

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

1.1. Product identifier

Product form : Mixture
 Product name : Electronics cleaner
 Product code : 169
 Type of product : Detergent
 Product group : Trade product

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

1.2.1. Relevant identified uses

Main use category : Industrial use, Professional use
 Industrial/Professional use spec : Industrial
 For professional use only
 Use of the substance/mixture : Cleaning agent
 Function or use category : Solvents

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

ECS AG, Herr G. Kleinmann
 Roosstrasse 53
 CH-8832 Wollerau - Switzerland
 T +4144787 53 53 - F +4144787 53 63
info@ecsag.com - www.ecsag.com

1.4. Emergency telephone number

Country	Organisation/Company	Address	Emergency number	Comment
Switzerland	Schweizerisches Toxikologisches Informationszentrum Centre Suisse d'Information Toxicologique, Centro Svizzero d'informazione tossicologica	Freiestrasse 16 Postfach CH-8028 Zurich	145 (24 h) aus dem Ausland: +41 44 251 51 51	

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Flammable liquids, Category 2 H225
 Serious eye damage/eye irritation, Category 2 H319
 Specific target organ toxicity — Single exposure, Category 3, Narcosis H336
 Full text of H statements : see section 16

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

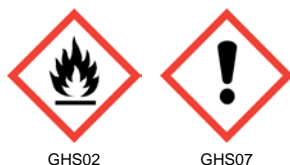
F; R11
 Xi; R36
 R67

Full text of R-phrases: see section 16

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



Signal word (CLP) : Danger

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Hazard statements (CLP)	: H225 - Highly flammable liquid and vapour H319 - Causes serious eye irritation H336 - May cause drowsiness or dizziness
Precautionary statements (CLP)	: P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking P233 - Keep container tightly closed P240 - Ground/bond container and receiving equipment P241 - Use explosion-proof electrical, lighting, ventilating equipment P261 - Avoid breathing mist, vapours P264 - Wash hands, forearms and face thoroughly after handling P271 - Use only outdoors or in a well-ventilated area P280 - Wear eye protection P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing P312 - Call a doctor, a POISON CENTER if you feel unwell P337+P313 - If eye irritation persists: Get medical advice/attention P370+P378 - In case of fire: Use alcohol resistant foam to extinguish P403+P233 - Store in a well-ventilated place. Keep container tightly closed P403+P235 - Store in a well-ventilated place. Keep cool P405 - Store locked up P501 - Dispose of contents/container to an authorised waste collection point P102 - Keep out of reach of children
Child-resistant fastening	: No
Tactile warning	: No

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	Classification according to Directive 67/548/EEC	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Propan-2-ol	(CAS No) 67-63-0 (EC no) 200-661-7 (EC index no) 603-117-00-0 (REACH-no) 01-2119457558-25	>= 50	F; R11 Xi; R36 R67	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336

Full text of R- and H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation	: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.
First-aid measures after skin contact	: Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. Get medical advice/attention.
First-aid measures after ingestion	: Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

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

Symptoms/injuries after inhalation	: May cause drowsiness or dizziness.
Symptoms/injuries after eye contact	: Causes serious eye irritation.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	: Foam. Dry powder. Carbon dioxide. Water spray. Sand.
Unsuitable extinguishing media	: Do not use a heavy water stream.

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5.2. Special hazards arising from the substance or mixture

- Fire hazard : Highly flammable liquid and vapour.
Explosion hazard : May form flammable/explosive vapour-air mixture.

5.3. Advice for firefighters

- Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.
Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Remove ignition sources. Use special care to avoid static electric charges. No open flames. No smoking.

6.1.1. For non-emergency personnel

- Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

- Protective equipment : Equip cleanup crew with proper protection. Avoid breathing Vapour, mist.
Emergency procedures : Ventilate area.

6.2. Environmental precautions

- Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

- Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

6.4. Reference to other sections

- See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Additional hazards when processed : Handle empty containers with care because residual vapours are flammable.
Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour. No open flames. No smoking. Use only non-sparking tools. Avoid breathing Avoid inhalation of vapour and spray mist. Use only outdoors or in a well-ventilated area.
Hygiene measures : Wash Wash immediately with plenty of soap and water thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

- Technical measures : Proper grounding procedures to avoid static electricity should be followed. Ground/bond container and receiving equipment. Use explosion-proof Ground/bond container and receiving equipment.
Storage conditions : Keep in fireproof place. Keep container tightly closed.
Incompatible products : Strong bases. Strong acids.
Incompatible materials : Sources of ignition. Direct sunlight. Heat sources.

7.3. Specific end use(s)

- No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Propan-2-ol (67-63-0)		
Switzerland	Local name	2-Propanol
Switzerland	VME (mg/m ³)	500 mg/m ³
Switzerland	VME (ppm)	200 ppm
Switzerland	VLE (mg/m ³)	1000 mg/m ³
Switzerland	VLE (ppm)	400 ppm
Switzerland	Remark (CH)	4x15

8.2. Exposure controls

- Personal protective equipment : Avoid all unnecessary exposure.

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Materials for protective clothing : Wear suitable protective clothing. Solvent-resistant apron

Hand protection : Wear protective gloves. Solvent-resistant gloves

Type	Material	Permeation	Thickness (mm)	Penetration	Standard
Chemical resistant PVC gloves (to European standard EN 374 or equivalent)	Butyl rubber, Nitrile rubber	6 (> 480 minutes)	0,5 mm	3 (> 0.65)	EN 374

Eye protection : Chemical goggles or safety glasses

Respiratory protection : Where exposure through inhalation may occur from use, respiratory protection equipment is recommended. In case of insufficient ventilation, wear suitable respiratory equipment

Device	Filter type	Condition	Standard
Breathing apparatus with filter	Type A - High-boiling (>65 °C) organic compounds		

Other information : Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: Colourless.
Odour	: alcoholic.
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: 17 °C
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: Highly flammable liquid and vapour
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density	: 0.808 g/m ³
Solubility	: Miscible with water.
Log Pow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

9.2. Other information

VOC content : 91

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Highly flammable liquid and vapour. May form flammable/explosive vapour-air mixture.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures. Open flame.

