

| ersion 1.0 | SDS Number: 40000000433 Revision Date: 02/07/20 |
|--|---|
| CTION 1. IDENTIFICATION | |
| Productname | : PURELL® Advanced Instant Hand Sanitizer Fragrance Free |
| Manufacturer or supplier's | details |
| Company name of supplier Address | GOJO Industries, Inc. 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 c | chemical and restrictions on use |
| Recommended use Restrictions on use | Hand Sanitizer This is a personal care or cosmetic product that is safe for consumers and other users under normal and reasonably foreseeable use. Cosmetics and consumer products, specifically defined by regulations around the world, are exempt from the requirement of an SDS for the consumer. While this material is not considered hazardous, this SDS contains valuable information critical to the safe handling and proper use of the product for industrial workplace conditions as well as unusual and unintended exposures such as large spills. This SDS should be retained and available for employees and other users of this product. For specific intended-use guidance, please refer to the information provided on the package or instruction sheet. |

| GHS Classification Flammable liquids | : Category 3 |
|---|--|
| Eyeirritation | : Category 2A |
| GHS label elements Hazard pictograms | |
| Signal word | : Warning |
| Hazard statements | : H226 Flammable liquid and vapour. H319 Causes serious eye irritation. |
| Precautionary statements | Prevention: P210 Keep away from heat/sparks/open flames/hot surfaces No smoking. P233 Keep container tightly closed. |



None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous components

| Chemical name | CAS-No. | Concentration (%) |
|-------------------|---------|-------------------|
| Ethyl Alcohol | 64-17-5 | >= 60 - < 70 |
| Isopropyl Alcohol | 67-63-0 | >= 1 - < 5 |

SECTION 4. FIRST AID MEASURES

| 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. Obtain medical attention. Rinse mouth with water. |
| Most important symptoms and effects, both acute and delaved | : Causes serious eye irritation. |
| 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 Dry chemical Carbon dioxide (CO2) |
| Specific hazards during firefighting | 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. Carbon oxides |
| Hazardous combustion products | : Carbon oxides |
| 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 | Collect contaminated fire extinguishing water separately. This must not be discharged into drains. 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

| Personal precautions, protective equipment and emergency procedures | : | Use personal protective equipment. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Material can create slippery conditions. |
|---|---|---|
| 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. Suppress (knock down) gases/vapours/mists with a water spray jet. 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. |
|-------------------------|--|
| | Keep away from heat. |
| | Use with local exhaust ventilation. |
| | Avoid contact with eyes. |
| | |



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| Conditions for safe storage | : Take measures to prevent the b Keep in properly labelled contai Keep container tightly closed in place. Store in accordance with the pa | ners. a dry and well-ventilated |

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

| Components | CAS-No. | Value type (Form of exposure) | Control parameters / Permissible concentration | Basis |
|-------------------|---------|-------------------------------------|---|-----------|
| Ethyl Alcohol | 64-17-5 | TWA | 1,000 ppm 1,900 mg/m3 | NIOSH REL |
| | | TWA | 1,000 ppm 1,900 mg/m3 | OSHA Z-1 |
| | | STEL | 1,000 ppm | ACGIH |
| Isopropyl Alcohol | 67-63-0 | TWA | 200 ppm | ACGIH |
| | | STEL | 400 ppm | ACGIH |
| | | TWA | 400 ppm 980 mg/m3 | NIOSH REL |
| | | ST | 500 ppm 1,225 mg/m3 | NIOSH REL |
| | | TWA | 400 ppm 980 mg/m3 | OSHA Z-1 |

Components with workplace control parameters

Biological occupational exposure limits

| Components | CAS-No. | Control parameters | Biological specimen | Samplin g time | Permissible concentratio n | |
|-------------------|---------|-----------------------|---------------------|--|----------------------------------|--------------|
| Isopropyl Alcohol | 67-63-0 | Acetone | Urine | End of shift at end of workwee k | 40 mg/l | ACGIH BEI |

Personal protective equipment

| Respiratory protection | : No personal respiratory protective equipment normally required. |
|--------------------------|--|
| Hand protection | |
| Remarks | : No special protective equipment required. |
| Eyeprotection | : 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. |
| Hygiene measures | : Handle in accordance with good industrial hygiene and safety practice. Avoid contact with eyes. |

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES



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|---|---|------------------------------|
| Appearance Colour Odour Odour Threshold | : liquid : clear : alcohol-like : No data available | |
| рН | : 6.5 - 8.5, (20 °C) | |
| Melting point/freezing point Initial boiling point and boiling | No data availableNo data available | |
| range Flash point | : 24.00 °C Method: Pensky-Martens clos | ed cup |
| 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 | |
| Relative vapour density | : No data available | |
| Density | : <= 0.881 g/cm3 | |
| Solubility(ies) Water solubility | : soluble | |
| Partition coefficient: n- | : Not applicable | |
| octanol/water Auto-ignition temperature | : not determined | |
| Thermal decomposition | : The substance or mixture is n | ot classified self-reactive. |
| Viscosity Viscosity, kinematic | : 3500 - 23000 mm2/s (20 °C) | |
| Explosiveproperties | : Not explosive | |
| Oxidizing properties | : The substance or mixture is n | ot classified as oxidizing. |
| | | |

SECTION 10. STABILITY AND REACTIVITY

| Reactivity Chemical stability Possibility of hazardous reactions | Not classified as a reactivity hazard. Stable under normal conditions. Vapours may form explosive mixture with air. |
|---|---|
| Conditions to avoid Incompatible materials Hazardous decomposition | Heat, flames and sparks. Strong oxidizing agents No hazardous decomposition products are known. |



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products

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure Inhalation Skin contact Eve contact

Acute toxicity

Not classified based on available information.

