

## Safety Data Sheet

# Disinfectant Gel

Creation Date: 2020/03/8 Revision Date: 2020/03/8

\*Prepared according to UN GHS (the 8th revised edition)

## 1 Identification of the chemical

### Product identifier

Product Name	GONG CHEN Disinfectant Gel
Specification	50 boxes / carton
CAS No.	Not applicable
EC No.	Not applicable
Molecular Formula	Not applicable

### Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses	Please consult manufacturer.
Uses advised against	Please consult manufacturer.

## 2 Hazards identification

### Hazard classification according to GHS

Flammable Liquids | Category 2

### Label elements

Hazard pictograms



Signal word **Danger**

### Hazard statements

H225	Highly flammable liquid and vapour
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## Precautionary statements

### Prevention

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233	Keep container tightly closed.
P240	Ground and bond container and receiving equipment.
P241	Use explosion-proof [electrical/ventilating/lighting] equipment.
P242	Use non-sparking tools.
P243	Take action to prevent static discharges.
P280	Wear protective gloves/protective clothing/eye protection/face protection.

### Response

P370+P378	In case of fire: Use appropriate extinguishing media mentioned in Section 5 of the SDS to extinguish.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse affected areas with water [or shower].

### Storage

P403+P235	Store in a well-ventilated place. Keep cool.
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### Disposal

P501	Dispose of contents/container in accordance with local/regional/national/international regulations.
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## Hazard description

### Physical and chemical hazards

	Highly flammable liquids, its vapor and air mixture can form explosive mixture.
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### Health hazards

Inhaled	Cough. Headache. Fatigue. Drowsiness.
Ingestion	Burning sensation. Headache. Confusion. Dizziness. Unconsciousness.
Skin Contact	Dry skin, no harm in general situation.
Eye	Redness. Pain. Burning.

### Environmental hazards

	Please refer to 12th chapter of SDS.
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## 3 Composition/information on ingredients

Component	Cas No.	EC No.	Concentration (weight percent, %)
Ethanol	64-17-5	200-578-6	63
Water	7732-18-5	231-791-2	34.125

Glycerol	56-81-5	200-289-5	2
CARBOMER	9003-01-4	618-347-7	0.6
Castor oil, hydrogenated, ethoxylated	61788-85-0	500-147-5	0.2
Lemon, ext.	84929-31-7	284-515-8	0.05
Sodium hydroxide	1310-73-2	215-185-5	0.025

## 4 First aid measures

### Description of first aid measures

General advice	Immediate medical attention is required. Show this safety data sheet (SDS) to the doctor in attendance.
Eye contact	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.
Skin contact	No harm in general situation. First aid is not needed.
Ingestion	Rinse mouth. Refer for medical attention.
Inhalation	Fresh air, rest.
Protecting of first-aiders	Ensure that medical personnel are aware of the substance involved. Take precautions to protect themselves and prevent spread of contamination.

### Most important symptoms and effects, both acute and delayed

- Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure.

### Indication of any immediate medical attention and special treatment needed

- Treat symptomatically.
- Symptoms may be delayed.

## 5 Firefighting measures

### Extinguishing media

Suitable extinguishing media	Small Fire: Dry chemical, CO <sub>2</sub> , water spray or alcohol-resistant foam; Large Fire: Water spray, fog or alcohol-resistant foam.
Unsuitable extinguishing media	Do not use a solid water stream as it may scatter or spread fire

### Specific hazards arising from the substance or mixture

- Will form explosive mixtures with air.
- Fire exposed containers may vent contents through pressure relief valves thereby increasing fire intensity and/ or vapour concentration.
- Vapours may travel to source of ignition and flash back.
- Liquid and vapour are flammable.
- Containers may explode when heated.
- May expansion or decompose explosively when heated or involved in fire.

### Advice for firefighters

- As in any fire, wear self-contained breathing apparatus (MSHA/NIOSH approved or equivalent) and full protective gear.
- Fight fire from a safe distance, with adequate cover.

