

**PURELL® ANTIMICROBIAL FOAM
HANDWASH 2% CHG w/w Chlorhexidine Glu-
conate Solution**

Version 1.0	Revision Date: 06/17/2022	SDS Number: 400000006013	Date of last issue: - Date of first issue: 06/17/2022
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SECTION 1. IDENTIFICATION

Product name : PURELL® ANTIMICROBIAL FOAM HANDWASH 2% CHG
w/w Chlorhexidine Gluconate Solution

Manufacturer or supplier's details

Company name of supplier : GOJO Industries, Inc.
Address : One GOJO Plaza, Suite 500
Akron, Ohio, 44311

Telephone : 1 (330) 255-6000

Emergency telephone number : CHEMTREC 1-800-424-9300
CHEMTREC +1-703-527-3887: Outside USA & CANADA

Recommended use of the chemical and restrictions on use

Recommended use :
Pharmaceutical

SECTION 2. HAZARDS IDENTIFICATION**GHS Classification**

Flammable liquids : Category 3
Skin irritation : Category 2
Serious eye damage : Category 1
Carcinogenicity : Category 2

GHS label elements

Hazard pictograms :



Signal word : Danger

Hazard statements : H226 Flammable liquid and vapour.
H315 Causes skin irritation.
H318 Causes serious eye damage.
H351 Suspected of causing cancer.

Precautionary statements : **Prevention:**
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read

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and understood.

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.

P264 Wash skin thoroughly after handling.

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response:

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.

P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/ physician.

P308 + P313 IF exposed or concerned: Get medical advice/ attention.

P332 + P313 If skin irritation occurs: Get medical advice/ attention.

P362 + P364 Take off contaminated clothing and wash it before reuse.

P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

Storage:

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

P405 Store locked up.

Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Hazardous components

Chemical name	CAS-No.	Concentration (% w/w)
Isopropyl Alcohol	67-63-0	>= 1 - < 5
Proprietary Component 1	Not Assigned	>= 1 - < 5
Proprietary Component 2	Not Assigned	>= 1 - < 5
Chlorhexidine Digluconate	18472-51-0	>= 1 - < 5

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SECTION 4. FIRST AID MEASURES

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| General advice | : | In the case of accident or if you feel unwell, seek medical advice immediately.
When symptoms persist or in all cases of doubt seek medical advice. |
| If inhaled | : | If inhaled, remove to fresh air.
If symptoms persist, call a physician. |
| In case of skin contact | : | Get medical attention if irritation develops and persists. |
| In case of eye contact | : | In case of contact, immediately flush eyes with plenty of water for at least 15 minutes.
If easy to do, remove contact lens, if worn.
Seek medical advice. |
| If swallowed | : | If swallowed, DO NOT induce vomiting.
Rinse mouth with water.
Obtain medical attention. |
| Most important symptoms and effects, both acute and delayed | : | Causes serious eye damage.
Causes skin irritation.
May be harmful if swallowed. |
| Protection of first-aiders | : | First Aid responders should pay attention to self-protection and use the recommended protective clothing |

SECTION 5. FIREFIGHTING MEASURES

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| Suitable extinguishing media | : | Water spray
Alcohol-resistant foam
Carbon dioxide (CO ₂)
Dry chemical |
| Unsuitable extinguishing media | : | High volume water jet |
| Specific hazards during fire-fighting | : | Do not use a solid water stream as it may scatter and spread fire.
Cool closed containers exposed to fire with water spray.
Flash back possible over considerable distance.
May form explosive mixtures in air.
Exposure to decomposition products may be a hazard to health. |
| Specific extinguishing methods | : | Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Use water spray to cool unopened containers. |
| Further information | : | Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. |
| Special protective equipment for firefighters | : | In the event of fire, wear self-contained breathing apparatus.
Use personal protective equipment. |

SECTION 6. ACCIDENTAL RELEASE MEASURES

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| Personal precautions, protective equipment and emergency procedures | : | Use personal protective equipment.
Ensure adequate ventilation.
Evacuate personnel to safe areas.
Material can create slippery conditions. |
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No conditions to be specially mentioned.

- Environmental precautions : Discharge into the environment must be avoided.
Prevent further leakage or spillage if safe to do so.
Retain and dispose of contaminated wash water.
Local authorities should be advised if significant spillages cannot be contained.
- Methods and materials for containment and cleaning up : Non-sparking tools should be used.
Soak up with inert absorbent material.
Keep in suitable, closed containers for disposal.
Clean contaminated floors and objects thoroughly while observing environmental regulations.

