SAFETY DATA SHEET

Sinol 100

The safety data sheet is in accordance with Commission Regulation (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

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

Date issued	12.01.2015
Revision date	29.03.2019

1.1. Product identifier

Product name	Sinol 100
Article no.	12. 52011, 52012, 52017, 52018
GTIN No.	6414501406591, 6414504270908, 6414501406584

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

Use of the substance / preparation	Fuel, solvent, detergent.
The chemical can be used by the general public	Yes

1.3. Details of the supplier of the safety data sheet

Manufacturer

Company name	Berner Ltd/Car care
Office address	Hitsaajankatu 24
Postal address	P.O.Box 22
Postcode	FI-00811
City	Helsinki
Country	Finland
Telephone number	+3582079100
Email	korrek-lasol@berner.fi

1.4. Emergency telephone number

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP / GHS]	Flam. Liq. 2; H225 Eye Irrit. 2; H319
Substance / mixture hazardous properties	Highly flammable liquid and vapour. Causes serious eye irritation. In use, may form flammable/explosive vapour-air mixture.

2.2. Label elements

Hazard pictograms (CLP)

Signal word	Danger
Hazard statements	H225 Highly flammable liquid and vapour. H319 Causes serious eye irritation.
Precautionary statements	P102 Keep out of reach of children. P210 Keep away from . No smoking. P233 Keep container tightly closed. P305+P351 IF IN EYES: Rinse cautiously with water for several minutes. P501 Dispose of contents / container to according to local regulations.

2.3. Other hazards

SECTION 3: Composition / information on ingredients

3.2. Mixtures

Substance	Identification	Classification	Contents	Notes
ethanol	CAS No.: 64-17-5 EC No.: 200-578-6 Index No.: 603-002-00-5 REACH Reg. No.: 01-21194557610-43-xxxx	Flam. Liq. 2; H225 Eye Irrit. 2; H319	90 - 100 %	
isopropanol	CAS No.: 67-63-0 EC No.: 200-661-7 Index No.: 603-117-00-0 REACH Reg. No.: 01-2119457558-25-xxxx	Flam. Liq. 2; H225 Eye Irrit. 2; H319 STOT SE 3; H336	1 - 5 %	
methyl ethyl ketone	CAS No.: 78-93-3 EC No.: 201-159-0 REACH Reg. No.: 01-2119457290-43-xxxx	Flam. Liq. 2;H225 Eye Irrit. 2;H319 EUH066 STOT SE 3;H336	~ 2 %	

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation	Move to fresh air. If symptoms persist, call a physician.
Skin contact	Rinse with water. If skin irritation persists, call a physician.
Eye contact	Rinse immediately with plenty of water for at least 15 minutes. If eye irritation

	persists, consult a specialist.
Ingestion	Induce vomiting if person is conscious. Consult a physician if necessary.

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

General symptoms and effects	-

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

Medical treatment	Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	Use dry chemical, CO2, water spray or alcohol foam.
Improper extinguishing media	--

5.2. Special hazards arising from the substance or mixture

Fire and explosion hazards	Highly flammable liquid and vapour.

5.3. Advice for firefighters

Personal protective equipment	Self-contained breathing apparatus

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	Keep people away from and upwind of spill/leak. Remove all sources of ignition.

6.2. Environmental precautions

Environmental precautionary measures	Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system. Local authorities should be advised if significant spillages cannot be contained.

6.3. Methods and material for containment and cleaning up

Clean up	Small amounts: Flush area with water. Large amounts : Soak up with inert absorbent material and dispose of as hazardous waste.

6.4. Reference to other sections

Other instructions	-

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Handling	Keep away from sources of ignition - No smoking. Take precautionary measures against static discharges. Provide sufficient air exchange and/or exhaust in work

rooms.