- |   |   |
|---|---|
| 3 | Prevent fire extinguishing water from contaminating surface water or the ground water system. |
|---|---|

## 6 Accidental release measures

### Personal precautions, protective equipment and emergency procedures

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| 1 | Avoid breathing vapours and contacting with skin and eye.  |
| 2 | Beware of vapours accumulating to form explosive concentrations.   |
| 3 | Vapours can accumulate in low areas.   |
| 4 | Emergency personnel wear positive pressure self-contained breathing apparatus. Wear protective and anti-static clothing. Wear chemical impermeable gloves. |
| 5 | Ensure adequate ventilation. Remove all sources of ignition. Take precautionary measures against static discharges.  |
| 6 | Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.  |
| 7 | Use personal protective equipment. Avoid breathing vapours, mist, gas or dust.   |

### Environmental precautions

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| 1 | Prevent further leakage or spillage if safe to do so. |
| 2 | Discharge into the environment must be avoided.       |

### Methods and materials for containment and cleaning up

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| 1 | Absorb spilled material in dry sand or inert absorbent. In case of large amount of spillage, contain a spill by bunding. |
| 2 | Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations.       |
| 3 | Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment.                                     |

## 7 Handling and storage

### Precautions for handling

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|---|---|
| 1 | Avoid inhalation of vapors.   |
| 2 | Use only non-sparking tools.  |
| 3 | To prevent fire caused by electrostatic discharge steam, equipment on all metal parts should be grounded. |
| 4 | Use explosion proof equipment.  |
| 5 | Handling is performed in a well ventilated place.   |
| 6 | Wear suitable protective equipment.   |
| 7 | Avoid contact with skin and eyes.   |
| 8 | Keep away from heat/sparks/open flames/ hot surfaces.   |

### Precautions for storage

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| 1 | Keep containers tightly closed.                                  |
| 2 | Keep containers in a dry, cool and well-ventilated place.        |
| 3 | Keep away from heat/sparks/open flames/hot surfaces.             |
| 4 | Store away from incompatible materials and foodstuff containers. |

## 8 Exposure controls/personal protection

### Control parameters

◆ Occupational Exposure limit values

Component	Country/Region	Limit value - Eight hours		Limit value - Short term	
		ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>
Ethanol 64-17-5	USA - OSHA	1000	1900	-	-
	South Korea	1000	1900	-	-
	Ireland	-	-	1000	-
	Germany (AGS)	500	960	1000	1920
	Denmark	1000	1900	2000	3800
	Australia	1000	1880	-	-
Glycerol 56-81-5	USA - OSHA	-	15	-	-
	South Korea	-	10	-	-
	Ireland	-	10	-	-
	Germany (DFG)	-	50	-	100
	Belgium	-	10	-	-
	Australia	-	10	-	-
Sodium hydroxide 1310-73-2	USA - OSHA	-	2	-	-
	Sweden	-	1	-	2
	South Korea	-	-	-	2
	Ireland	-	-	-	2
	Denmark	-	2	-	2
	Australia	-	-	-	2

◆ Biological limit values

Biological limit values | No information available

◆ Monitoring methods

- |   |   |
|---|---|
| 1 | EN 14042 Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents. |
| 2 | GBZ/T 160.1~GBZ/T 160.81-2004 Determination of toxic substances in workplace air (Series standard) .  |

Engineering controls

- |   |  |
|---|--|
| 1 | Ensure adequate ventilation, especially in confined areas.                             |
| 2 | Ensure that eyewash stations and safety showers are close to the workstation location. |
| 3 | Use explosion-proof electrical/ventilating/lighting/equipment.                         |
| 4 | Set up emergency exit and necessary risk-elimination area.                             |

Personal protection equipment

General requirement	
Eye protection	Tightly fitting safety goggles (approved by EN 166(EU) or NIOSH (US)).
Hand protection	Wear protective glove (such as butyl rubber), passing the tests according to EN 374(EU), US F739 or AS/NZS 2161.1 standard.
Respiratory protection	If exposure limits are exceeded or if irritation or other symptoms are experienced, use a full-face respirator with multi-purpose combination (US) or type AXBEK (EN 14387) respirator cartridges.
Skin and body protection	Wear fire/flame resistant/retardant clothing and antistatic boots.

