SAFETY DATA SHEET. According to EU Reg. 1907/2006/EC – Article 31

Initial SDS issue date – 04/10/2019 Latest revision – 20/03/2024 V3.1

Identification of the Substance/Preparation and Company.

SECTION 1.

1.1 Product identifier: Ecosolve 100 70/30% IPA/DI Cleaning Fluid.

Safety document identification number: SDS-ECO100-V3.1

1.2 Composition Information on ingredients and uses
General description: Cleaning fluid made with a mixture of Alcohol solvent and water for cleaning tasks to remove residues in Electronics Manufacturing operations.

1.3 Details of the Manufacturer and source of the Safety Data Sheet.

Company: SMT-Surclean

SMT Technology Centre, Prospect Rd.,

Cowes, Isle of Wight, U.K. P031 7AD.

1.4 Emergency contact details

Main and emergency tel. No:
+44 (0)1983 290333

Email: info@surclean.co.uk

SECTION 2 – Hazards identification

2.1 –Classification of the substance/mixture to Regulation (EC) No 1272/2008

GHS02 Flame **Flammable Sol. 1** **H226 Flammable liquid and vapour.**

GHS07 **Eye irritant 2** **H319 Causes serious eye irritation**

STOT SE 3 **H336 May cause drowsiness or dizziness**

SECTION 4 –First Aid Measures

4.1 Description of first aid measures

Contact with skin

-wash the affected area with plenty of soap and water.

-afterwards, a suitable moisturising skin cream can be applied.

Contact with eyes

-If material has got into eyes, wash out immediately with plenty of water for at least 15 minutes.

-Seek medical attention if any irritation persists.

Ingestion

-Give patient plenty of water to drink. NEVER MAKE AN UNCONCIOUS PERSON VOMIT OR DRINK FLUIDS. DO NOT INDUCE VOMITING.

-Seek medical attention immediately.

Inhalation and General

-Remove the patient from source of exposure to fresh air and lie down. Seek medical advice if neccesary. If casualty is unconcious, place into the recovery position. Perform artificial respiration if breathing has stopped. If breathing is difficult, properly trained personnel may assist affected person by administering 100% Oxygen. Keep affected person warm and at rest. Seek prompt medical attention.

4.2 Most important symptoms and effects, both acute and delayed: No further relevant information

4.3 Indication of any immediate medical attention and special treatment needed: No further relevant information available

SECTION 5 – Firefighting Measures

5.1 Extinguishing Media

-in case of fire use water spray or fog, alcohol resistant foam, dry chemical or C02 (S43), Sand, Dolomite etc.

5.2 Special hazards arising from the substance or mixture: May be released in case of fire: Carbon Monoxide (CO)

5.3 Advice for firefighters

-Do not use water jets. Wear breathing apparatus. Use Water to keep fire exposed containers cool and to disperse vapours. Dike for water control. Cool containers exposed to flames with water until well after the fire is out. Move container from the fire area if it can be done without risk. Use water spray to reduce vapours. For large scale fires in cargo areas, use unmanned hose holder or monitor nozzles if possible. If not, withdraw and let fire bum out. If risk of water pollution occurs, notify appropriate authorities.

SECTION 6 – Accidental release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Immediate actions -Shut off all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. Use breathing protection against the effects of fumes/dust/aerosol. Wear protective equipment. Keep unprotected persons away.

6.2 Environmental precautions

Do not allow material to enter drainage system, surface, or ground water.

6.3 Methods and material for spillage containment and clean up

Clean up procedures

-Provide ventilation and confine spill. Absorb spillage in a suitable inert material such as vermiculite, dry sand or earth and place into appropriate container. For smaller spills, dilution with water is possible.

6.4 Reference to other sections

See section 7 for information on safe handling

See section 8 for information on personel protection equipment

See section 13 for information on disposal

SAFETY DATA SHEET. According to EU Reg. 1907/2006/EC – Article 31

Initial SDS date 04/10/19 Latest revision 20/03/2024 V3.1 SDS Identifier: SDS-ECO100-V3.1

Surclean Ecosolve 100 70/30% IPA/DI Cleaning Fluid.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008

This product is classified and labeled according to the CLP regulations.