7.2. Conditions for safe storage, including any incompatibilities

Storage	Keep out of the reach of children. Keep containers tightly closed in a cool, well-ventilated place. Flammable liquid

7.3. Specific end use(s)

Specific use(s)	--

SECTION 8: Exposure controls / personal protection

8.1. Control parameters

Substance	Identification	Exposure limits	TWA Year
ethanol	CAS No.: 64-17-5	Limit value (8 h) : 1000 ppm Limit value (8 h) : 1900 mg/m3 **Limit value (short term)** Value: 1300 ppm **Limit value (short term)** Value: 2500 mg/m3	
isopropanol	CAS No.: 67-63-0	Limit value (8 h) : 200 ppm Limit value (8 h) : 500 mg/m3 **Limit value (short term)** Value: 250 ppm **Limit value (short term)** Value: 620 mg/m3	
methyl ethyl ketone	CAS No.: 78-93-3	**Limit value (short term)** Value: 100 ppm **Limit value (short term)** Value: 300 mg/m3	

DNEL / PNEC

DNEL	Comments: Ethanol: Application Route/ Inhalation: 950 mg/m3 (chronic effect/ end use/worker), 1900 mg/m3 (acute effect, local effect/end use/worker), 114 mg/m3 (chronic effect/end use/consumer), 950 mg/m3 (acute effect, local effect/end use/consumer) Application Route/ Skin contact: 343 mg/kg (chronic effect/end use/worker/ Exposure time 1 d), 206 mg/kg (chronic effect/end use/ consumer/ Exposure time 1 d) Application Route/ Ingestion: 87 mg/kg (chronic effect/end use/consumer/ Exposure time 1 d)
PNEC	Comments: Ethanol: Untreated waste water: 580 mg/l, Local clean Water : 0.96 mg/l, Terrestrial Compartment : 0.63 mg/kg, Marine water : 0.79 mg/l

8.2. Exposure controls

Precautionary measures to prevent exposure

Product related measures to prevent exposure	Handle in accordance with good industrial hygiene and safety practice.

Eye / face protection

Required Properties	If splashes are likely to occur, wear: Use Safety glasses with side-shields conforming to EN166

Hand protection

Skin- / hand protection, short term contact	Under normal conditions of use gloves are not normally required.
Skin- / hand protection, long term contact	Chemical resistant gloves required for prolonged or repeated contact.
Required properties for hand protection	Rubber or plastic gloves

Skin protection

Protective clothing necessary properties	Normal work clothes are adequate.

Respiratory protection

Respiratory protection necessary at	Under normal conditions of use respiration protection should not be required.

Appropriate environmental exposure control

Environmental exposure controls	Large amounts: Do not discharge into drains, water courses or onto the ground.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Clear liquid
Odour	sharp
pH	Status: In delivery state Value: -
Boiling point / boiling range	Value: 78 °C Comments: Ethanol
Flash point	Value: 12 °C Comments: Ethanol
Lower explosion limit with unit of measurement	Value: 3,3 vol% Comments: Ethanol
Upper explosion limit with units of measurement	Value: 19 vol% Comments: Ethanol
Vapour pressure	Value: 5,9 kPa Comments: Ethanol
Density	Value: ~ 810 kg/m³ Temperature: 20 °C
Solubility	Medium: Water Comments: soluble

Partition coefficient: n-octanol/ water	Comments: Ethanol log Pow = -0,3

9.2. Other information

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	Stable under normal conditions.

10.2. Chemical stability

Stability	Stable at normal ambient temperature and pressure.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	Keep away from oxidising agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions.

10.4. Conditions to avoid

Conditions to avoid	Heat, flames and sparks. Vapours may form explosive mixture with air.

10.5. Incompatible materials

Materials to avoid	Keep away from oxidising agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions.

