1 Identification

- Product identifier
  - Trade name: Star San Gel Instant Hand Sanitizer

- Article number: 18623

- Details of the supplier of the safety data sheet
  - Manufacturer/Supplier: DIAMOND CHEMICAL COMPANY, INC.
    Corporate Headquarters
    Union Ave & DuBois Street
    East Rutherford, NJ 07073
    USA
    Telephone: 201-935-4300

- Information department: Product safety department

- Emergency telephone number:
  INFOTRAC - 1-800-535-5053

Recommended Use: Hand Sanitizer

Restriction on Use: This is a personal care product that is safe for consumers. Personal care products are not required to have an SDS as per regulations around the world. While this material is not considered hazardous, this SDS contains valuable information to the safe handling of the product for industrial workplace conditions as well as unusual and unintended exposures such as large spills. The SDS should be retained and made available to employees and other handlers of this product.

2 Hazard(s) identification

- Label elements PRODUCT DESCRIPTION - Alcohol Based Hand Sanitizer - 70% v/v

- GHS label elements
  - The product is classified and labeled according to the Globally Harmonized System (GHS).

- Hazard pictograms
  - GHS02
  - GHS07

- Signal word Danger

- Hazard statements
  - Highly flammable liquid and vapor.
  - Causes serious eye irritation.

- Precautionary statements
  - Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
  - Keep container tightly closed.
  - Ground/bond container and receiving equipment.
  - Use explosion-proof electrical/ventilating/lighting/equipment.
  - Use only non-sparking tools.
  - Take precautionary measures against static discharge.
  - Wash thoroughly after handling.
  - Wear protective gloves/protective clothing/eye protection/face protection.
  - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

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If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice/attention.
In case of fire: Use for extinction: CO2, powder or water spray.
Store in a well-ventilated place. Keep cool.
Dispose of contents/container in accordance with local/regional/national/international regulations.

· Classification system:
· NFPA ratings (scale 0 - 4)

† Health = 0
† Fire = 3
† Reactivity = 0

· HMIS-ratings (scale 0 - 4)

† HEALTH 0 Health = 0
† FIRE 3 Fire = 3
† REACTIVITY 0 Reactivity = 0

· Other hazards
· Results of PBT and vPvB assessment
· PBT: Not applicable.
· vPvB: Not applicable.

3 Composition/information on ingredients
· Chemical characterization: Mixtures
· Description:
Mixture of the substances listed below with nonhazardous additions.
Alcohol Based Hand Sanitizer Gel - 70% ethanol v/v
Water
Acrylate Polymer
Triethanolamine
Aloe Vera Gel
Fragrance

· Components:

<table>
<thead>
<tr>
<th>Component</th>
<th>Prop. %</th>
</tr>
</thead>
<tbody>
<tr>
<td>64-17-5 ethanol</td>
<td></td>
</tr>
<tr>
<td>102-71-6 Triethanolamine</td>
<td></td>
</tr>
</tbody>
</table>

4 First-aid measures
· Description of first aid measures
· General information: Wash clothing if there is a spill.
· After inhalation: Supply fresh air; consult doctor in case of complaints.
· After skin contact: Immediately rinse with water.
· After eye contact:
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
· After swallowing: If symptoms persist consult doctor.
Trade name: Star San Gel Instant Hand Sanitizer

· Information for doctor:
  · Most important symptoms and effects, both acute and delayed
    No further relevant information available.
  · Indication of any immediate medical attention and special treatment needed
    No further relevant information available.

5 Fire-fighting measures

· Extinguishing media
  · Suitable extinguishing agents:
    CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
  · For safety reasons unsuitable extinguishing agents: Water with full jet
  · Special hazards arising from the substance or mixture No further relevant information available.
  · Advice for firefighters
  · Protective equipment: No special measures required.

6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures
  Wear protective equipment. Keep unprotected persons away.
· Environmental precautions: Do not allow to enter sewers/ surface or ground water.
· Methods and material for containment and cleaning up:
  Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
  Dispose contaminated material as waste according to item 13.
  Ensure adequate ventilation.
· Reference to other sections
  See Section 7 for information on safe handling.
  See Section 8 for information on personal protection equipment.
  See Section 13 for disposal information.
· Protective Action Criteria for Chemicals