Hazard Pictograms

GHS02

GHS07

Signal word: DANGER

Hazard determining components of labelling: Propan-2-ol

Hazard statements

H226 Flammable liquid
H319 Causes serious
eye irritation.
H336 May cause drowsiness or dizziness

Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No Smoking.
P261 Avoid breathing vapours. Use in a well ventilated area.
P305 + P351 + P338 IF IN EYES: Rinse with water for several minutes. Remove contact lenses, if present and easy to do so. Continue with water irrigation.
P312 IF FEELING UNWELL: Call a POISON CENTRE or Doctor.
P337 + P313 if eye irritation persists: Seek medical attention/advice.
P403 + P233 Store in a well ventilated place. Keep container firmly closed.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3 Other hazards

Results of PBT and vPvB assessment:

PBT: Not applicable
vPvB Not applicable

SECTION 3 – Composition/information of ingredients

3.2 Chemical characterisation: Mixtures

Description: Impregnated Cleaning Wipes

I.D. Numbers	Name of Ingredient	Concentration	Warning Symbol	risk phrases
CAS: 67-63-0 Einecs: 200-881-7 Reg. Nr: 01-2119457558-25-X	Isopropanol Alcohol	70%		Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE3, H336

Additional information: For the wording of the listed hazard phrases refer to section 16.

SECTION 7 - Handling and Storage

7.1 Precautions for safe handling
Keep away from heat and direct sunlight. Ensure good interior ventilation, particularly at ground level. (Fumes are heavier than air). In use, avoid the formation of flammable and explosive levels of solvent vapours in the in the ambient air, and take measures to prevent the maximum workplace vapour concentration values being exceeded.
Information about the protection against explosions and fires
Keep sources of ignition away – Do not smoke

7.2 Conditions for safe storage, including any incompatibilities
Storage requirements to be met by storerooms and containers
Observe special regulations requirements specified in Section 15.
Store in a cool location and away from direct sunlight.
Information about storage in a single common storage area
Keep away from strong Oxidizing, Alkali and Acidic materials
Further information about storage conditions
Keep containers tightly sealed.
Store in cool, dry conditions in well sealed containers.

7.3 Specific end use(s) – No further relevant information available.

SECTION 8 – Exposure controls/Personal Protection

8.1 Control parameters

Components with limit values requiring monitoring in the workplace:
CAS 67-63-0 propan-2-ol

WEL (United Kingdom)	Short term value: 1250 mg/m3 – 500 ppm

DNELs
CAS 67-63-0 propan-2-ol

Oral	DNEL (consumer, long term, systemic)	26 mg/kg bw/day (human)
Dermal	DNEL (worker, long term, systemic)	888 mg/kg bw/day (human)
	DNEL (consumer, long term, systemic)	319 mg/kg bw/day (human)
Inhalative	DNEL (worker, long term, systemic)	500 mg/M3 (human)
	DNEL (consumer, long term, systemic)	89 mg/m3 (human)

PNECs
CAS 67-63-0 propan-2-ol

PNEC aqua (freshwater)	140.9 mg/L (.)
PNEC aqua (marine water)	140.9 mg/L (.)
PNEC STP	2,251 mg/L (.)
PNEC soil	28 mg/kg soil dw (.) 552
PNEC sediment (freshwater)	mg/kg sedim. dw (.) 552
PNEC sediment (marine water)	mg/kg sedim. dw (.)
PNEC aqua (intermittent releases)	140.9 mg/L (.)
PNEC oral	160 mg/kg food (.)

Additional information – The lists valid during the compilation were used as a basis.

SECTION 8 (Cont.)

8.2 Exposure controls
Personal protective equipment
General protective and hygienic measures:
Keep away from foodstuffs, beverages and food. Remove contaminated clothing immediately.
Wash hands during breaks and at end of working. Do not smoke within the work area.
Breathing equipment: Not necessary providing work area is well ventilated.
Protection of hands:
In case of longer or repeated contact with the skin; use barrier cream for skin surfaces likely to come into contact with the product. It is recommended that impermeable gloves are worn, particularly for regular users.
Material of gloves:
The user should take note of the ingredients in the product mixture, and from glove manufacturers technical information select the best option for impermeability and glove material resistance to the product. Since both glove material specifications and thickness vary between manufacturers, it is not possible to calculate the degree of resistance to the product mixture in advance. Testing should therefore be undertaken before use.
Penetration time of glove material:
The exact glove material break through time is determined by the glove manufacturer, and observation.
Reference Nitrile Rubber, NBR.
Workspace controls:
Normal good room ventilation should be sufficient. Do not allow waste product to accumulate. Store and dispose of waste materials in conformance to regulations, and with due regard to flammability and personel safety.
Eye protection:
Safety glasses, goggles or full face shield should be worn if possibility of liquid splashing is present.
Body protection:
Wear appropriate protective work clothing to prevent possible liquid contact when using the product.

