

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

- 1.1. Product identifier:
- Product name : **CleverSEPT disinfectant for hands and surfaces**
 Product description: Ethanol-based liquid disinfectant.
- Use of the substance / preparation:
 Relevant identified uses of the substance or mixture: Disinfectant liquid for hands. Biocide.
 Product type: 1 - human hygiene
- Uses advised against: Unknown
- 1.2. Details of the supplier of the safety data sheet
- Company name Nanoformula OÜ
 Street Narva mnt.4
 Place Voka, 71401, Estonia
 Company telephone (during working hours only): +372 39 71305
 Company e-mail for SDS info@nanoformula.eu
- 1.3. Emergency telephone number 112
 Poison Information Center: 16662

SECTION 2: HAZARDS IDENTIFICATION

- 2.1. Classification of the substance or mixture
- Regulation (EC) No 1272/2008.
 Flam Liq.1 H225
 Eye Irrit.2 H319
 Signal word: GHS02 Flammable, GHS07 Warning

2.2. Label elements



Caution

Hazard statements:
 H225 Highly flammable liquid and vapor.
 H319: Causes serious eye irritation.

Precautionary statements:
 P233: Keep container tightly closed.
 P102: Keep out of reach of children.
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P210: Keep away from heat/sparks/open flames/hot surfaces. — No smoking.

Contains: 70-75% Denatured ethanol

- 2.3. Other hazards
- Health hazard: Harmful if swallowed.
 Environmental hazards: Not hazardous

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Name	CAS No.	EINECS nr.	Content, %	Classification: REGULATION (EC) No 1272/2008
Ethanol	64-17-5	200-578-6	70-75 %	Flam. Liq. 2 - H225 Eye Irrit.2 - H319
Glycerin	58-81-5	200-289-5	1-2%	Not applicable

2-Butanone	78-93-3	201-159-0	<0,6%	Flam. Liq. 2 - H225 Eye Irrit. 2 - H319 STOT SE 3 - H336
Isopropanol	67-63-0	200-661-7	1-5%	Flam. Liq. 2 - H225 Eye Irrit. 2 - H319 STOT SE 3 - H336
Hydrogen peroxide	7722-84-1	231-765-0	0,10-0,15%	Ox. Liq. 1 (H271) Acute Tox. 4 (H302) Acute Tox. 4 (H332) Skin Corr. 1A (H314) Eye Dam. 1

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

General methods: If symptoms persist, call to doctor
 Eye contact: Rinse immediately with plenty of water, holding the eyelids open..
 Skin contact: Wash the skin with soap and water.
 Inhalation: No harmful effect is detected during usual application. Go to fresh air
 Ingestion: Rinse mouth with water. Drink much water. No retch.

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

Eye contact: Can cause an allergic reaction
 Skin, inhalation and Ingestion contact: Can cause an allergic reaction

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

Eye contact: Seek medical advice if effects persist.
 Skin contact: If skin allergic persists, consult a specialist.
 Inhalation: Consult with specialist if necessary
 Ingestion: Seek medical advice if effects persist.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media:

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. In case of fire, cool containers sprayed with water.

5.2. Special hazards arising from the substance or mixture:

Do not use a water stream as it may scatter and spread fire.

5.3. Special hazards arising from the substance or mixture

Flammable. Risk of ignition. Vapors may form explosive mixtures with air. Vapors may be expanding

5.4. Advice for firefighters:

As with any fire, wear self-contained breathing apparatus, MSHA / NIOSH (approved or equivalent) full protective suit.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures:

Use personal protective equipment. Ensure adequate ventilation. Remove all sources of ignition. Avoid generation of static electricity.

6.2. Environmental protection measures

The environment should not be released. Do not flush into surface water or sanitary sewer system.

6.3. Methods for cleaning up:

For cleanup use inert adsorbent, for example wood sawdust. Leakage or spillage with sawdust collect and utilize according to local regulations.

6.4. Other information

Protection methods are in Sections 8 and 13.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling:

Wear personal protective equipment. Avoid contact with eyes, skin or clothing. Ensure adequate ventilation. Avoid ingestion and

inhalation. Keep away from open flames, hot surfaces and sources of ignition. Do not use equipment that may cause sparks. All metal parts must be earthed to prevent electrostatic ignition of the vapors. Avoid generation of static electricity.

7.2. Conditions for safe storage, including any incompatibilities:

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from open flames, hot surfaces and source of ignition. Flammable substances area. Keep away from heat and sources of ignition.

7.3. Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Product Do not eat, drink or smoke during handling. Wash contaminated clothing before reuse. Wash hands before breaks and at the end of the working day.

7.4. Special use

Data not available

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters:

Substances for which occupational exposure limit values must be monitored in the work environment (Government of the Republic Regulation No. 293 of 18 September 2001):

Ethanol: TWA: 300 ppm / 8 hours.
TWA: 1000 mg/m³ / 8 hours.
STEL: 900 ppm / 15minutes.
STEL: 1920 mg/m³ / 15minutes.

