SILK & CLEAN INTERNATIONAL

Material safety data sheet

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1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY

Commercial product name:	**Silk & Clean**
Use of the substance/preparation:	Stain remover for silk
Company:	Silk & Clean International AB Östra Storagtan 3 611 34 Nyköping Telefon: 0155 286700 e-post: info@silkandclean.se
Contakt person:	Hans Franzén
Emergency telephone:	Hans Franzén 0155 286700 (office hours) or. 08-33 12 31 toxicity information central (office hours), 112 for emergency central.
Created by:	Hans Franzén, Silk & Clean International AB, +46 155 286700

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture according to Regulation (EC) No1272/2008
Flammable liquids (Category 2)
Eye irritation (Category 2)
Specific target organ toxicity - single exposure (Category 3)

According to European Directive 67/548/EEC as amended.
Highly flammable. Irritating to eyes. Repeated exposure may cause skin dryness or cracking. Vapours may cause drowsiness and dizziness.

Label elemnts, CLP

Pictogram:	
Signal word:	Danger
Hazard statements:	H225 Highly flammable liquid and vapour. H319 Causes serious eye irritation. H336 May cause drowsiness or dizziness. EUH066 Repeated exposure may cause skin dryness or cracking.
Precautionary statements:	P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking. P261 Avoid breathing dust/fume/gas/mist/vapours/spray. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

3. COMPOSITION/INFORMATION ON INGREDIENTS

EG-Nr.	CAS-Nr.	Substance name	Wt- (%)	Classification
200-578-6	64-17-5	Ethanol	60-70	Flam. Liq. 2, H225
200-661-7	67-63-0	2-propanol (Isopropanol)	30-40	Flam. Liq. 2, H225 Eye Irrit 2, H319 STOT SE 3, H336

4. FÖRSTA HJÄLPEN

General:	Remove victim immediately from source of exposure. General first aid, rest, warmth and fresh air. Contact physician if symptoms appear.
Inhalation:	General first aid, rest, warmth and fresh air. Consult a physician for specific advice.
Ingestion:	Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If potentially dangerous quantities of this material have been swallowed, call a physician immediately.
Skin:	Promptly flush contaminated skin with soap or mild detergent and water. Promptly remove clothing if penetrated and flush the skin with water. Contact physician if irritation continues.
Eyes:	Promptly wash eyes with plenty of water while lifting the eye lids. Make sure to remove any contact lenses from the eyes before rinsing. Contact physician if irritation persists.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media:	Skum, koldioxid (CO2), pulver eller vattendimma.
Special fire fighting procedures:	Move container from fire area if it can be done without risk. Cool containers exposed to flames with water until well after the fire is out. Avoid water in straight hose stream; will scatter and spread fire.
Specific hazards:	Solvent vapours may form explosive mixtures with air. Vapour is heavier than air and may accumulate into hollows or confined spaces.
Special protective equipment for firefighters:	Wear personal protective equipment. Wear selfcontained breathing apparatus for fire fighting.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions:	Avoid inhalation of gases. Evacuate personnel to safe areas. Avoid contact with skin and eyes. Wear personal protective equipment. Avoid sparks, flames, heat and smoking. Ventilate.
Environmental precautions:	Prevent product from entering drains or environment.
Methods for cleaning up:	Eliminate all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. Absorb in vermiculite, dry sand or earth and place into containers. Collect and reclaim or dispose in sealed containers in licensed waste. Inform authorities if large amounts are involved. Dispose of in accordance with local regulations.

7. HANDLING AND STORAGE

Storage	Keep in cool, dry, ventilated storage and closed containers. Protect from light, including direct sunrays. Ground container and transfer equipment to eliminate static electric sparks. Flammable/combustible - Keep away from oxidisers, heat and flames.
Handling:	Container must be kept tightly closed. Provide good ventilation. Storage tanks and other containers must be grounded. Eliminate all sources of ignition. Avoid a height of fall of more than 50 cm for fluids. Wear personal protective equipment. When using, do not eat, drink or smoke. Handle in accordance with good industrial hygiene and safety practice.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