  · PAC-1:
    64-17-5 ethanol 1,800 ppm
    102-71-6 Triethanolamine 15 mg/m³
    75-65-0 2-methylpropan-2-ol 150 ppm
  · PAC-2:
    64-17-5 ethanol 3300* ppm
    102-71-6 Triethanolamine 240 mg/m³
    75-65-0 2-methylpropan-2-ol 1,300 ppm
  · PAC-3:
    64-17-5 ethanol 15000* ppm
    102-71-6 Triethanolamine 1,500 mg/m³
    75-65-0 2-methylpropan-2-ol 8000* ppm

  *(Contd. on page 4)
7 Handling and storage

- **Handling:**
  - _Precautions for safe handling_ No special precautions are necessary if used correctly.
  - _Information about protection against explosions and fires:_
    - Keep ignition sources away - Do not smoke.
    - Protect against electrostatic charges.
  - _Conditions for safe storage, including any incompatibilities_
  - _Storage:_
    - _Requirements to be met by storerooms and receptacles:_ Store in a cool location.
    - _Information about storage in one common storage facility:_ Not required.
  - _Further information about storage conditions:_
    - Keep receptacle tightly sealed.
    - Store in cool, dry conditions in well sealed receptacles.
  - _Specific end use(s)_ No further relevant information available.

8 Exposure controls/personal protection

- _Additional information about design of technical systems:_ No further data; see item 7.
- _Control parameters_

<table>
<thead>
<tr>
<th>Component</th>
<th>Limit Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>64-17-5 ethanol</td>
<td>PEL: Long-term value: 1900 mg/m³, 1000 ppm</td>
</tr>
<tr>
<td></td>
<td>REL: Long-term value: 1900 mg/m³, 1000 ppm</td>
</tr>
<tr>
<td></td>
<td>TLV: Short-term value: 1880 mg/m³, 1000 ppm</td>
</tr>
<tr>
<td>102-71-6 Triethanolamine</td>
<td>TLV: Long-term value: 5 mg/m³</td>
</tr>
</tbody>
</table>

- _Additional information:_ The lists that were valid during the creation were used as basis.
- _Exposure controls_
- _Personal protective equipment:_
- _General protective and hygienic measures:_
  - Keep away from foodstuffs, beverages and feed.
  - Avoid spills.
  - Wash hands before breaks and at the end of work.
  - Avoid contact with the eyes.
  - As with other cleaning products avoid contact with the eyes and skin.
- _Breathing equipment:_ Not required.
- _Protection of hands:_
  - _Material of gloves_ None required.

No special equipment required.
9 Physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form</td>
<td>Highly viscous</td>
</tr>
<tr>
<td>Color</td>
<td>Colorless</td>
</tr>
<tr>
<td>Odor</td>
<td>Like alcohol</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>Not determined</td>
</tr>
<tr>
<td>pH-value at 20 °C (68 °F)</td>
<td>7</td>
</tr>
<tr>
<td>Change in condition</td>
<td></td>
</tr>
<tr>
<td>Melting point/Melting range</td>
<td>Undetermined</td>
</tr>
<tr>
<td>Boiling point/Boiling range</td>
<td>78 °C (172.4 °F)</td>
</tr>
<tr>
<td>Flash point</td>
<td>13 °C (55.4 °F)</td>
</tr>
<tr>
<td>Flammability (solid, gaseous)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>Not determined</td>
</tr>
<tr>
<td>Auto igniting</td>
<td>Product is not selfigniting.</td>
</tr>
<tr>
<td>Danger of explosion</td>
<td>Product is not explosive. However, formation of explosive air/ vapor mixtures are possible.</td>
</tr>
<tr>
<td>Explosion limits</td>
<td></td>
</tr>
<tr>
<td>Lower</td>
<td>Not determined</td>
</tr>
<tr>
<td>Upper</td>
<td>Not determined</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>Not determined</td>
</tr>
<tr>
<td>Density at 20 °C (68 °F):</td>
<td>0.7 g/cm³ (5.8415 lbs/gal)</td>
</tr>
<tr>
<td>Relative density</td>
<td>Not determined</td>
</tr>
<tr>
<td>Vapor density</td>
<td>Not determined</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Not determined</td>
</tr>
<tr>
<td>Solubility in / Miscibility with Water</td>
<td>Not miscible or difficult to mix.</td>
</tr>
<tr>
<td>Partition coefficient (n-octanol/water)</td>
<td>Not determined</td>
</tr>
<tr>
<td>Viscosity</td>
<td></td>
</tr>
<tr>
<td>Dynamic at 20 °C (68 °F):</td>
<td>5,000 mPas</td>
</tr>
<tr>
<td>Kinematic</td>
<td>Not determined</td>
</tr>
</tbody>
</table>

