SECTION 1. IDENTIFICATION

Product name: GOJO® E2 Foam Handwash with BAK

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: Antibacterial Soap
Restrictions on use: 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.

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification
Not a hazardous substance or mixture.

GHS label elements
Not a hazardous substance or mixture.

Other hazards
None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous components

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS-No.</th>
<th>Concentration (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glycerin</td>
<td>56-81-5</td>
<td>&gt;= 1 - &lt; 5</td>
</tr>
</tbody>
</table>
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: Rinse thoroughly with plenty of water, also under the eyelids. If easy to do, remove contact lens, if worn. Get medical attention if irritation develops and persists.

If swallowed: If swallowed, DO NOT induce vomiting. Rinse mouth with water. Obtain medical attention.

Most important symptoms and effects, both acute and delayed: None known.

Protection of first-aiders: First Aid responders should pay attention to self-protection and use the recommended protective clothing.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable extinguishing media: None known.

Hazardous combustion products: Carbon oxides
Nitrogen oxides (NOx)

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.
- Material can create slippery conditions.

Environmental precautions:
- Discharge into the environment must be avoided.
- Prevent further leakage or spillage if safe to do so.
- Prevent spreading over a wide area (e.g. by containment or oil barriers).
- 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:
- Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).
- 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.

Conditions for safe storage:
- Keep in properly labelled containers.
- Keep containers tightly closed in a dry, cool and well-ventilated place.
- Store in accordance with the particular national regulations.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Value type (Form of exposure)</th>
<th>Control parameters / Permissible concentration</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glycerin</td>
<td>56-81-5</td>
<td>TWA (mist, respirable fraction)</td>
<td>5 mg/m³</td>
<td>OSHA Z-1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA (mist, total dust)</td>
<td>15 mg/m³</td>
<td>OSHA Z-1</td>
</tr>
</tbody>
</table>

Personal protective equipment
Respiratory protection:
- No personal respiratory protective equipment normally 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.

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

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : liquid

Colour : colourless, yellow

Odour : like soap

Odour Threshold : No data available

pH : 5.0 - 7.0, (20 °C)

Melting point/freezing point : No data available

Initial boiling point and boiling range : 99 °C

Flash point : > 100 °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

Relative vapour density : No data available

Density : 1.007 g/cm3

Solubility(ies) Water solubility : soluble

Partition coefficient: n-octanol/water : Not applicable
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<table>
<thead>
<tr>
<th>Auto-ignition temperature</th>
<th>: No data available</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thermal decomposition</td>
<td>: The substance or mixture is not classified self-reactive.</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Viscosity, kinematic: 75 mm2/s (20 °C)</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>: Not explosive</td>
</tr>
<tr>
<td>Oxidizing properties</td>
<td>: The substance or mixture is not classified as oxidizing.</td>
</tr>
</tbody>
</table>

SECTION 10. STABILITY AND REACTIVITY

Reactivity : Not classified as a reactivity hazard.
Chemical stability : Stable under normal conditions.
Incompatible materials : Strong oxidizing agents
Hazardous decomposition products : No hazardous decomposition products are known.

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure
Inhalation
Eye contact
Skin contact

Acute toxicity
Not classified based on available information.

Components:
Glycerin:
Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg

Cocamidopropyl Betaine:
Acute oral toxicity : LD50 : > 5,000 mg/kg
Method: OECD Test Guideline 401
Remarks: Based on data from similar materials

Acute dermal toxicity : LD50 (Rat): > 2,000 mg/kg
Method: OECD Test Guideline 402
Assessment: The substance or mixture has no acute dermal toxicity
Remarks: Based on data from similar materials

Benzalkonium Chloride:
Acute oral toxicity : LD50 (Rat): 850 mg/kg

Acute dermal toxicity : LD50 (Rat): 2,300 mg/kg
Skin corrosion/irritation
Not classified based on available information.