10.5. Incompatible materials

Strong acids. Strong bases.

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10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide. May release flammable gases.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

Propan-2-ol (67-63-0)	
LD50 oral	4396 mg/kg bodyweight
LD50 dermal	12800 mg/kg bodyweight
LC50 inhalation rat (Dust/Mist - mg/l/4h)	46600 mg/m ³

Skin corrosion/irritation : Not classified
Based on available data, the classification criteria are not met

Serious eye damage/irritation : Causes serious eye irritation.

Respiratory or skin sensitisation : Not classified
Based on available data, the classification criteria are not met

Germ cell mutagenicity : Not classified
Based on available data, the classification criteria are not met

Carcinogenicity : Not classified
Based on available data, the classification criteria are not met

Reproductive toxicity : Not classified
Based on available data, the classification criteria are not met

Specific target organ toxicity (single exposure) : May cause drowsiness or dizziness.

Specific target organ toxicity (repeated exposure) : Not classified
Based on available data, the classification criteria are not met

Aspiration hazard : Not classified
Based on available data, the classification criteria are not met

Potential adverse human health effects and symptoms : Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

12.1. Toxicity

Propan-2-ol (67-63-0)	
LC50 fish 1	9640 mg/l
EC50 other aquatic organisms 1	13299 mg/l EC50 waterflea (48 h)
EC50 other aquatic organisms 2	> 1000 mg/l IC50 algea (72 h) mg/l

12.2. Persistence and degradability

ELEKTRONIK-REINIGER ECS-169	
Persistence and degradability	Not established.

12.3. Bioaccumulative potential

ELEKTRONIK-REINIGER ECS-169	
Bioaccumulative potential	Not established.

Propan-2-ol (67-63-0)	
Log Pow	0.14

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

Additional information : Avoid release to the environment

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.

Additional information : Handle empty containers with care because residual vapours are flammable.

Ecology - waste materials : Avoid release to the environment.

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SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number

UN-No. (ADR)	: 1219
UN-No. (IMDG)	: 1219
UN-No. (IATA)	: 1219
UN-No. (ADN)	: 1219
UN-No. (RID)	: 1219

14.2. UN proper shipping name

Proper Shipping Name (ADR)	: ISOPROPANOL (ISOPROPYL ALCOHOL)
Proper Shipping Name (IMDG)	: ISOPROPANOL (ISOPROPYL ALCOHOL)
Proper Shipping Name (IATA)	: ISOPROPANOL (ISOPROPYL ALCOHOL)
Proper Shipping Name (ADN)	: ISOPROPANOL (ISOPROPYL ALCOHOL)
Proper Shipping Name (RID)	: ISOPROPANOL (ISOPROPYL ALCOHOL)
Transport document description (ADR)	: UN 1219 ISOPROPANOL (ISOPROPYL ALCOHOL), 3, II, (D/E)
Transport document description (IMDG)	: UN 1219 ISOPROPANOL (ISOPROPYL ALCOHOL), 3, II

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR)	: 3
Danger labels (ADR)	: 3



IMDG

Transport hazard class(es) (IMDG)	: 3
Danger labels (IMDG)	: 3



IATA

Transport hazard class(es) (IATA)	: 3
Hazard labels (IATA)	: 3



ADN

Transport hazard class(es) (ADN)	: 3
Danger labels (ADN)	: 3



RID

Transport hazard class(es) (RID)	: 3
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Danger labels (RID) : 3



14.4. Packing group

Packing group (ADR) : II
Packing group (IMDG) : II
Packing group (IATA) : II
Packing group (ADN) : II
Packing group (RID) : II

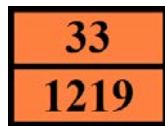
14.5. Environmental hazards

Dangerous for the environment : No
Marine pollutant : No
Other information : No supplementary information available

14.6. Special precautions for user

- Overland transport

Classification code (ADR) : F1
Special provisions (ADR) : 601
Limited quantities (ADR) : 11
Excepted quantities (ADR) : E2
Vehicle for tank carriage : FL
Transport category (ADR) : 2
Hazard identification number (Kemler No.) : 33
Orange plates :



Tunnel restriction code (ADR) : D/E

- Transport by sea

MFAG-No : 129

- Air transport

No data available

- Inland waterway transport

No data available

- Rail transport

No data available

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions
Contains no substance on the REACH candidate list
Contains no REACH Annex XIV substances

VOC content : 91

15.1.2. National regulations

No additional information available

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15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Indication of changes:

	Supersedes	Modified	
	Revision date	Modified	
	Date of issue	Modified	
8.2	Materials for protective clothing	Added	
8.2	Respiratory protection	Modified	
8.2	Hand protection	Modified	

Data sources : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Other information : None.

Full text of R-, H- and EUH-statements:

Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 2	Flammable liquids, Category 2
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Narcosis
H225	Highly flammable liquid and vapour
H319	Causes serious eye irritation
H336	May cause drowsiness or dizziness
R11	Highly flammable
R36	Irritating to eyes
R67	Vapours may cause drowsiness and dizziness
F	Highly flammable
Xi	Irritant

SDS EU (REACH Annex II)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product