Safety Data Sheet

CENTRAL SOLUTIONS, INC.

Issue Date 24-Jan-2008

Revision Date: 22-Jan-2016

Version 3

| 1. IDENTIFICATION | | | |
|---|---|--|--|
| Product Identifier Product Name | MooreBrand Instant Hand Sanitizer | | |
| Other means of identification | 18060-0116 | | |
| UN/ID No | UN1170 Reference: RD18-106A. Reorder Numbers: 2.5 oz. 83581 - 4 oz. 83582 - 8 oz. 83583 - 18oz. 23705 | | |
| Recommended use of the chemica Recommended Use Details of the supplier of the safety | A gelled alcohol hand sanitizer with Aloe for hand washing to decrease bacteria on the skin | | |
| Manufacturer Address Central Solutions, Inc. 401 Funston Rd. Kansas City, KS 66115 | Distributor Moore Medical LLC Farmington, CT 06032 | | |
| Emergency Telephone Number Company Phone Number Emergency Telephone (24 hr) | 800-255-0262 (M-F 8AM to 5PM, CST) INFOTRAC 1-352-323-3500 (International) 1-800-535-5053 (North America) | | |
| | 2. HAZARDS IDENTIFICATION | | |
| <u>Classification</u> | 2. HAZARDS IDENTIFICATION | | |

Flammable Liquids

Category 2

<u>Signal Word</u> Danger

Hazard Statements

Highly flammable liquid and vapor



Appearance Clear light green gel

Physical State Gel

Odor Alcohol

Precautionary Statements - Prevention

Keep away from heat/sparks/open flames/hot surfaces. - No smoking Keep container tightly closed Ground/bond container and receiving equipment Use explosion-proof equipment Use only non-sparking tools Take precautionary measures against static discharge Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response

IN CASE OF FIRE: Use CO2, dry chemical, or foam for extinction

Precautionary Statements - Storage

Store in a well-ventilated place

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Other Hazards

Toxic to aquatic life with long lasting effects

3. COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical Name | CAS No | Weight-% |
|---------------|---------|----------|
| Ethanol | 64-17-5 | 70 |

4. FIRST-AID MEASURES

First Aid Measures

| | Eye Contact | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. | |
|-------------------------------------|--------------|--|--|
| | Skin Contact | If skin irritation occurs, rinse affected area with water. | |
| | Inhalation | Remove to fresh air. | |
| | Ingestion | Dilute by giving a large amount of water. Call a physician or Poison Control Center. | |
| Most important symptoms and effects | | | |
| | 0 | — | |

Symptoms

Exposed individuals may experience eye tearing, redness and discomfort. May cause gastrointestinal disturbance. Inhalation may cause giddiness or loss of consciousness.

Indication of any immediate medical attention and special treatment needed

Notes to Physician

Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Carbon dioxide (CO2). Alcohol resistant foam. Dry chemical.

Unsuitable Extinguishing Media Not determined.

Specific Hazards Arising from the Chemical

Vapors may travel to source of ignition and flash back. Alcohol flames may be difficult to see; the flames are virtually colorless.

Hazardous Combustion Products Carbon oxides.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Use cool water to cool equipment and to disperse vapors.

6. ACCIDENTAL RELEASE MEASURES

| | Personal precautions, | protective equi | pment and emerg | ency procedures | |
|--|-----------------------|-----------------|-----------------|-----------------|--|
|--|-----------------------|-----------------|-----------------|-----------------|--|

| Personal Precautions | Use personal protective equipment as required. | | |
|-----------------------------------|--|--|--|
| Environmental Precautions | See Section 12 for additional Ecological Information. | | |
| Methods and material for containm | ent and cleaning up | | |
| Methods for Containment | Prevent further leakage or spillage if safe to do so. | | |
| Methods for Clean-Up | Small spills (less than 1 gallon) may be washed down a drain with lots of water or cleaned up and disposed of into a sanitary sewer system. Large spills (more than 1 gallon) should be contained and collected (by absorption [sand, clay, or other absorbent material] or vacuuming) then disposed of properly. | | |

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on Safe Handling Keep away from heat/sparks/open flames/hot surfaces. — No smoking. Use spark-proof tools and explosion-proof equipment. Ground/bond container and receiving equipment. Take precautionary measures against static discharges.

Conditions for safe storage, including any incompatibilities

Storage ConditionsKeep containers tightly closed in a dry, cool and well-ventilated place. Do not contaminate
food or feed stuffs. Do not reuse container. Keep out of the reach of children.Incompatible MaterialsStrong oxidizers. Hydrogen peroxide. Bromine. Chromic acid.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