SECTION 7. HANDLING AND STORAGE

- Advice on safe handling : For personal protection see section 8.
Do not swallow.
Avoid contact with eyes.
Keep container closed when not in use.
Keep away from heat and flame.
- Conditions for safe storage : No smoking.
Take measures to prevent the build up of electrostatic charge.
Keep container tightly closed in a dry and well-ventilated place.
Store in accordance with the particular national regulations.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Isopropyl Alcohol	67-63-0	TWA	200 ppm 492 mg/m ³	CA AB OEL
		STEL	400 ppm 984 mg/m ³	CA AB OEL
		TWA	200 ppm	CA BC OEL
		STEL	400 ppm	CA BC OEL
		TWAEV	400 ppm 983 mg/m ³	CA QC OEL
		STEV	500 ppm 1,230 mg/m ³	CA QC OEL
		TWA	200 ppm	ACGIH
		STEL	400 ppm	ACGIH

Biological occupational exposure limits

Components	CAS-No.	Control parameters	Biological specimen	Sampling time	Permissible concentration	Basis
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Isopropyl Alcohol	67-63-0	Acetone	Urine	End of shift at end of work-week	40 mg/l	ACGIH BEI
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Personal protective equipment

Respiratory protection : No personal respiratory protective equipment normally required.

Hand protection

Remarks : No special protective equipment required.

Eye protection : No special protective equipment required.
Wear face-shield and protective suit for abnormal processing problems.

Skin and body protection : No special protective equipment required.

Protective measures : Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place.

Ensure that eye flushing systems and safety showers are located close to the working place.

When using do not eat, drink or smoke.

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice.

Avoid contact with eyes.

Wash hands before breaks and immediately after handling the product.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : liquid
Colour : colourless, light yellow
Odour : No data available
Odour Threshold : No data available

pH : No data available
Melting point/range : No data available

Boiling point/boiling range : 97 °C

Flash point : 55.9 °C
Evaporation rate : No data available

Flammability (solid, gas) : Not applicable

Flammability (liquids) : No data available

Upper explosion limit : No data available

Lower explosion limit : No data available

Vapour pressure : No data available

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Relative vapour density	: No data available
Density	: 1.06 g/cm ³
Solubility(ies) Water solubility	: soluble
Partition coefficient: n- octanol/water	: Not applicable
Auto-ignition temperature	: not determined
Decomposition temperature	: The substance or mixture is not classified self-reactive.
Viscosity Viscosity, dynamic	: No data available
Viscosity, kinematic	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity	: Not classified as a reactivity hazard.
Chemical stability	: Stable under normal conditions.
Possibility of hazardous reac- tions	: Vapours may form explosive mixture with air.
Conditions to avoid	: Heat, flames and sparks.
Incompatible materials	: Oxidizing agents
Hazardous decomposition products	: Ammonia

SECTION 11. TOXICOLOGICAL INFORMATION**Acute toxicity**

Not classified based on available information.

Product:

Acute oral toxicity	: Acute toxicity estimate: > 5,000 mg/kg Method: Calculation method
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Components:**Isopropyl Alcohol:**

Acute oral toxicity	: LD50 (Rat): > 5,000 mg/kg
Acute inhalation toxicity	: LC50 (Rat): 72.6 mg/l Exposure time: 4 h Test atmosphere: vapour
Acute dermal toxicity	: LD50 (Rat): > 5,000 mg/kg



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Chlorhexidine Digluconate:

Acute oral toxicity : LD50 Oral (Rat): 2,000 mg/kg

Acute toxicity estimate: 500 mg/kg

Acute dermal toxicity : Median lethal dose (Rabbit): 2,000 mg/kg

Skin corrosion/irritation

Causes skin irritation.

Components:

Isopropyl Alcohol:

Species: Rabbit

Result: No skin irritation

Proprietary Component 1:

Assessment: Causes burns.

Serious eye damage/eye irritation

Causes eye irritation.

Components:

Isopropyl Alcohol:

Species: Rabbit

Result: Irritation to eyes, reversing within 21 days

Chlorhexidine Digluconate:

Assessment: Risk of serious damage to eyes.

Remarks: Risk of serious damage to eyes.

Severe eye irritation

Respiratory or skin sensitisation

Skin sensitisation

Not classified based on available information.

Respiratory sensitisation

Not classified based on available information.

Components:

Isopropyl Alcohol:

Test Type: Buehler Test

Exposure routes: Skin contact

Species: Guinea pig

Method: OECD Test Guideline 406

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Result: negative

Proprietary Component 1:

Assessment: Causes severe skin burns and eye damage.

Chlorhexidine Digluconate:

Assessment: Causes serious eye damage.

Germ cell mutagenicity

Not classified based on available information.