Glycerin: Piirnorm 10 mg/m³

Hydrogen peroxide: TWA: 1 ppm / 8 hours.
TWA: 1.4 mg/m³ / 8hours.
STEL: 2 ppm / 15 minutes.
STEL: 3 mg/m³ / 15minutes.

2-Butanone: TWA: 200 ppm / 8 hours.
TWA: 600 mg/m³ / 8 hours.
STEL: 300 ppm / 15minutes.
STEL: 900 mg/m³ / 15minutes.

Isopropanol: TWA: 150 ppm / 8 hours.
TWA: 350 mg/m³ / 8 hours.
STEL: 250 ppm / 15minutes.
STEL: 600 mg/m³ / 15minutes.

8.2. Exposure controls:

Technical measures: Ensure adequate ventilation, especially in confined areas. Use explosion-proof electrical system / ventilation / lighting / tools. Make sure eyewash stations and safety showers are close to the workplace. Wherever possible, engineering controls such as process isolation or enclosure should be applied, introducing process or equipment changes to reduce emissions or contact and properly designed use of ventilation systems to control hazardous materials at source.

Skin and body protection: Long-sleeved clothing

Respiratory protection: If workers are exposed to concentrations above the exposure limit, they must wear appropriate, certified respirators.

Hand protection: Protective gloves

Eye protection: Safety goggles (EU standard - EN 166)

Environmental exposure controls Prevent product from entering drains. Avoid groundwater contamination.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Main physical and chemical properties:

Appearance:	Clear liquid
Color:	Colorless
Odor:	characteristic
pH, 20°C:	6.5 – 7.5
Melting point / range:	Not available
Boiling point / boiling range, °C:	78
Flash point, °C:	25
Evaporation rate, °C:	No data
Flammability (solid, gas):	Not applicable
Auto-ignition temperature, °C:	363-425 °C (100% ethanol)
Explosion limit:	Lower 3.3 vol % Upper 19 vol %
Vapor pressure:	No data
Density, g/cm ³ , 20°C:	0,855 - 0,900 g/cm ³
Solubility:	Solubility in water: miscible

9.2. Other information-

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity:

The product does not contain any substances which, under normal use, could cause dangerous reactions.

10.2. Chemical stability:

The product is stable under normal conditions of storage and handling.

10.3. Possibility of hazardous reactions

No dangerous reactions known.

10.4. Conditions to avoid

Avoid heat, sparks and open flame.

10.5. Incompatible materials:

Avoid strong oxidizing agents, strong acids.

10.6. Hazardous decomposition products:

Under normal conditions, none.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects:

Not classified as acutely toxic.

11.2. Irritant and corrosive:

May be irritating to eyes and skin.

11.3. . Subacute, subchronic and long-term toxicity:

Overexposure may cause headache, dizziness, fatigue, nausea and vomiting.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity:

No environmental damage is known or expected under normal use.

12.2. Persistence and degradability:

Biodegradable. Ethanol: Readily biodegradable. BOD₅ 37 - 86%

12.3. Bioaccumulation:

Ethanol: log Pow = -0.32, weak

12.4. Mobility in soil:

The product is miscible with water and thus with varying levels in soil and water.

12.5. Assessment of persistent, bio accumulative and toxic properties and of very persistent and very bio accumulative properties (PBT and vPvB):

This product does not contain any substances that have been assessed as PBT or vPvB.

12.6. Other adverse effects:

Data not available.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Liquid can end up in the sewers, if necessary ask the local rescue service.

SECTION 14: TRANSPORT INFORMATION

- 14.1. UN number: 1170
- 14.2. UN proper shipping name: Ethanol solution
- 14.3. Transport hazard class(es): 3
- 14.4. Packing group: III
- 14.5. Environmental hazards: Not classified as dangerous goods
- 14.6. Special precautions for user: See section 7.
- 14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: See section 7.

SECTION 15: REGULATORY INFORMATION

- 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture:
Regulation (EC) No 1907/2006 – REACH of 18 December 2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) and establishing a European Chemicals Agency
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
COMMISSION REGULATION (EU) No 453/2010 of 20 May 2010 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH)
EV Kemikaaliseadus ja nende alusel kehtestatud määrused.
EV Jäätmeseadus ja nende alusel kehtestatud määrused
- 15.2. Chemical safety assessment:
Chemical safety assessment is prepare according to COMMISSION REGULATION (EU) No 453/2010 of 20 May 2010

SECTION 16: OTHER INFORMATION

- 16.1. Further information: User's manual presents in label and producer's site
- 16.2. Additional information:
The information provided in this Safety Data Sheet is result of careful testing and knowledge of NANOFORMULA LTD.
This information helps provide safe work and belief at the date of its publication. The given information is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification.
We hope that this document will be useful and will be appreciate if receive additional information about safe work with it.