| Chemical Name | ACGIH TLV | OSHA PEL | NIOSH IDLH |
|-------------------|--------------------------------|---|------------------------------|
| Ethanol | STEL: 1000 ppm | TWA: 1000 ppm | IDLH: 3300 ppm |
| 64-17-5 | | TWA: 1900 mg/m ³ | TWA: 1000 ppm |
| | | (vacated) TWA: 1000 ppm | TWA: 1900 mg/m ³ |
| | | (vacated) TWA: 1900 mg/m ³ | |
| Glycerol | TWA: 10 mg/m ³ mist | TWA: 15 mg/m ³ mist, total | - |
| 56-81-5 | | particulate | |
| | | TWA: 5 mg/m ³ mist, respirable | |
| | | fraction | |
| | | (vacated) TWA: 10 mg/m ³ mist, | |
| | | total particulate | |
| | | (vacated) TWA: 5 mg/m ³ mist, | |
| | | respirable fraction | |
| Isopropyl alcohol | STEL: 400 ppm | TWA: 400 ppm | IDLH: 2000 ppm |
| 67-63-0 | TWA: 200 ppm | TWA: 980 mg/m ³ | TWA: 400 ppm |
| | | (vacated) TWA: 400 ppm | TWA: 980 mg/m ³ |
| | | (vacated) TWA: 980 mg/m ³ | STEL: 500 ppm |
| | | (vacated) STEL: 500 ppm | STEL: 1225 mg/m ³ |
| | | (vacated) STEL: 1225 mg/m ³ | _ |

Appropriate engineering controls

Engineering Controls Apply technical measures to comply with the occupational exposure limits. Ventilation systems.

Individual protection measures, such as personal protective equipment

| Eye/Face Protection | Avoid contact with eyes. |
|--------------------------|--|
| Skin and Body Protection | No special technical protective measures are necessary. |
| Respiratory Protection | No protective equipment is needed under normal use conditions. |

General Hygiene Considerations Do not get in eyes. Keep away from food and drink.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

| Physical State Appearance Color | Gel Clear light green gel Light green | Odor Odor Threshold | Alcohol Not determined |
|---------------------------------------|---|------------------------|---------------------------|
| Property | Values | Remarks • Method | |
| рН | 6.00-8.00 | | |
| Melting Point/Freezing Point | Not established | | |
| Boiling Point/Boiling Range | 100 ℃ / 212 ℉ | | |
| Flash Point | 21 ℃ / 70 ℉ | SETA | |
| Evaporation Rate | Not established | | |
| Flammability (Solid, Gas) | Not determined | | |
| Upper Flammability Limits | Not determined | | |
| Lower Flammability Limit | Not determined | | |
| Vapor Pressure | Not established | | |
| Vapor Density | Not established | | |
| Specific Gravity | .858 - 882 | | |
| Water Solubility | Completely soluble | | |
| Solubility in other solvents | Not determined | | |
| - | | | |

Remarks • Method

| Partition Coefficient |
|---------------------------|
| Autoignition Temperature |
| Decomposition Temperature |
| Kinematic Viscosity |
| Dynamic Viscosity |
| Explosive Properties |
| Oxidizing Properties |
| Density |
| - |

Values Not determined Not determined Not determined 6000-10000 cps Not determined Not determined 7.15-7.35 lb/gal

10. STABILITY AND REACTIVITY

Reactivity

Property

Not reactive under normal conditions.

Chemical Stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Hazardous Polymerization

Hazardous polymerization does not occur.

Conditions to Avoid

Keep out of reach of children.

Incompatible Materials

Strong oxidizers. Hydrogen peroxide. Bromine. Chromic acid.

Hazardous Decomposition Products

Carbon oxides.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

| Product Information | |
|---------------------|---|
| Eye Contact | Avoid contact with eyes. |
| Skin Contact | Not expected to be a skin irritant during prescribed use. |
| Inhalation | Avoid breathing vapors or mists. |
| Ingestion | Do not taste or swallow. |

Component Information

| Chemical Name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|--------------------------------|---------------------|---|-----------------------|
| Ethanol | = 7060 mg/kg (Rat) | - | = 124.7 mg/L (Rat)4 h |
| 64-17-5 | | | |
| Carbomer 9003-01-4 | = 2500 mg/kg (Rat) | - | - |
| Glycerol 56-81-5 | = 12600 mg/kg (Rat) | > 21900 mg/kg (Rat) | - |
| sopropyl alcohol 67-63-0 | = 4396 mg/kg (Rat) | = 12800 mg/kg (Rat) = 12870 mg/kg (Rabbit) | = 72.6 mg/L (Rat)4 h |
| sopropyl Myristate 110-27-0 | > 10000 mg/kg (Rat) | = 5 g/kg (Rabbit) | > 41 mg/L (Rat) |
| Propylene Glycol 25322-69-4 | > 2 g/kg (Rat) | - | - |

Information on physical, chemical and toxicological effects

Symptoms Please see section 4 of this SDS for symptoms.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Carcinogenicity

Isopropyl Alcohol (IPA) is listed as an IARC Monograph Group 3 chemical. However, IARC Group 3 chemicals are "not classifiable as human carcinogens". IPA is classified as an IARC Group 1 chemical ONLY when manufactured by the strong-acid process. The IPA used in this product is NOT manufactured by the strong-acid process and is therefore not classifiable as a human carcinogen. Ethanol has been shown to be carcinogenic in long-term studies only when consumed as an alcoholic beverage.

