

SILK & CLEAN INTERNATIONAL

SAFETY DATA SHEET

Ecosolv/heptan

Date of issue: 2010-03-18

1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND COMPANY

Trade Name:	Ecosolv/Heptan
Applications:	Solvent
Manufacturer:	SILK & CLEAN INTERNATIONAL AB Ostra Storgatan 3 SE 611 34 NYKOPING, SWEDEN Phone: +46 155 286700 e-mail: info@silkclean.com
Issued by:	Hans Franzén
Emergency Phone:	112 Poison Information

2. HAZARDS

Highly flammable

Irritating to eyes and skin. . Harmful: may cause lung damage if swallowed. Vapors may cause drowsiness and dizziness. . Harmful to aquatic organisms, may cause long term adverse effects in the aquatic environment.



Harmful



Highly Flammable

3. COMPOSITION / INFORMATION ON INGREDIENTS

Komponent	EG-Nr.	CAS-Nr.	Konc. (%)	Classification
				(KIFS 2005:5)
Ethanol	200-578-6	64-17-5	50-70	F; R11
Isopropanol	200-661-7	67-63-0	25-40	F, Xi, R11-36-67
NAFTA, hydrodesulphurised easy dearomatised	295-434-2	92045-53-9	20 - <25	F;Xn,N, R11-38-51/53-65-67

Legend: T + = Very toxic, T = Toxic, C = Corrosive, Xn = Harmful, Xi = Irritant
Explosive, O = Oxidising, Extremely flammable, F = Highly flammable, N = Dangerous
Version of this designated risk phrases are contained in Section 16

4. FIRST AID MEASURES

Inhalation:	Fresh air, rest and warmth. Kontakta läkare vid besvär. Contact a doctor in case of complaints.
Eye Contact:	Rinse with plenty of water for at least 10 minutes. Håll ögonlocken brett isär. Hold eyelids apart. Kontakta läkare vid kvarstående besvär. Contact a doctor in the case of inconvenience.
Skin contact	Remove contaminated clothing. Wash with soap and water.

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SAFETY DATA SHEET Ecosolv/heptan

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5. FIRE FIGHTING

Fire and explosion hazards:	Highly flammable. Vapors may form explosive mixtures with air even at room temperature. Vapors are heavier than air and may accumulate in low-lying areas. Clothes that have been contaminated by the substance presents a fire hazard.
Extinguishing Media:	Powder, foam or water spray.
Fire-fighting:	Please note the risk of explosion. Containers close to fire should be removed or cooled with water.

6. ACCIDENTAL RELEASE MEASURES

Please note the risk of fire and explosion! Remove all ignition sources and precautionary measures against static electricity. Avoid breathing vapors and direct contact with the product. Ensure good ventilation / ventilation. Wear appropriate protective equipment when necessary (see section 8).

Prevent discharge to drains, soil and water. Small spills can be wiped up with cloth or similar. Larger waste spillage with non-combustible absorbent material (sand, earth or similar) and collected. Clean the surface with water. Cleaning wastes be disposed of as hazardous waste. Contact emergency services to major spills.

7. HANDLING AND STORAGE

Management	When handling the product must be rules for handling flammable goods followed. Manage product isolated from sources of ignition and heat. Take precautionary measures against static electricity. Develop methods and establishment so that the inhalation of vapors and direct contact with the product are avoided. Work in well ventilated area. Mechanical ventilation and local exhaust ventilation may be needed. Wear protective equipment (see Section 8) if necessary. Possibility of eyewash shall be provided at the workplace.
Storage:	Storage of large quantities of flammable liquids requires the permission of the municipal committee (SÄIFS 1995:3).

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

The following elements have been assigned exposure limit of the Work Environment Authority (AFS 2005:17):

Topic:	NGV	KTV
Heptane and heptane	200 ppm, 800 mg/m ³	300 ppm, 1200 mg/m ³
Ethanol	500 ppm, 1000 mg/m ³	1000 ppm, 1900 mg/m ³
Isopropanol	150 ppm, 350 mg/m ³	250 ppm, 600 mg/m ³

Exposure: Work in well ventilated area, such as dragskåp. hood. Mechanical ventilation and local exhaust ventilation may be needed.

Respiratory protection: In case of insufficient ventilation can respirator (full face mask with gas filter A, brown) or breathing apparatus required.

Wear safety goggles when risk of splashes.



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SAFETY DATA SHEET

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Wear gloves when risk of direct contact or splashes. Probably a good glove: nitril.



In a comprehensive treatment or handling involving a risk for splash protective clothing should be used, eg ärmskydd och förkläde. sleeve covers and apron.