10.6. Hazardous decomposition products

Hazardous decomposition products	Thermal decomposition can lead to release of irritating gases and vapours.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Other information regarding health hazards

Assessment of acute toxicity, classification	LD50/oral/rat = >2000 mg/kg (according to data from raw materials)
Assessment of eye damage or irritation, classification	Irritating.
General respiratory or skin sensitisation	No sensitisation responses were observed.
Inhalation	May cause irritation of respiratory tract.
Specific target organ toxicity - single exposure, human experience	Overexposure may cause headache and irritation to eyes and mucous membrane. Ingestion of large amounts may cause alcoholpoisoning.
Specific target organ toxicity - repeated exposure, human experience	Repeated and prolonged use of ethanol will result in cirrhosis of the liver.

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicity	Ethanol: LC50 (fish, 96 h) = 11200 mg/l, EC50(Invertebrates. /48 h, Fresh water = 5012 mg/l, EC50(Invertebrates. /48 h), Marine water = 857 mg/l MIBK: LC50 (fish) = 505 mg/l Isopropanol: LC50 Leuciscus idus (Golden orfe) : >100 mg/l, EC50/48h/daphnia = :> 100 mg/l, EC50/72h/algae = :> 100 mg/l, Scenedesmus subspicatus

12.2. Persistence and degradability

Persistence degradability additional information	Ethanol: Hydrolytic stable, T½ = ca. 4 - 6 days in the atmosphere. Isopropanol: Hydrolysis is unlikely.
Persistence and degradability, comments	Ethanol: BOD5/COD >0,5, >80% / 4 d (OECD TG 301) readily biodegradable. Isopropanol: > 70%, 10 d, Concentration: 7 mg/l, readily biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential	Ethanol: log Pow = -0,3; low bioaccumulation MIBK: Low bioaccumulation (soluble in water) Isopropanol: log Pow = 4,8 - 5,8 probable accumulative

12.4. Mobility in soil

Mobility	Mobile liquid. Soluble in water. The product evaporates readily.

12.5. Results of PBT and vPvB assessment

PBT assessment results	This mixture contains no substance considered to be persistent, bioaccumulating nor toxic (PBT).
vPvB evaluation results	This mixture contains no substance considered to be very persistent nor very bioaccumulating (vPvB).

12.6. Other adverse effects

Other adverse effects, comments	-

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Specify the appropriate methods of disposal	In accordance with local and national regulations. Contact the proper local authorities. if needed. Deliver empty disposable packages to recycling, if all hazards have been eliminated.

SECTION 14: Transport information

Dangerous goods	Yes

14.1. UN number

ADR/RID/ADN	1170
IMDG	1170
ICAO/IATA	1170

14.2. UN proper shipping name

Proper shipping name English ADR/RID/ADN	ETHANOL SOLUTION
ADR/RID/ADN	ETHANOL SOLUTION
IMDG	ETHANOL SOLUTION
ICAO/IATA	ETHANOL SOLUTION

14.3. Transport hazard class(es)

ADR/RID/ADN	3
Classificaton code ADR/RID/ADN	F1
IMDG	3
ICAO/IATA	3
Comments	3

14.4. Packing group

ADR/RID/ADN	II
IMDG	II
ICAO/IATA	II

14.5. Environmental hazards

14.6. Special precautions for user

Special safety precautions for user	Highly flammable.

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

Transport in bulk (yes/no)	No
Pollution category	Not applicable.

Additional information

Hazard label ADR/RID/ADN	3
Hazard label IMDG	3
Hazard label ICAO/IATA	3

ADR/RID Other information

Tunnel restriction code	D/E
Transport category	2

Hazard No.	33
Other applicable information ADR/ RID	33

IMDG Other information

EmS	F-E, S-D

SECTION 15: Regulatory information

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

Legislation and regulations	-

15.2. Chemical safety assessment

Chemical safety assessment	-

SECTION 16: Other information

List of relevant H-phrases (Section 2 and 3)	H225 Highly flammable liquid and vapour. H319 Causes serious eye irritation. H336 May cause drowsiness or dizziness.
Additional information	Manufacturer and the label of the product.
Key literature references and sources for data	The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release.
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