| Chemical Name | ACGIH | IARC | NTP | OSHA |
|---------------|-------|---------|-------|------|
| Ethanol | A3 | Group 1 | Known | Х |
| 64-17-5 | | | | |

Legend

ACGIH (American Conference of Governmental Industrial Hygienists) A3 - Animal Carcinogen IARC (International Agency for Research on Cancer) Group 1 - Carcinogenic to Humans Group 3 IARC components are "not classifiable as human carcinogens" NTP (National Toxicology Program) Known - Known Carcinogen OSHA (Occupational Safety and Health Administration of the US Department of Labor) X - Present

Numerical measures of toxicity

Not determined

12. ECOLOGICAL INFORMATION

Ecotoxicity

Toxic to aquatic life with long lasting effects.

| Chemical Name | Algae/aquatic plants | Fish | Toxicity to microorganisms | Crustacea |
|---------------------------------|--|--|-------------------------------|---|
| Ethanol 64-17-5 | | 12.0 - 16.0: 96 h Oncorhynchus mykiss mL/L LC50 static 100: 96 h Pimephales promelas mg/L LC50 static 13400 - 15100: 96 h Pimephales promelas mg/L LC50 flow-through | | 9268 - 14221: 48 h Daphnia magna mg/L LC50 10800: 24 h Daphnia magna mg/L EC50 2: 48 h Daphnia magna mg/L EC50 Static |
| Carbomer 9003-01-4 | | 580: 96 h Lepomis macrochirus mg/L LC50 | | 168: 96 h water flea mg/L EC50 |
| Glycerol 56-81-5 | | 51 - 57: 96 h Oncorhynchus mykiss mL/L LC50 static | | 500: 24 h Daphnia magna mg/L EC50 |
| Isopropyl alcohol 67-63-0 | 1000: 96 h Desmodesmus subspicatus mg/L EC50 1000: 72 h Desmodesmus subspicatus mg/L EC50 | 9640: 96 h Pimephales promelas mg/L LC50 flow- through 11130: 96 h Pimephales promelas mg/L LC50 static 1400000: 96 h Lepomis macrochirus µg/L LC50 | | 13299: 48 h Daphnia magna mg/L EC50 |
| Isopropyl Myristate 110-27-0 | 100: 72 h Desmodesmus subspicatus mg/L EC50 | 8400: 96 h Brachydanio rerio mg/L LC50 semi-static 8400: 96 h Brachydanio rerio mg/L LC50 | | 100: 48 h Daphnia magna mg/L EC50 |

Persistence/Degradability

Not determined

Bioaccumulation

Not determined

Mobility

| Chemical Name | Partition Coefficient |
|---------------|-----------------------|
| Ethanol | -0.32 |
| 64-17-5 | |

Other Adverse Effects

Not determined

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

| Disposal of Wastes | Disposal should be in accordance with applicable regional, national and local laws and regulations. |
|------------------------|---|
| Contaminated Packaging | Disposal should be in accordance with applicable regional, national and local laws and regulations. |

California Hazardous Waste Status

| Chemical Name | California Hazardous Waste Status |
|---------------|-----------------------------------|
| Ethanol | Toxic |
| 64-17-5 | Ignitable |

14. TRANSPORT INFORMATION

Note

This product as packaged in 2.5oz, 4oz, 8oz, & 18oz are shipped as Limited Quantity

DOT

| UN/ID No Proper Shipping Name Hazard Class Packing Group | UN1170 Ethanol solution 3 II |
|---|---------------------------------------|
| IATA UN/ID No Proper Shipping Name Hazard Class Packing Group | UN1170 Ethanol solution 3 II |
| IMDG UN/ID No Proper Shipping Name Hazard Class Packing Group | UN1170 Ethanol solution 3 II |

15. REGULATORY INFORMATION

International Inventories

Not determined

US Federal Regulations

<u>SARA 313</u>

| Chemical Name | CAS No | Weight-% | SARA 313 - Threshold Values % |
|-----------------------------|---------|----------|----------------------------------|
| Isopropyl alcohol - 67-63-0 | 67-63-0 | 0.25 | 1.0 |

US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals.

| Chemical Name | California Proposition 65 |
|-------------------|---------------------------|
| Ethanol - 64-17-5 | Carcinogen |
| | Developmental |

U.S. State Right-to-Know Regulations

| Chemical Name | New Jersey | Massachusetts | Pennsylvania |
|------------------------------|------------|---------------|--------------|
| Ethanol 64-17-5 | Х | Х | Х |
| Glycerol 56-81-5 | Х | Х | Х |
| Isopropyl alcohol 67-63-0 | Х | X | Х |

16. OTHER INFORMATION

| <u>NFPA</u> HMIS | Health Hazards Not determined Health Hazards 0 | Flammability Not determined Flammability 3 | Instability Not determined Physical Hazards 0 | Special Hazards Not determined Personal Protection 0 |
|---|---|---|--|---|
| Issue Date Revision Date: Revision Note | 28-Jan-2008 22-Jan-2016 New format | | | |

Disclaimer

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 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.

End of Safety Data Sheet