**Product:**
Assessment: Not irritating when applied to human skin.

**Components:**
**Glycerin:**
Result: No skin irritation

**Cocamidopropyl Betaine:**
Result: Skin irritation

**Benzalkonium Chloride:**
Species: Rabbit
Result: Corrosive after 3 minutes to 1 hour of exposure
Remarks: Based on data from similar materials

**Serious eye damage/eye irritation**
Not classified based on available information.

**Components:**
**Glycerin:**
Result: No eye irritation

**Cocamidopropyl Betaine:**
Result: Eye irritation
Remarks: Severe eye irritation

**Benzalkonium Chloride:**
Species: Rabbit
Result: Irreversible effects on the eye
Remarks: Based on data from similar materials

**Respiratory or skin sensitisation**
Skin sensitisation: Not classified based on available information.
Respiratory sensitisation: Not classified based on available information.

**Components:**
**Cocamidopropyl Betaine:**
Test Type: Maximisation Test (GPMT)
Exposure routes: Skin contact
Species: Guinea pig
Result: negative
Remarks: Based on data from similar materials

**Benzalkonium Chloride:**
Test Type: Buehler Test
Exposure routes: Skin contact
Species: Guinea pig
Method: OECD Test Guideline 406
Result: negative
Remarks: Based on data from similar materials
Germ cell mutagenicity
Not classified based on available information.

**Components:**

**Glycerin:**
Genotoxicity in vitro: Test Type: In vitro mammalian cell gene mutation test
Method: OECD Test Guideline 476
Result: negative

**Cocamidopropyl Betaine:**
Genotoxicity in vitro: Test Type: Bacterial reverse mutation assay (AMES)
Method: OECD Test Guideline 471
Result: negative
Remarks: Based on data from similar materials

Genotoxicity in vivo: Test Type: Mammalian erythrocyte micronucleus test (in vivo cytogenetic assay)
Test species: Mouse
Application Route: Ingestion
Result: negative
Remarks: Based on data from similar materials

**Benzalkonium Chloride:**
Genotoxicity in vitro: Test Type: Bacterial reverse mutation assay (AMES)
Method: OECD Test Guideline 471
Result: negative
Remarks: Based on data from similar materials

Genotoxicity in vivo: Test Type: Mammalian erythrocyte micronucleus test (in vivo cytogenetic assay)
Test species: Mouse
Application Route: Ingestion
Method: OECD Test Guideline 474
Result: negative
Remarks: Based on data from similar materials

Carcinogenicity
Not classified based on available information.

**Components:**

**Glycerin:**
Species: Rat
Application Route: Ingestion
Exposure time: 2 Years
Result: negative

**IARC**
No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

**OSHA**
No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**NTP**
No component of this product present at levels greater than or
Reproductive toxicity
Not classified based on available information.

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

Effects on foetal development: Test Type: Embryo-foetal development
Species: Rabbit
Application Route: Ingestion
Result: negative

Cocamidopropyl Betaine:
Effects on foetal development: Test Type: Embryo-foetal development
Species: Rat
Application Route: Ingestion
Method: OECD Test Guideline 414
Result: negative
Remarks: Based on data from similar materials

Benzalkonium Chloride:
Effects on fertility: Test Type: Two-generation reproduction toxicity study
Species: Rat
Application Route: Ingestion
Result: negative
Remarks: Based on data from similar materials

Effects on foetal development: Test Type: Embryo-foetal development
Species: Rat
Application Route: Ingestion
Result: negative
Remarks: Based on data from similar materials

STOT - single exposure
Not classified based on available information.

STOT - repeated exposure
Not classified based on available information.