Components:**Isopropyl Alcohol:**

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)
Result: negative

Genotoxicity in vivo : Test Type: Mammalian erythrocyte micronucleus test (in vivo
cytogenetic assay)
Species: Mouse
Application Route: Intraperitoneal injection
Result: negative

Carcinogenicity

May cause cancer based on animal data.

Components:**Isopropyl Alcohol:**

Species: Rat
Application Route: inhalation (vapour)
Exposure time: 104 weeks
Method: OECD Test Guideline 451
Result: negative

Reproductive toxicity

Not classified based on available information.

Components:**Isopropyl Alcohol:**

Effects on fertility : Test Type: Two-generation reproduction toxicity study
Species: Rat
Application Route: Ingestion
Result: negative

Effects on foetal develop- : Test Type: Embryo-foetal development
ment Species: Rat
Application Route: Ingestion
Result: negative

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STOT - single exposure

Short-term exposure may cause target organ effects

Components:**Isopropyl Alcohol:**

Assessment: May cause drowsiness or dizziness.

STOT - repeated exposure

Not classified based on available information.

Repeated dose toxicity**Components:****Isopropyl Alcohol:**

Species: Rat

NOAEL: 5000 ppm

Application Route: inhalation (vapour)

Exposure time: 104 w

Method: OECD Test Guideline 413

Proprietary Component 1:Repeated dose toxicity - : Causes severe skin burns and eye damage.
Assessment**Chlorhexidine Digluconate:**Repeated dose toxicity - : Causes serious eye damage.
Assessment**Aspiration toxicity**

Not classified based on available information.

SECTION 12. ECOLOGICAL INFORMATION**Ecotoxicity****Components:****Isopropyl Alcohol:**Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): 10,000 mg/l
Exposure time: 96 hToxicity to daphnia and other : EC50 (Daphnia magna (Water flea)): > 10,000 mg/l
aquatic invertebrates Exposure time: 24 hToxicity to bacteria : EC50 (Pseudomonas putida): > 1,050 mg/l
Exposure time: 16 h**Proprietary Component 2:**

Toxicity to fish : LC50 (Brachydanio rerio (zebrafish)): 3.6 mg/l

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Exposure time: 96 h
Test Type: semi-static test

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 4.2 mg/l
Exposure time: 24 h

Chlorhexidine Digluconate:

Toxicity to fish : (Fish): 2.08 mg/l

Toxicity to daphnia and other aquatic invertebrates : (Daphnia magna (Water flea)): 0.087 mg/l

Toxicity to algae : (Chlorella pyrenoidosa (aglae)): 0.081 mg/l

Ecotoxicology Assessment

Acute aquatic toxicity : Very toxic to aquatic life.

Chronic aquatic toxicity : Very toxic to aquatic life with long lasting effects.

Persistence and degradability**Components:****Isopropyl Alcohol:**

Biodegradability : Result: rapidly degradable

Chlorhexidine Digluconate:

Biodegradability : Result: Not readily biodegradable.

Bioaccumulative potential**Components:****Isopropyl Alcohol:**

Partition coefficient: n-octanol/water : log Pow: 0.05

Chlorhexidine Digluconate:

Bioaccumulation : Bioconcentration factor (BCF): 42

Mobility in soil

No data available

Other adverse effects

No data available



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SECTION 13. DISPOSAL CONSIDERATIONS**Disposal methods**

Waste from residues : Dispose of in accordance with local regulations.
Contaminated packaging : Dispose of as unused product.
Empty containers should be taken to an approved waste handling site for recycling or disposal.

SECTION 14. TRANSPORT INFORMATION**International Regulation****IATA-DGR**

Not regulated as a dangerous good

IMDG-Code

Not regulated as a dangerous good

National Regulations**TDG**

Not regulated as a dangerous good

Remarks : Not classified as supporting combustion according to the transport regulations.

SECTION 15. REGULATORY INFORMATION**The components of this product are reported in the following inventories:**

REACH	On the inventory, or in compliance with the inventory
TSCA	On TSCA Inventory
CH INV	On the inventory, or in compliance with the inventory
AICS	On the inventory, or in compliance with the inventory
DSL	All components of this product are on the Canadian DSL.
ENCS	On the inventory, or in compliance with the inventory
KECI	On the inventory, or in compliance with the inventory
PICCS	On the inventory, or in compliance with the inventory
IECSC	On the inventory, or in compliance with the inventory
ISHL	On the inventory, or in compliance with the inventory
NZIoC	On the inventory, or in compliance with the inventory

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Canadian lists

No substances are subject to a Significant New Activity Notification.

SECTION 16. OTHER INFORMATION**Full text of other abbreviations**

AICS - Australian Inventory of Chemical Substances; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; CPR - Controlled Products Regulations; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System

Revision Date : 06/17/2022

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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