Product:

| Acute oral toxicity | : Acute toxicity estimate : > 5,000 mg/kg Method: Calculation method |
|--|---|
| Components: Ethyl Alcohol: Acute oral toxicity | : LD50 (Rat): > 5,000 mg/kg |
| Acute inhalation toxicity | : LC50 (Rat): 124.7 mg/l Exposure time: 4 h |

| | Test atmosphere: vapour |
|---|--|
| 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 |

Skin corrosion/irritation

Not classified based on available information.

Product:

Result: No skin irritation

Components:

Ethyl Alcohol: Species: Rabbit Method: OECD Test Guideline 404 Result: No skin irritation

Isopropyl Alcohol:

Species: Rabbit Result: No skin irritation

Serious eye damage/eye irritation

Causes serious eye irritation.



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Components:

Ethyl Alcohol: Species: Rabbit Result: Irritation to eyes, reversing within 21 days Method: OECD Test Guideline 405

Isopropyl Alcohol:

Species: Rabbit Result: Irritation to eyes, reversing within 21 days

Respiratory or skin sensitisation

Skin sensitisation: Not classified based on available information. Respiratory sensitisation: Not classified based on available information.

Product:

Result: Does not cause skin sensitisation.

Components:

Ethyl Alcohol:

Test Type: Local lymph node assay (LLNA) Exposure routes: Skin contact Species: Mouse Result: negative

Isopropyl Alcohol:

Test Type: Buehler Test Exposure routes: Skin contact Species: Guinea pig Method: OECD Test Guideline 406 Result: negative

Germ cell mutagenicity

Not classified based on available information.

Components:

| Ethyl Alcohol: Genotoxicity in vitro : | Test Type: In vitro mammalian cell gene mutation test Result: negative |
|---|--|
| Genotoxicity in vivo : | Test Type: Rodent dominant lethal test (germ cell) (in vivo) Test species: Mouse Application Route: Ingestion Result: negative |
| Isopropyl Alcohol: | |
| | Test Type: Bacterial reverse mutation assay (AMES) Result: negative |
| Genotoxicity in vivo : | Test Type: Mammalian erythrocyte micronucleus test (in vivo cytogenetic assay) Test species: Mouse Application Route: Intraperitoneal injection Result: negative |



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| Carcinogenicity Not classified based on available information. | | | | |
| <u>Components:</u> Isopropyl Alcohol: Species: Rat Application Route: inhalati Exposure time: 104 weeks Method: OECD Test Guide Result: negative | S | | | |
| IARC | No component of this product pres equal to 0.1% is identified as proba human carcinogen by IARC. | | | |
| OSHA | No component of this product pres equal to 0.1% is identified as a car carcinogen by OSHA. | | | |
| NTP | No component of this product pres equal to 0.1% is identified as a kno by NTP. | ent at levels greater than or own or anticipated carcinogen | | |
| Reproductive toxicity Not classified based on av | ailable information. | | | |
| <u>Components:</u> Ethyl Alcohol: Effects on fertility | : Test Type: Two-generation repr Species: Mouse Application Route: Ingestion Method: OECD Test Guideline Result: negative | | | |
| Isopropyl Alcohol: Effects on fertility | : Test Type: Two-generation repr Species: Rat Application Route: Ingestion Result: negative | oduction toxicity study | | |
| Effects on foetal development | : Test Type: Embryo-foetal develops Species: Rat Application Route: Ingestion Result: negative | opment | | |
| STOT - single exposure | | | | |

Not classified based on available information.

Components:

Isopropyl Alcohol:

Assessment: May cause drowsiness or dizziness.

STOT - repeated exposure

Not classified based on available information.



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Repeated dose toxicity

Components:

Ethyl Alcohol: Species: Rat NOAEL: 2,400 mg/kg Application Route: Ingestion Exposure time: 2 y

Isopropyl Alcohol:

Species: Rat NOAEL: 5000 ppm Application Route: inhalation (vapour) Exposure time: 104 w Method: OECD Test Guideline 413