## 9 Physical and chemical properties

### Physical and chemical properties

Appearance	Colorless transparent mucus
Odor	sweet smell
Odor threshold	No information available
pH	7.0 (20°C, 10g/L, Ethanol)
Melting point/freezing point(°C)	-117 (Ethanol)
Initial boiling point and boiling range(°C)	79 (Ethanol)
Flash point(Closed cup, °C)	13 (Ethanol)
Evaporation rate	No information available
Flammability	No information available
Upper/lower explosive limits[%(v/v)]	Upper limit: 19 (Ethanol) ; Lower limit: 3.3 (Ethanol)
Vapor pressure	5.8kPa (Ethanol)
Relative vapour density(Air=1)	1.6 (Ethanol)
Relative density(Water=1)	0.79 (Ethanol)
Solubility(mg/L)	Miscible with water (Ethanol)
n-octanol/water partition coefficient	-0.32 (Ethanol)
Auto-ignition temperature(°C)	363 (Ethanol)
Decomposition temperature(°C)	≥700 (Ethanol)
Kinematic viscosity	No information available
Particle characteristics	Not applicable

## 10 Stability and reactivity

### Stability and reactivity

Reactivity	Contact with incompatible substances can cause decomposition or other chemical reactions.
Chemical stability	Stable under proper operation and storage conditions.

<b>Possibility of hazardous reactions</b>	In contact with oxidants causes severe reactions, and may cause a fire or explosion. In contact with active metals (alkali metals, Na, Ca etc.) causes a reaction and release hydrogen. React violently with acids, phenols or alcohols.
<b>Conditions to avoid</b>	Incompatible materials, heat, flame and spark.
<b>Incompatible materials</b>	Oxidants, alkali metals, alkaline earth metals and aluminum. Alkali, sodium, calcium, and other active metal, halogen, metal oxide, nonmetal oxide, acyl halide and metal phosphide. acids, phenols, alcohols and nitro substituted hydrocarbon.
<b>Hazardous decomposition products</b>	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## 11 Toxicological information

### Acute toxicity

Component	Cas No.	LD <sub>50</sub> (oral)	LD <sub>50</sub> (dermal)	LC <sub>50</sub> (inhalation,4h)
Ethanol	64-17-5	7060mg/kg(Rat)	No information available	39mg/L(Mouse)
Glycerol	56-81-5	12600mg/kg(Rat)	> 10000mg/kg(Rabbit)	No information available
CARBOMER	9003-01-4	2500mg/kg(Rat)	No information available	No information available

### Carcinogenicity

ID	Cas No.	Component	IARC	NTP
1	64-17-5	Ethanol	Not Listed	Not Listed
2	7732-18-5	Water	Not Listed	Not Listed
3	56-81-5	Glycerol	Not Listed	Not Listed
4	9003-01-4	CARBOMER	Category 3	Not Listed
5	61788-85-0	Castor oil, hydrogenated, ethoxylated	Not Listed	Not Listed
6	84929-31-7	Lemon, ext.	Not Listed	Not Listed
7	1310-73-2	Sodium hydroxide	Not Listed	Not Listed

### Others

#### GONG CHEN Disinfectant Gel

<b>Skin corrosion/irritation</b>	Based on available data, the classification criteria are not met
<b>Serious eye damage/irritation</b>	Based on available data, the classification criteria are not met
<b>Skin sensitization</b>	Based on available data, the classification criteria are not met
<b>Respiratory sensitization</b>	Based on available data, the classification criteria are not met
<b>Reproductive toxicity</b>	Based on available data, the classification criteria are not met
<b>STOT-single exposure</b>	Based on available data, the classification criteria are not met
<b>STOT-repeated exposure</b>	Based on available data, the classification criteria are not met
<b>Aspiration hazard</b>	Based on available data, the classification criteria are not met
<b>Germ cell mutagenicity</b>	Based on available data, the classification criteria are not met

Reproductive  
toxicity(additional)

Based on available data, the classification criteria are not met

**12** Ecological information**Acute aquatic toxicity**

Component	Cas No.	Fish	Crustaceans	Algae
Ethanol	64-17-5	LC <sub>50</sub> : 11000mg/L (96h)(Fish)	EC <sub>50</sub> : 9950mg/L (48h)(Crustaceans)	No information available
Sodium hydroxide	1310-73-2	LC <sub>50</sub> : 196mg/L (96h)(Fish)	EC <sub>50</sub> : 40.4mg/L (48h)(Crustaceans)	No information available
Glycerol	56-81-5	LC <sub>50</sub> : 68100mg/L (96h)(Fish)	No information available	No information available