SECTION 9 - Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance
-Form – Clear colourless liquid.
Odour/Taste-Mild. Alcohol. Sweet odour.
Solubility Description – completely soluble in water.

Changes of state	Value/range	unit	method
Melting point/freezing point	– Not determined.		
Boiling point/range	88	deg C.	
Flash Point	13	deg C.	Pensky Martens C.Cup.
Auto ignition temperature	425	deg C.	
Inflammability (solid/gaseous)	- Flammable		
Self inflammability	- Product is not self igniting.		
Explosive properties	- Product is not explosive. However formation of explosive air/water vapour is possible.		

Explosion hazard

Explosion limits	-lower 2.0 % -upper 12%
Vapour pressure	-43Pa @ 20 deg. C.
Density	-0.826 - 0.892 @ 20 deg. C.
PH Value	-Neutral
viscosity	-3.1 mPas @ 20 deg. C.

9.2 Other information No further relevant information available.

SECTION 10 – Stability and Reactivity

10.1 Reactivity – No further relevant information available.
10.2 Chemical stability/Thermal decomposition – Chemically stable. No decomposition if used to specifications.
10.3 Possibility of hazardous reactions – No dangerous reactions noted.
10.4 Conditions to avoid - Avoid heat, sparks, moisture and flames.
10.5 Materials to avoid - Bases, Alkalies (Inorganic), Strong Oxidizing agents, Strong Reducing agents.
10.6 Hazardous Decomposition products - Material does not decompose up to the specified boiling point. Thereafter in case of fire, material can create Vapours/Gases/Fumes of: Carbon Monoxide (CO), Carbon Dioxide (C02).

SECTION 11 - Toxicological Information

11.1 Information on toxicological effects
Acute toxicity – Based on available data, the classification parameters are not met.

LD/LC50 Values that are relevant for classification
CAS 67-63-0 propan-2-ol
Oral - LD50 – 4570 mg/kg (Rat).
Skin Contact – LD50 – 13400 mg/kg (Rabbit).
Inhalation – LC50 – 30 mg/l/4 hours (Rat).

Primary irritant effect:
Skin corrosion/irritation – Based on the available data, the classification parameters are not met.
Serious eye damage/irritation - Will cause chronic eye irritation.
Respiratory or skin sensitisation – Based on the available data, the classification parameters are not met.

Additional toxicological information - Higher concentrations can cause nausea and dizziness.

CMR effects (carcinogenicity, mutagenicity, and toxicity for reproduction)
Germ cell mutagenicity – Based on available data, the classification parameters are not met.
Carcinogenicity – Based on available data, the classification parameters are not met.
Reproductive toxicity – Based on available data, the classification parameters are not met.

STOT – single exposure – May cause drowsiness or dizziness.

STOT – repeated exposure – Based on available data, the classification parameters are not met.
Aspiration hazard – Based on available data, the classification parameters are not met.

SECTION 12 – Ecological information

12.1 Toxicity

Aquatic toxicity
CAS 67-63-0 propan-2-ol

EC50 (static)	> 10000 mg/l/24 hours (Dapphnia magna) (OECD202)
LC50 (dynamic)	9640 mg/l/96 hours (Pimephales promelas) (OECD203)

12.2 Persistance and degradability – No further relevant information available. **Other information –** not established.
12.3 Bio-accumulative potential – No further relevant information available.
12.4 Mobility in soil – No further relevant information available
Additional ecological information:
General notes – Water Hazard Class 1 (German reg – DE) (Self assessed): slightly hazardous for water. Do not allow spills of undiluted product or large quantities to reach ground water, contained land water or drainage systems.
12.5 Results of PBT and vPvB assessment:
PBT – Not applicable
vPvB – Not applicable
12.6 Other adverse effects – No further relevant information available.

SECTION 13 – Disposal Considerations

13.1 Waste treatment methods
Recommendations
The waste code numbers indicated are recommendations based the probable use of the product.

Must not be disposed of with domestic refuse. Do not allow the product to reach drainage/sewage systems.

European waste type code numbers and description
15 00 00 – Waste packaging: Absorbants, Wiping cloths (wipes), Filter materials, and protective clothing not otherwise specified.

15 02 00 – Absorbants, Filter materials, Wiping cloths, and Protective clothing.

15 02 02 – Absorbants, Filter materials (including oil filters not otherwise specified), Wiping cloths, Protective clothing contaminated by hazardous substances.

Uncleaned packaging(s)
Recommendation – Dispose of packaging according to local, regional, national and international regulations.
Recommended cleaning agent – Water, and if required, used with an aqueous miscible cleaning agent.

