

Material Safety Data Sheet (MSDS)

1 Chemical Product & Company Information

- . **Product Name:** 250ml Hand Sanitizer
- . **Product Model/Type:** 250ml
- . **Relevant identified uses -Main use category:** Disinfection supplies
- . **Supplier:** Berk International, LLC.
- . **Address:** 400 East 2nd Street
Boyertown, PA 19512
- . **Tel:** 610-369-0600
- . **Fax:** 610-369-0676
- . **E-Mail:** customerservice@berkwiper.com
- . **Emergency Telephone Number:** 866-222-2375

2 Hazards identification

- . **Classification of the substances or mixture**
- . **Classification according to Regulation (EC) No 1272/2008 CLP and GHS:** Flammable Liquid (Category 2).
- . **Label elements**
- . **Hazard pictograms:**



GHS02

- . **Signal word:** Danger
- . **Hazard statement(s):**
H225 Highly flammable liquid and vapor.
- . **Prevention Precautionary statements:**
P210 Keep away from heat/sparks/open flames/hot surfaces –No smoking.
P233 Keep container tightly closed.
P240 Container and receiving equipment grounding.
P241 Use explosion-proof electrical / ventilating / lighting . . . Equipment.
P242 Use only non-sparking tools.
P243 Take precautionary measures against static discharge.
P280 Wear protective gloves / protective clothing / Wear protective goggles / face protection.
- . **Response Precautionary Statements:**
P303+P361+P353 IF ON SKIN (or hair): Immediately Remove / Take off all contaminated clothing.
Rinse skin with water / shower.
P370+P378 in case of fire: Use fire extinguisher for fire fighting.
- . **Disposal Precautionary Statements:**
P501 Dispose of contents/container in accordance with local/regional/national/international regulation.
- . **Other hazards:** See section 11.



3 Composition/information on ingredients

. **Description:** Mixture of substances listed below with additions.

Components Name	CAS No.	Weight Percent (%)
ALCOHOL	64-17-5	70.00
WATER	7732-18-5	26.20
GLYCERIN	56-81-5	3.00
CARBOMER	9007-20-9	0.65
ALOE YOHJYU MATSU EKISU	118-58-1	0.10
SODIUM HYDROXIDE	1310-73-2	0.05

4 First aid measures

- . **After inhalation:** If there have unwell feeling, supply fresh air; consult doctor in case of complaints.
- . **After skin contact:** Wash with water and soap for a few minute.
- . **After eye contact:** Immediately flush eyes with plenty of water for a few minutes, occasionally lifting the upper and lower eyelids. If the symptoms cannot be eased Get medical aid immediately.
- . **After swallowing:** If victim is conscious and alert, Gargle with water and induce vomiting, if symptoms persist consult doctor.
- . **Most important symptoms and effects, both acute and delayed:** No specific symptoms known.
- . **Indication of any immediate medical attention and special treatment needed:** Treat symptomatically, No special treatment required.

5 Fire-fighting measures

- . **Suitable extinguishing media:** CO₂, sand, extinguishing powder.
- . **Unsuitable extinguishing media:** Water. Do not use water jet as an extinguisher, as this will spread the fire.
- . **Special hazards arising from the substance or mixture:** Contact heat/sparks/open flames/hot surfaces will burn. Containers can burst violently or explode when heated, due to excessive pressure build-up.
- . **Hazardous decomposition products in case of fire:** Harmful gases or vapors.
- . **Firefighters protective equipment and protection measures:** Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Standard Firefighter's clothing including helmets, protective boots and gloves will provide a basic level of protection for chemical incidents Avoid breathing fire gases or vapors.
- . **Fire Fighting Procedure:** Evacuate area. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Cool containers exposed to flames with water until well after the fire is out. If a leak or spill has not ignited, use water spray to disperse vapors and protect men stopping the leak.

6 Accidental release measures

- . **Personal precautions, protective equipment and emergency procedures:** For personal protection, see Section 8.
- . **Measures for environmental protection:** Do not allow much product to reach sewage system or any water course. Inform respective authorities in case of seepage into water course or sewage system.
- . **Methods and material for containment and cleaning up:** Reuse or recycle products wherever possible. Absorb spillage to prevent material damage. Flush contaminated area with plenty of water. Wash thoroughly after dealing with a spillage.

7 Handling and storages

- . **Precautions for safe handling:** Section 8 of this safety data sheet. Keep away from food, drink and animal feeding stuffs. Handle all packages and containers carefully to minimize spills. Keep container tightly sealed when not in use.
- . **Conditions for safe storage, including any incompatibilities:** Store in a cool location. Store away from flammable substances. Keep container tightly sealed, Store in well-sealed receptacles.

8 Exposure controls/personal protection

- . **Control parameters:** Not available.
- . **Appropriate engineering controls:** Airtight production, enhance ventilation, Provide safety shower and eyewash equipment.
- . **Personal protective equipment**
 - . **Respiratory Protection:** No special respiratory protection is required for use of these products. If respiratory protection is needed, use only protection authorized in the U.S. State or EU Standard.
 - . **Body Protection:** General protective clothing.
 - . **Protective Gloves:** When need choose Rubber or plastic gloves with elbow-length gauntlet.
 - . **Eye Protection:** Unnecessary , When necessary wear chemical goggles or face shield.