Aspiration toxicity

Not classified based on available information.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Components:

| Ethyl Alcohol: Toxicity to fish | : | LC50 (Pimephales promelas (fathead minnow)): > 1,000 mg/l Exposure time: 96 h |
|--|---|--|
| Toxicity to daphnia and other aquatic invertebrates | : | EC50 (Daphnia magna (Water flea)): > 1,000 mg/l Exposure time: 48 h |
| Toxicity to algae | : | EC50 (Chlorella vulgaris (Fresh water algæ)): 275 mg/l Exposure time: 72 h Method: OECD Test Guideline 201 |
| Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) | : | NOEC (Daphnia magna (Water flea)): 9.6 mg/l Exposure time: 9 d |
| Toxicity to bacteria | : | EC50 (Photobacterium phosphoreum): 32.1 mg/l Exposure time: 0.25 h |
| Isopropyl Alcohol: Toxicity to fish | : | LC50 (Pimephales promelas (fathead minnow)): 10,000 mg/l Exposure time: 96 h |
| Toxicity to daphnia and other aquatic invertebrates | : | EC50 (Daphnia magna (Water flea)): > 10,000 mg/l Exposure time: 24 h |
| Toxicity to bacteria | : | EC50 (Pseudomonas putida): > 1,050 mg/l Exposure time: 16 h |

Persistence and degradability

Components:



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| Ethyl Alcohol: Biodegradability | : Result: Readily biodegradable. Biodegradation: 84 % Exposure time: 20 d | |
| Isopropyl Alcohol: Biodegradability | : Result: rapidly degradable | |
| Bioaccumulative potential | | |
| Components: Ethyl Alcohol: Partition coefficient: n- octanol/water Isopropyl Alcohol: Partition coefficient: n- octanol/water | : log Pow: -0.35 : log Pow: 0.05 | |
| Mobility in soil No data available | | |
| Other adverse effects No data available | | |
| Product: Regulation | 40 CFR Protection of Environm Stratospheric Ozone - CAA Sec | |
| Remarks | This product neither contains, n Class I or Class II ODS as defir Section 602 (40 CFR 82, Subpt | ned by the U.S. Clean Air Act |

SECTION 13. DISPOSAL CONSIDERATIONS

| 0 | Disposal methods | |
|---|---|--|
| | Vaste from residues Contaminated packaging | Dispose of in accordance with local regulations. 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 | |
|---|--|
| UN/ID No. | : UN 1987 |
| Proper shipping name | : Alcohols, n.o.s. (Ethanol, Propan-2-ol) |
| Class | : 3 |
| Packing group | : 111 |
| Packing instruction (cargo aircraft) | : 366 |
| Packing instruction (passenger aircraft) | : 355 |



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| IMDG-Code UN number | : UN 1987 | |
| Proper shipping name | : ALCOHOLS, N.O.S. (Ethanol, Propan-2-ol) | |
| Class | : 3 | |
| Packing group | : 11 | |
| Labels EmS Code | : 3 : F-E, S-D | |
| Marine pollutant | : no | |
| National Regulations | | |
| 49 CFR | | |
| UN/ID/NA number | : UN 1987 | |
| Proper shipping name | : Alcohols, n.o.s. | |
| Class | : 3 | |
| Packing group | : III | |
| ERG Code | : 127 | |
| Marine pollutant | : no | |

EPCRA - Emergency Planning and Community Right-to-Know Act

| SARA 311/312 Hazards | : | Fire Hazard Acute Health Hazard | | |
|----------------------|---|---|---------|-----------|
| SARA 302 | : | No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302. | | |
| SARA 313 | : | The following components are subject to reporting levels established by SARA Title III, Section 313: | | ng levels |
| | | Isopropyl Alcohol | 67-63-0 | 3.4086 % |

Clean Air Act

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 12 (40 CFR 61). This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F). The following chemical(s) are listed under the U.S. Clean Air Act Section 111 SOCMI Intermediate or Final VOC's (40 CFR 60.489): Ethyl Alcohol 64-17-5 65.2821 % 67-63-0 Isopropyl Alcohol 3.4086 % This product does not contain any VOC exemptions listed under the U.S. Clean Air Act Section 450. **California Prop 65** This product does not require a warning label under California Proposition 65. The components of this product are reported in the following inventories: TSCA : On TSCA Inventory CH INV : On the inventory, or in compliance with the inventory



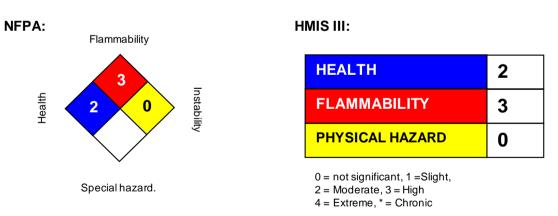
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| | | |
| AICS | : On the inventory, or in compliance | e with the inventory |
| DSL | : On the inventory, or in compliance | e with the inventory |
| ISHL | : On the inventory, or in compliance | e with the inventory |
| KECI | : On the inventory, or in compliance | e with the inventory |
| PICCS | : On the inventory, or in compliance | e with the inventory |
| ENCS | : On the inventory, or in compliance | e with the inventory |
| IECSC | : On the inventory, or in compliance | e with the inventory |
| NZIoC | : On the inventory, or in compliance | e with the inventory |
| EINECS | : On the inventory, or in compliance | e with the inventory |

Inventories

AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TCSI (Taiwan), TSCA (USA)

SECTION 16. OTHER INFORMATION

Further information



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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.