Repeated dose toxicity

Components:
Glycerin:
Species: Rat
NOAEL: 167 mg/m³
LOAEL: 660 mg/m³
Application Route: inhalation (dust/mist/fume)
Exposure time: 13 w
Symptoms: Local irritation
Cocamidopropyl Betaine:
Species: Rat
NOAEL: 250 mg/kg
Application Route: Ingestion
Exposure time: 90 d
Method: OECD Test Guideline 408
Remarks: Based on data from similar materials

Benzalkonium Chloride:
Species: Mouse
NOAEL: 192 mg/kg
Application Route: Ingestion
Exposure time: 94 d
Remarks: Based on data from similar materials

Aspiration toxicity
Not classified based on available information.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Components:
Glycerin:
Toxicity to fish: LC50 (Oncorhynchus mykiss (rainbow trout)): 54,000 mg/l
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates: EC50 (Daphnia magna (Water flea)): 1,955 mg/l
Exposure time: 48 h

Toxicity to bacteria: NOEC (Pseudomonas putida): > 10,000 mg/l
Exposure time: 16 h

Cocamidopropyl Betaine:
Toxicity to fish: LC50: > 1 - 10 mg/l
Exposure time: 96 h
Method: ISO 7346/2
Remarks: Based on data from similar materials

Toxicity to bacteria: EC50: > 100 mg/l
Method: OECD Test Guideline 209
Remarks: Based on data from similar materials

Benzalkonium Chloride:
Toxicity to fish: LC50 (Lepomis macrochirus (Bluegill sunfish)): 0.515 mg/l
Exposure time: 96 h
Remarks: Based on data from similar materials

Toxicity to daphnia and other aquatic invertebrates: EC50 (Daphnia magna (Water flea)): 0.016 mg/l
Exposure time: 48 h
Remarks: Based on data from similar materials

Toxicity to algae: ErC50 (Selenastrum capricornutum (green algae)): 0.049 mg/l
Exposure time: 72 h
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Method: OECD Test Guideline 201
Remarks: Based on data from similar materials

EC10 (Selenastrum capricornutum (green algae)): 0.009 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201
Remarks: Based on data from similar materials

M-Factor (Acute aquatic toxicity) : 10

Toxicity to fish (Chronic toxicity)
NOEC (Pimephales promelas (fathead minnow)): 0.0322 mg/l
Exposure time: 34 d
Remarks: Based on data from similar materials

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)
NOEC (Daphnia magna (Water flea)): 0.0125 mg/l
Exposure time: 21 d
Method: OECD Test Guideline 211
Remarks: Based on data from similar materials

M-Factor (Chronic aquatic toxicity) : 1

Persistence and degradability

Components:
Glycerin:
Biodegradability : Result: Readily biodegradable.
Biodegradation: 94 %
Exposure time: 1 d

Cocamidopropyl Betaine:
Biodegradability : Result: Readily biodegradable.
Biodegradation: > 60 %
Exposure time: 28 d
Method: OECD Test Guideline 301
Remarks: Based on data from similar materials

Benzalkonium Chloride:
Biodegradability : Result: Readily biodegradable.
Biodegradation: 72 %
Exposure time: 28 d

Bioaccumulative potential

Components:
Glycerin:
Partition coefficient: n-octanol/water : log Pow: -1.76

Benzalkonium Chloride:
Partition coefficient: n-octanol/water : log Pow: 2.75
Remarks: Based on data from similar materials
Mobility in soil
No data available

Other adverse effects
No data available

Product:
Regulation
40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances

Remarks
This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

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
49 CFR
Not regulated as a dangerous good

SECTION 15. REGULATORY INFORMATION

SARA 311/312 Hazards : No SARA Hazards

SARA 302 : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

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):

- Glycerin 56-81-5 2 %

This product does not contain any VOC exemptions listed under the U.S. Clean Air Act Section 450.

**Clean Water Act**

This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.

This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

**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 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
- **ISHL**: 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
- **NZIoC**: On the inventory, or in compliance 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

NFPA:

<table>
<thead>
<tr>
<th>Health</th>
<th>Flammability</th>
<th>Instability</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

Special hazard.

HMIS III:

- **HEALTH**: 0
- **FLAMMABILITY**: 1
- **PHYSICAL HAZARD**: 0

0 = not significant, 1 = Slight, 2 = Moderate, 3 = High, 4 = Extreme, * = Chronic

Revision Date : 12/13/2018

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.