WEL (GB) Short-term value: 384 mg/m³, 100 ppm, Long-term value: 191 mg/m³, 50 ppm
REL (USA) Short-term value: 560 mg/m³, 150 ppm, Long-term value: 375 mg/m³, 100 ppm
Ethanol AFS (Sweden, 7/2000).
KTV: 1900 mg/m3 15 minute/minutes.
KTV: 1000 ppm 15 minute/minutes.
NGV: 1000 mg/m3 8 hour/hours.
NGV: 500 ppm 8 hour/hours.
propan-2-ol AFS (Sweden, 7/2000).
KTV: 600 mg/m3 15 minute/minutes.
KTV: 250 ppm 15 minute/minutes.
NGV: 350 mg/m3 8 hour/hours.
NGV: 150 ppm 8 hour/hours.
Ethanol Arbejdstilsynet (Denmark, 10/2002).
GV: 1900 mg/m3 8 hour/hours.
GV: 1000 ppm 8 hour/hours.
propan-2-ol Arbejdstilsynet (Denmark, 10/2002). Skin
GV: 490 mg/m3 8 hour/hours.
GV: 200 ppm 8 hour/hours. K
Ethanol Arbeidstilsynet (Norway, 10/2003).
AN: 950 mg/m3 8 hour/hours.
AN: 500 ppm 8 hour/hours.
propan-2-ol Arbeidstilsynet (Norway, 10/2003).
AN: 245 mg/m3 8 hour/hours.
AN: 100 ppm 8 hour/hours.
Ethanol MAK-Werte Liste (Germany, 7/2003).
Spitzenbegrenzung: 1920 mg/m3 15 minute/minutes.
TWA: 960 mg/m3 8 hour/hours.
propan-2-ol MAK-Werte Liste (Germany, 7/2003).
Spitzenbegrenzung: 1000 mg/m3 15 minute/minutes.
TWA: 500 mg/m3 8 hour/hours.
Ethanol Työterveyslaitos (Finland, 3/2002).
STEL: 2500 mg/m3 15 minute/minutes.
STEL: 1300 ppm 15 minute/minutes.
TWA: 1900 mg/m3 8 hour/hours.
TWA: 1000 ppm 8 hour/hours.
propan-2-ol Työterveyslaitos (Finland, 3/2002).
STEL: 620 mg/m3 15 minute/minutes.
STEL: 250 ppm 15 minute/minutes.
TWA: 500 mg/m3 8 hour/hours.
TWA: 200 ppm 8 hour/hours.

Protective gloves:	Protective gloves should be used if there is a risk of direct contact or splash. For exposure of 4 to 8 hours use gloves made of: Nitrile. Polyvinyl chloride (PVC). Protection for more than 8 hours needs special consideration.
Eye protection:	Wear approved chemical safety goggles.
Skin protection:	Wear appropriate clothing to prevent reasonably probable skin contact.
Respiratory protection	In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure useself-contained respiratory protective device. All handling to take place in wellventilated area.
Process conditions:	Use engineering controls to reduce air contamination to permissible exposure.

9. PHYSICAL AND CHEMICAL PROPERTIES

Experimental data for many of the physical properties of Silk & Clean L are insufficient. Therefore, when indicated, data for pure ethanol (being the major component of this mixture) is presented. The data for the other component, iso-propanol, are similar to data for pure ethanol, therefore the data for Silk & Clean is similar to data for pure ethanol.

Appearance:	Fluid. Volatile
Colour:	Clear
Odour:	Alcohol
Solubility:	Soluble in most organic solvents
Density (20°C):	0.789 g/cm3 at 20°C
Flash point	12 °C (ethanol)
Boiling:	78 °C (ethanol)
Vapour pressure (20°C):	5.9 kPa (ethanol)
Explosion limits:	2.8-19 vol-% (ethanol)
Auto ignition temperature:	425 °C (ethanol)
Partition coefficient (n-octanol/water):	Partition coefficient (n-octanol/water) -0.32 (ethanol)
Viscosity, dynamic	1.2 mPas (20 °C) 12 °C (ethanol)

10. STABILITY AND REACTIVITY

Stability:	Chemically stable, but inflammable. Avoid: Heat, sparks, flames. Fumes can create an explosion if mixed with air..
Conditions to avoid:	Avoid contact with strong oxidisers. .
Hazardous polymerisation:	Will not polymerise.
Materials to avoid:	No incompatible groups noted.
Hazardous decomp. products:	No specific hazardous decomposition products noted. Fire or high temperatures create: Carbon dioxide (CO2). Carbon monoxide (CO).