**Chronic aquatic toxicity**

Chronic aquatic toxicity | No information available

**Persistence and degradability**

Component	Cas No.	Persistence (water/soil)	Persistence (air)
Ethanol	64-17-5	Low(Half-life = 2.17 days)	Low(Half-life = 5.08 days)
Water	7732-18-5	Low	Low

**Bioaccumulative potential**

Component	Cas No.	Bioaccumulative potential	comments
Ethanol	64-17-5	Low	Log Kow=-0.31
Water	7732-18-5	Low	Log Kow=-1.38

**Mobility in soil**

Component	Cas No.	Mobility in soil	Soil Organic Carbon-Water Partitioning Coefficient (Koc)
Ethanol	64-17-5	High	1
Water	7732-18-5	Low	14.3

**Results of PBT and vPvB assessment**

Component	Cas No.	Results of PBT and vPvB assessment (according to (EC) No 1907/2006)
Ethanol	64-17-5	not PBT/vPvB
Water	7732-18-5	not PBT/vPvB
Glycerol	56-81-5	not PBT/vPvB
CARBOMER	9003-01-4	not PBT/vPvB
Castor oil, hydrogenated, ethoxylated	61788-85-0	not PBT/vPvB



Lemon, ext.	84929-31-7	not PBT/vPvB
Sodium hydroxide	1310-73-2	not PBT/vPvB

### 13 Disposal considerations

#### Disposal considerations

Waste chemicals	Before disposal should refer to the relevant national and local laws and regulation. Recommend the use of incineration disposal.
Contaminated packaging	Containers may still present chemical hazard when empty. Keep away from hot and ignition source of fire. Return to supplier for recycling if possible.
Disposal recommendations	Refer to section 13.1 and 13.2.

### 14 Transport information

#### Label and Mark

Transporting Label	
Marine pollutant	None

#### IMDG-CODE

UN number	1170
UN proper shipping name	ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)
Transport hazard class	3
Transport subsidiary hazard class	None
Packing group	II
Special provisions	144
Limited quantities	1L
Excepted quantities	E2
Marine pollutant (Yes or no)	No
EmS No.	F-E,S-D

#### ICAO/IATA-DGR

UN number	1170
UN proper shipping name	ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)
Transport hazard class	3
Transport subsidiary hazard class	None
Packing group	II
Excepted quantities	E2
Passenger and Cargo Aircraft Limited Quantity	Y341

<b>Packing Instructions</b>	
<b>Passenger and Cargo Aircraft Limited Quantity</b>	1 L
<b>Maximum net Quantity per Package</b>	
<b>Passenger and Cargo Aircraft Packing Instructions</b>	353
<b>Passenger and Cargo Aircraft Maximum net Quantity per Package</b>	5 L
<b>Cargo Aircraft Packing Instructions</b>	364
<b>Cargo Aircraft Maximum net Quantity per Package</b>	60 L
<b>Special provisions</b>	A3、A58、A180
<b>ERG code</b>	3L

**UN-ADR**

<b>UN number</b>	1170
<b>UN proper shipping name</b>	ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)
<b>Transport hazard class</b>	3
<b>Transport subsidiary hazard class</b>	None
<b>Packing group</b>	II
<b>Special provisions</b>	144 601
<b>Limited quantities</b>	1 L
<b>Excepted quantities</b>	E2
<b>Packing instructions</b>	P001 IBC02 R001
<b>Special packing provisions</b>	-
<b>Mixed packing provisions</b>	MP19
<b>Portable tanks and bulk containers instructions</b>	T4
<b>Portable tanks and bulk containers special provisions</b>	TP1
<b>ADR tank code</b>	LGBF
<b>ADR tank special provisions</b>	-
<b>Vehicle for tank carriage</b>	FL
<b>Transport category (Tunnel restriction code)</b>	2 (D/E)
<b>Special provisions for carriage (Packages)</b>	-
<b>Special provisions for carriage (Bulk)</b>	-
<b>Special provisions for carriage (Loading, unloading and handling)</b>	-
<b>Special provisions for carriage (Operation)</b>	S2 S20

