> <li>Results of PBT and vPvB associated vPbT:</li> </ul>	
• <u>PD1.</u> • vPvB:	Not applicable. Not applicable.
• <u>VF VD.</u> • Other adverse effects	No further relevant information available.
13 Disposal considerations	
<ul> <li>Waste treatment methods</li> </ul>	
· Recommendation:	Must not be disposed of together with household garbage. Do not allow product
	to reach sewage system.
· 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	
S T	
6	
· <u>Class</u>	6.1 Toxic substances.
· Label	6.1
<del></del>	
· <u>ADR</u>	
· <u>Class</u>	6.1 (T1) Toxic substances
· Label	6.1
· IMDG	
^	
Ne V	
Class	6.1 Toxic substances.
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	(Contd. of page
· Label	6.1
· IATA	
· <u>Class</u> · Label	6.1 Toxic substances. 6.1
	0.1
• <u>Packing group</u> • DOT, ADR, IMDG, IATA	III
· Environmental hazards:	Product contains environmentally hazardous substances:
Marine pollutant:	Yes
Special marking (ADR):	Symbol (fish and tree) Symbol (fish and tree)
Special precautions for user	Warning: Toxic substances
Danger code (Kemler):	60
· EMS Number:	F-A,S-A
Segregation groups	Liquid halogenated hydrocarbons
· Transport in bulk according to Annex	ll of
MARPOL73/78 and the IBC Code	Not applicable.
· Transport/Additional information:	
· DOT	
• Remarks:	Special marking with the symbol (fish and tree).
· UN "Model Regulation":	UN1897, Tetrachloroethylene, solution, ENVIRONMENTALL HAZARDOUS, 6.1, III

### **15 Regulatory information**

Safety, health and environmental regulations/legislation specific for the substance or mixture
 Sara
 Section 355 (extremely hazardous substances):
 None of the ingredient is listed.
 Section 313 (Specific toxic chemical listings):

All ingredients are listed.

• TSCA (Toxic Substances Control Act):

All ingredients are listed.

Proposition 65

Chemicals known to cause cancer:

All ingredients are listed.

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

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**Trade name: Super Gloss** (Contd. of page 8) · Cancerogenity categories EPA (Environmental Protection Agency) 127-18-4 tetrachloroethylene L · TLV (Threshold Limit Value established by ACGIH) 127-18-4 tetrachloroethylene A3 · MAK (German Maximum Workplace Concentration) 127-18-4 tetrachloroethylene 3B · NIOSH-Ca (National Institute for Occupational Safety and Health) All ingredients are listed. · GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS). Hazard pictograms GHS08 Signal word Warning · Hazard-determining components of labeling: tetrachloroethvlene · Hazard statements H227 Combustible liquid. H351 Suspected of causing cancer. · Precautionary statements P101 If medical advice is needed, have product container or label at hand. P102 Keep out of reach of children. P103 Read label before use. P280 Wear protective gloves/protective clothing/eye protection/face protection. P281 Use personal protective equipment as required. P308+P313 IF exposed or concerned: Get medical advice/attention. P405 Store locked up. P403+P235 Store in a well-ventilated place. Keep cool. P501 Dispose of contents/container in accordance with local/regional/ national/international regulations. · 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.

<ul> <li>Department issuing MSDS:</li> <li>Contact:</li> </ul>	Laboratory Dieter Zimmermann Elke Hake	
	Fon ++49 (0)911 64296-59	
	@mail E.Hake@akemi.de	
<ul> <li>Date of preparation / last revision</li> </ul>	06/16/2014 / -	
<ul> <li>Abbreviations and acronyms:</li> </ul>	ADR: Accord européen sur le transport des marchandises dangereuses pa	ar 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)	
		(Contd. on page 10)

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### Trade name: Super Gloss

HMIS: Hazardous Materials Identification System (USA) LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent : Flammable liquids, Hazard Category 4 Carc. 2: Carcinogenicity, Hazard Category 2