11. TOXICOLOGICAL INFORMATION

Inhalation:	High concentrations of vapour may cause headache, discomfort, vomiting or intoxication.
Ingestion:	May cause stomach pain or vomiting. Central nervous system depression.
Skin:	Irritating to skin. Can be absorbed by the skin and result in similar symptoms when breathed in.
Eyes:	Spray and vapour in the eyes may cause irritation.

Ethanol
Toxicity by ingestion:
LD50 Oral rat: 7060 mg/kg body weight
Toxicity by inhalation:
LC50 Inhalation rat 4h: 124,7 mg/l
Toxicity by skin contact:
LD50 Dermal rabbit: >20000 mg/kg body weight

Isopropanol
Toxicity by ingestion:
Oral, rat: LD50 = 5000 mg/kg body weight
Toxicity by inhalation:
Inhalation, rat: LC50 = 72600 mg/m3
Toxicity by skin contact:
Skin, rabbit: LD50 = 12800 mg/kg

12. ECOTOXICOLOGICAL INFORMATION

Ethanol
Acute toxicity:
LC50 Fish 96h: 13500 mg/l species: Pimephales promelas
EC50 Daphnia 48h: 5400 mg/l species: D. magna
IC50 Algae 72h: >10,9 mg/l species: Skeletonema costatum

Accumulation:
BCF: 0,66
Log Pow: -0,32
Degradability:
BOD5/COD: 0,4 - 0,8

Isopropanol
Acute toxicity:
LC50 Fish 96h: 4200 mg/l species: Rasbora heteromorpha
EC50 Daphnia 48h: 13299 mg/l species: D. magna
IC50 Algae 72h: 6 mg/l species: Green algae

Accumulation:
Log Pow: 0,3
Degradability:
BOD5/COD: 0,3 - 0,6

13. DISPOSAL CONSIDERATIONS

Disposal methods:	Absorb in vermiculite or dry sand, dispose in licensed special waste. Collect in marked containers and deliver to approved depot. Make sure containers are empty before discarding (explosion risk). Please note the danger of containers that have contained inflammable fluids. Empty containers must not be burned because of explosion hazard. The container should not be punctured, cut or welded. To minimise danger for an explosion, the container should be purged of air with the opening down. Do not allow runoff to sewer, waterway or ground.
Waste class:	Search in the European Waste Catalogue (EWC) for the appropriate code for your particular waste. Dispose of in accordance with local regulations.

14. TRANSPORT INFORMATION

Label for conveyance:	 Highly flammable
Proper shipping name	ALCOHOLS, N.O.S. (Ethanol, propan-2-ol)
ROAD TRANSPORT (ADR)	
UN-nummer	1987
ADR class	Class 3: Flammable liquids.
ADR Hazard labels	3
Classification code	F1
ADR packing group	II
Hazard no. (ADR)	33 Highly flammable liquid (flash point below 23°C)
RAIL TRANSPORT (RID)	
RID class no.	3
RID Hazard labels	3
RID packing group	II

SEA TRANSPORT (IMDG)	
UN no. sea	1993
IMDG class	3
IMDG packing group	II
EmS no.	F-E, S-D

15. REGULATORY INFORMATION

See section 2 for labeling.

16. REMAINING INFORMATION

Previous classification according. 67/548/EEC - 1999/45/EC	
Symbols:	 Highly flammable  Irritating
Risk phrases:	R-11 Highly flammable. R-36 Irritating to eyes. R-67 Vapours may cause drowsiness and dizziness.
Safety phrases:	S-2 Keep out of reach of children. S-16 Keep away from sources of ignition - No Smoking.

The information in this data sheet is considered to be correct according to present knowledge andexperience, but there is no guarantee that it is complete. It is therefore in the user's interest to ensure that the information is sufficient for the area it is intended for.