Hazard identification No.	33
Notes	-

## 15 Regulatory information

### International chemical inventory

Component	EINECS	TSCA	DSL	IECSC	NZIoC	PICCS	KECI	AICS	ENCS
Ethanol	√	√	√	√	√	√	√	√	√
Water	√	√	√	√	√	√	√	√	×
Glycerol	√	√	√	√	√	√	√	√	√
CARBOMER	×	√	√	√	√	√	×	√	√
Castor oil, hydrogenated, ethoxylated	√	√	√	√	√	√	√	√	√
Lemon, ext.	√	×	×	√	√	√	√	√	×
Sodium hydroxide	√	√	√	√	√	√	√	√	√

【EINECS】 European Inventory of Existing Commercial Chemical Substances

【TSCA】 United States Toxic Substances Control Act Inventory

【DSL】 Canadian Domestic Substances List

【IECSC】 China Inventory of Existing Chemical Substances New

【NZIoC】 Zealand Inventory of Chemicals

【PICCS】 Philippines Inventory of Chemicals and Chemical Substances

【KECI】 Existing and Evaluated Chemical Substances

【AICS】 Australia Inventory of Chemical Substances Existing And

【ENCS】 New Chemical Substances

#### Note

"√" Indicates that the substance included in the regulations

"×" That no data or included in the regulations

## 16 Others

### Information on revision

Creation Date	2020/03/8
Revision Date	2020/03/8
Reason for revision	-

### Reference

[1]IPCS:The International Chemical Safety Cards (ICSC) ,website: <http://www.ilo.org/dyn/icsc/showcard.home>.

[2]IARC, website: <http://www.iarc.fr/>.

[3]OECD: The Global Portal to Information on Chemical Substances, website:

[http://www.echemportal.org/echemportal/index?pageID=0&request\\_locale=en](http://www.echemportal.org/echemportal/index?pageID=0&request_locale=en). [4]CAMEO Chemicals,

website: <http://cameochemicals.noaa.gov/search/simple>. [5]NLM:ChemIDplus, website:

<http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.jsp>.

[6]EPA: Integrated Risk Information System, website: <http://cfpub.epa.gov/iris/>.

[7]U.S. Department of Transportation:ERG, website: <http://www.phmsa.dot.gov/hazmat/library/erg>.

[8]Germany GESTIS-database on hazard substance, website: <http://gestis-en.itrust.de/>.

## | Abbreviations and acronyms

**CAS** –Chemical Abstracts Service

**PC-STEL**- Short term exposure limit

**DNEL** - Derived No Effect Level

**RPE** - Respiratory Protective Equipment

**LC<sub>50</sub>** - Lethal Concentration 50%

**NOEC** -No Observed Effect Concentration

**PBT** - Persistent, Bioaccumulative, Toxic

**BCF** - Bioconcentration factor (BCF)

**IMDG**-International Maritime Dangerous Goods

**UN**-The United Nations

**NFPA**-National Fire Protection Association

**CMR** - Carcinogens, mutagens or substances toxic to reproduction

**PC-TWA** - Time Weighted Average

**IARC** - International Agency for Research on Cancer

**PNEC** –Predicted No Effect Concentration

**LD<sub>50</sub>** - Lethal Dose 50%

**EC<sub>50</sub>** - Effective Concentration 50%

**POW** - Partition coefficient Octanol:Water

**vPvB** - very Persistent, very Bioaccumulative

**ICAO/IATA**-International Civil Aviation Organization/International Air Transportation Association

**ACGIH**-American Conference of Governmental Industrial Hygienists

**OECD**-Organization for Economic Co-operation and Development

## | Disclaimer

This Safety Data Sheet (SDS) was prepared according to UN GHS (the 8th revised edition). The data included was derived from international authoritative database and provided by the enterprise. Other information was based on the present state of our knowledge. We try to ensure the correctness of all information. However, due to the diversity of information sources and the limitations of our knowledge, this document is only for user' s reference. Users should make their independent judgment of suitability of this information for their particular purposes. We do not assume responsibility for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product.