9 Physical and chemical properties

. General Information	
Form:	Cream
Color:	Transparent
Odor:	Odorless
. Change in condition	
Melting point/Melting range:	Not available
Boiling point/Boiling range:	>80 C
Flash point:	About 12°C
. Density:	
. Relative density:	<1 (water=1)
. Vapor density:	>1(Air=1)
. Evaporation rate	Not available
. Solubility in/Miscibility with	
Water:	Soluble
PH- Value:	6~8.
Viscosity:	Not available

10 Stability and reactivity

- . **Chemical Stability:** Normally stable, but can become unstable at elevated temperatures and pressures.
- . **Possibility of hazardous reactions:** Will not occur.
- . **Conditions to Avoid:** Avoid heat/sparks/open flames/hot surfaces.
- . **Incompatible Materials:** Strong oxidizing agents, peroxides, acids, acid chlorides, acid anhydrides, alkali metals.
- . **Hazardous decomposition Products:** No further relevant information available.

11 Toxicological information

. Toxicity to Animals: LD50/LC50 values relevant

64-17-5	Alcohol	Oral	LD50: 7060 mg/kg (Rat),	LD50: 3450 mg/kg (Mouse).
64-17-5	Alcohol	Inhalation	LC50: Inhalation 20000ppm/1 0H (Rat).	

- . **Skin corrosion/irritation:** No further relevant information available.
- . **Chronic Effects on Humans: CARCINOGENIC EFFECTS:** Classified NONE by NTP, OSHA and IARC.

. Alcohol Mutagenicity:

Microbial mutagenicity: Salmonella typhimurium (s) bacteria 11 pph.

Dominant lethal test: mice by mouth 1 ~ 1.5g/kg / day, 2 weeks, positive.

Cytogenetic analysis: human lymphocytes 2.5pph/24h. Sister chromatid exchange: human lymphocytes 500ppm/72h.

Inhibition of DNA: human lymphocytes 220mmol / l. Micronucleus test: Dog lymphocytes, 400umol/l.

. Alcohol Teratogenicity:

After 2-17 weeks pregnant monkeys orally administered lowest toxic dose (TDL0) 32400mg/kg cause central nervous system and Craniofacial (including nose and tongue) Malformations. Different time, rats, mice, guinea pigs, pregnant animals orally, intravenously, intraperitoneal route of administration of different doses, induced central nervous system, Urogenital system, endocrine system, hepatobiliary system, respiratory system, Craniofacial including nose and tongue, eye, ear malformations. 30 days prior to mating male rats orally administered 240g/kg, cause urogenital malformations.

. Other Toxic Effects on Humans: None

12 Ecological information

- . **Eco toxicity: (Alcohol) LC50:** 13480mg/l/96h (fish); 50% inhibitory concentration IC50: 1450mg/V72h (algae).
- . **Persistence and degradability:** Expected degradable.
- . **Bio accumulative potential:** No further relevant information available.
- . **Mobility in soil:** No further relevant information available.
- . **Other adverse effects:** No further relevant information available.

13 Disposal considerations

- . **Product:** Must be disposed of in accordance with applicable Federal, state and local regulations.
- . **Recommendation:** Not be dispose together with household garbage. Do not allow product to reach sewage system.
- . **Uncleaned packaging:** Recommendation Disposal must be made according to official regulations.

14 Transport information

- . **UN Proper Shipping Name:** Alcoholic solution.
- . **UN Number:** UN1170
- . **Packing Group:** II
- . **Marine Pollutant:** Not available.
- . **Special Provisions for Transport:** Not applicable.
- . **ADRRID Classification:** 3
- . **IMO/IMDG Classification:** 3
- . **ICAO/IATA Classification:** 3

15 Regulatory information

- . **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- . **TSCA inventory:** Most components are listed as commercial status active on the TSCA.
- . **WHMIS:** Not controlled under WHMIS.
- . **DSCL:** Not controlled under DSCL.
- . **Named dangerous substances -ANNEX I:** None of the ingredients is listed.
- . **SVHC Candidate List or REACH Regulation Annex XIV Authorization (12/1/2017):** None of the ingredients is listed.
- . **REACH Regulation Annex XVII Restriction (3/2/2017):** None of the ingredients is listed
- . **REACH Regulation Annex XIV Authorization List (14/8/2014):** None of the ingredients is listed
- . **REACH Regulation List of substances of very high concern (SVHC):** None of the ingredients is listed
- . **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

The contents and format of this MSDS Comprehensive reference with ISO Commission Directive ISO11014:2009, GHS, and EU Regulation EC No 1272/2008 (CLP).

DISCLAIMER OF LIABILITY

The information in this MSDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product is beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This MSDS was prepared and is to be used only for this product. If the product is used as a component in another product, this MSDS information may not be applicable.

. Abbreviations and acronyms:

ADR: Accord euro peen sur le transport des marchandises danger uses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road).

RID: European agreement on the international carriage of dangerous goods by rail (Regulations concerning the International Transport of Dangerous Goods by Rai) .

IMDG: International Maritime Code for Dangerous Goods.

IATA: International Air Transport Association.

ICAO: International Civil Aviation Organization.

TDG: Transportation of Dangerous Goods Program of Canada.

DOT: U.S. Department of Transportation.

GHS: Globally Harmonized 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).

ACGIH: American Conference of Governmental Industrial Hygienists.

NFPA: National Fluid Power Association.

TSCA: Toxic Substances Control Act.

DNEL: Derived No-Effect Level (REACH).

PNEC: Predicted No -Effect Concentration (REACH).

LC50: Lethal concentration, 50 percent.

LD50: Lethal dose, 50 percent.

PBT: Persistent, Bio accumulative and Toxic.