9. PHYSICAL AND CHEMICAL PROPERTIES

Data refer to Isopropanol

Appearance:	Colorless liquid	Description:	Volatile
Boiling Point (° C):	82 °C	Flash Point (° C):	12
Solidification point (° C):	-90 °C	Firing Point (° C):	Ca 425
Water solubility (g / l):	Soluble	Solubility in org.	Miscible
Density (kg / dm³):	0,89		
Vapor pressure (kPa / mm Hg):	4,2 / 31		

10. STABILITY AND REACTIVITY

Stability and reactivity:	Stable under normal conditions. Vapors may already at room temperature to form explosive mixtures with air. Reagerar häftigt med starka oxidationsmedel Reacts violently with strong oxidizers
Conditions / substances to avoid:	Avoid heat and contact with oxidizing agents, plastics and rubber materials.

11. TOXICOLOGICAL INFORMATION

	Data refer to Isopropanol
Inhalation:	Vapors may cause drowsiness and dizziness. Vapors can irritate the respiratory tract and cause symptoms such as nausea, lethargy, dizziness and headache. Inhalation of high concentrations may cause unconsciousness.
Eye Contact:	Eye contact may cause irritation and pain. Vapors can irritate.
Skin contact:	Seems degreasing of the skin which can cause irritation, redness, dry skin, cracking and dermatitis. Can be absorbed through the skin and cause symptoms similar to inhalation.
Ingestion:	Give similar symptoms as inhalation.
Toxicity Data:	LD ₅₀ Oral rat: 4710 – 5445 mg/kg LD ₅₀ Dermal rabbit: 12800 mg/kg LC ₅₀ Inhalation ratt on råtta, 4h: 46,5 – 72,6 mg/kg

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SAFETY DATA SHEET

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12. ECOLOGICAL INFORMATION

Data refer Isopropanol.

Not classified as dangerous for the environment. Low toxicity to both aquatic organisms and terrestrial mammals. Only major local emissions could be expected to pose a risk to aquatic organisms. Readily biodegradable. Is volatile and evaporates quickly.

Ekotoxicitets data:

LC₅₀ Fish 96h: 4200 mg/l (*karp*)

EC₅₀ Daphnia, 48h: 13299 mg/l

Akkumulerbarhet: Log Pow: 0,28

Degradability BOD5/COD: 0,3 – 0,6

13. WASTE MANAGEMENT

Handled in accordance with the Waste Ordinance (SFS 2001:1063). Do not discharge into the sewer, but must be disposed of for destruction. Issues related to gete can usually be answered by the municipality.

14. TRANSPORT INFORMATION



UN Number:	1987		
Proper shipping name:	ALKOHOLS, N.O.S (ethanol, isopropanol)		
<u>ADR / RID (road / rail)</u>			
Class:	3	Hazard Nr:	33
Label:	3	Packing Group:	II
Tunnel Restriction	(D/E)		
<u>IMDG (Sjö)</u>			
Class:	3	Packing Group:	II
EMS:	F-E,S-D	Marine Pollutant:	No
<u>IATA (air)</u>			
Class:	3	Packing Group:	II
Label:	3		

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15. REGULATORY

Class:	Harmful (Xn), Highly Flammable (F)	
Symbol:	 Harmful	 Highly Flammable
Risk phrases:	R11 Highly flammable. R36/38 Irritating to eyes and skin. R65 Harmful: may cause lung damage if swallowed. R67 Vapors may cause drowsiness and dizziness. R52/53 Harmful to aquatic organisms, may cause long term adverse effects in the aquatic environment.	
Protective phrases:	S2 Keep out of the reach of children. S7 Keep container tightly closed. S16 Keep away from sources of ignition - No smoking. S24/25 Avoid contact with skin and eyes. S26 After contact with eyes, rinse immediately with plenty of water and seek medical advice. S33 Take precautionary measures against static electricity. S61 Avoid release to the environment. Refer to special instructions / Safe Hot Datasheet. S62 If swallowed, do not induce vomiting. Seek medical advice immediately and show this container or label.	
Fire classification:	Flammable class 1	

16. OTHER INFORMATION

The information in this MSDS are based on current knowledge and experience, but no assurance can be given that information is complete. It is therefore the user's own interest to clarify whether there is sufficient information for the purpose for which the product is used. It is the user who has full responsibility to comply with the requirements of current legislation.

Full text of risk phrases in section 2:

R11 Highly flammable.

R36/38 Irritating to eyes and skin.

R65 Harmful: may cause lung damage if swallowed.

R67 Vapors may cause drowsiness and dizziness.

R52/53 Harmful to aquatic organisms, may cause long term adverse effects in the aquatic environment.