SECTION 14 -Transport Information

14.1 UN-Number, ADR, IMDG, IATA – UN1219
14.2 UN Proper shipping name:
ADR – 1219 FLAMMABLE LIQUID, N.O.S. (ISOPROPANOL (ISOPROPYL ALCOHOL))
IMDG, IATA - FLAMMABLE LIQUID, N.O.S. (ISOPROPANOL (ISOPROPYL ALCOHOL))
14.3 Transport hazard class (es):

ADR

Class - 4.1 (F1) Flammable liquid, self-reactive substances.
Label - 4.1

IMDG, IATA

Class - 4.1 Flammable liquid, self reactive substances.
Label - 4.1

Section 14 – Transport Information (cont.)

14.4 - Packing group: ADR, IMDG, IATA – Packing group II

14.5 - Environmental hazards: Not applicable
Marine pollutant – No

14.6 – Special precautions for user – Warning: Flammable liquids, self reactive substances and solid de-sensitised explosives.
Kemmler number – 40
EMS Number – F-A, S-I
Stowage Category – B

14.7 – Transport in Bulk according to
Annex II of Marpol and the IBC code – Not applicable

Transport/Additional information:
ADR – Limited quantities (LQ) – 1 kg
ADR – Excepted quantities (EQ) – Code: E2
Maximum net quantity per inner packaging: 30 gm.
Maximum net quantity per outer packaging: 500 gm.

Transport category – 2
Tunnel restriction code – E

IMDG – Limited quantities (LQ) – 1 kg
IMDG – Excepted quantities (EQ) – Code: E2
Maximum net quantity per inner packaging: 30 gm.
Maximum net quantity per outer packaging; 500 gm.

UN "Model Regulation": FLAMMABLE LIQUID, N.O.S., (ISOPROPANOL (ISOPROPYL ALCOHOL)), 4.1, II

SECTION 15 - Regulatory Information

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

National regulations within country of use

Information about limitations of use – Employment regulations specific to young personnel must be observed.

Water Hazard Class – Water Hazard Class 1 (DE) (Self assessed); Slightly hazardous for water.

Substances of very high concern (SVHC) according to REACH, Article 57 – No ingredients on SVHC list.

15.2 Chemical safety assessment – No Chemical Safety Assessment has been carried out.

Issue date and revision number
Issued on 20/03/2023. Issue revision 3.1

Disclaimer
This information relates only to the specific material designated and will not be valid for such material used in combination with any other material or in any process. Such information is, to the best of the Manufacturers knowledge and belief, accurate and reliable as of the date shown. However, no warranty, guarantee or representation is made as to its accuracy, reliability or completeness. It is the users sole responsibility to satisfy himself as to the suitability of such information for their particular application.

SECTION 16 – Other information

Additional restrictions may apply in some countries. Users of the product should check all local and national regulations and safety advice information relating to the ingredients listed in section 3, before using the material.

The data contained within this safety bulletin is based on the best and latest information known to SMT-Surclean.

The data contained within this safety bulletin **does not** constitute a guarantee for any particular product features or performance, and **does not** constitute a legal contractual relationship.

Relevant phrases – H226: Flammable liquid and vapour. H319:
Causes serious eye irritation.
H336: May cause drowsiness or dizziness.

Issuing authority for this document – Product Development and Technical Support dept., SMT-Surclean, U.K.

Change authority – This safety data bulletin must not be changed without written authority from SMT-Surclean.

Glossary of Abbreviations and acronyms used within this document:
ADR – Accord europeen sur le transport des merchandises Dangereuses par Route (EU DG goods transport law).
IMDG – International Maritime Code for Dangerous Goods.
IATA – International Air Transport Association.
GHS – Globally Harmonised System of Classification and Labelling of Chemicals.
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).
DNEL – Derived No-Effect Level (REACH).
PNEC – Predicted No-Effect Concentration (REACH).
LC50 – Lethal concentration, 50 %
PBT – Persistant, Bio-accumulative and Toxic.
SVHC – Substances of Very High Concern.
vPvB – very Persistant and very Bio-accumulative.
Flam. Liq. 2 – Flammable liquids – Category 2.
Flam. Sol. 1. – Flammable solids – Category 1.
Eye Irrit. 2 – Serious eye damage/eye irritation – category 2.
STOT SE 3 – Specific target organ toxicity (single exposure) – Category 3.
WEL – Workplace Exposure Limits – based on dataas defined within Great Britain (UK) only.