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10 Stability and reactivity

- Reactivity: No further relevant information available.
- Chemical stability:
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- Possibility of hazardous reactions: No dangerous reactions known.
- Conditions to avoid: No further relevant information available.
- Incompatible materials: No further relevant information available.
- Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

- Information on toxicological effects
  - Acute toxicity:
    - LD/LC50 values that are relevant for classification:
      - 64-17-5 ethanol
      - Oral LD50 7,060 mg/kg (rat)
      - Inhalative LC50/4 h 20,000 mg/l (rat)

- Primary irritant effect:
  - on the skin: No irritant effect.
  - on the eye: Irritating effect.
  - Sensitization: No sensitizing effects known.

- Additional toxicological information:
The product shows the following dangers according to internally approved calculation methods for preparations:
  - Irritant

- Carcinogenic categories
  - NTP (National Toxicology Program)
    - None of the ingredients is listed.
  - OSHA-Ca (Occupational Safety & Health Administration)
    - None of the ingredients is listed.

12 Ecological information

- Toxicity
  - Aquatic toxicity: No further relevant information available.
  - Persistence and degradability: No further relevant information available.

- Behavior in environmental systems:
  - Bioaccumulative potential: No further relevant information available.
  - Mobility in soil: No further relevant information available.
Trade name: Star San Gel Instant Hand Sanitizer

- Additional ecological information:
  - General notes:
    Water hazard class 1 (Self-assessment): slightly hazardous for water
    Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
  - Results of PBT and vPvB assessment
    - PBT: Not applicable.
    - vPvB: Not applicable.
  - Other adverse effects: No further relevant information available.

13 Disposal considerations

- Waste treatment methods
  - Recommendation:
    Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- Uncleaned packagings:
  - Recommendation: Disposal must be made according to official regulations.

14 Transport information

- UN-Number
  - DOT NA1993
  - IMDG, IATA UN1993
- UN proper shipping name
  - DOT Flammable liquids, n.o.s. (Ethanol)
  - IMDG FLAMMABLE LIQUID, N.O.S. (ETHANOL (ETHYL ALCOHOL))
  - IATA FLAMMABLE LIQUID, N.O.S. (ETHANOL)
- Transport hazard class(es)
  - DOT
    - Class 3 Flammable liquids
    - Label 3
  - IMDG, IATA
    - Class 3 Flammable liquids
    - Label 3
Trade name: Star San Gel Instant Hand Sanitizer

- Packing group
  - DOT, IMDG, IATA
  - Packing group
  - DOT, IMDG, IATA
  - DOT
  - Quantity limitations
    - On passenger aircraft/rail: 60 L
    - On cargo aircraft only: 220 L

- Environmental hazards:
  - Not applicable.

- Special precautions for user
  - Warning: Flammable liquids
  - EMS Number: F-E,S-E

- Stowage Category
  - A

- Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code
  - Not applicable.

- Transport/Additional information:
  - DOT
  - IMDG
  - Limited quantities (LQ)
    - 5L
  - Exected quantities (EQ)
    - Code: E1
      - Maximum net quantity per inner packaging: 30 ml
      - Maximum net quantity per outer packaging: 1000 ml

- UN "Model Regulation":
  - UN 1993 FLAMMABLE LIQUID, N.O.S. (ETHANOL (ETHYL ALCOHOL)), 3, III

15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
  - Sara
  - Section 355 (extremely hazardous substances):
    - None of the ingredients is listed.
  - Section 313 (Specific toxic chemical listings):
    - 75-65-0 2-methylpropan-2-ol
  - TSCA (Toxic Substances Control Act):
    - 64-17-5 ethanol
    - 7732-18-5 water, distilled, conductivity or of similar purity
    - 102-71-6 triethanolamine
    - 75-65-0 2-methylpropan-2-ol
    - 3734-33-6 denatonium benzoate
  - Hazardous Air Pollutants
    - None of the ingredients is listed.
  - Proposition 65
  - Chemicals known to cause cancer:
    - None of the ingredients is listed.
· Chemicals known to cause reproductive toxicity for females:
  None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for males:
  None of the ingredients is listed.

· Chemicals known to cause developmental toxicity:
  64-17-5 ethanol

· Carcinogenic categories
  · EPA (Environmental Protection Agency)
    None of the ingredients is listed.
  · TLV (Threshold Limit Value established by ACGIH)
    64-17-5 ethanol A3
    75-65-0 2-methylpropan-2-ol A4
  · NIOSH-Ca (National Institute for Occupational Safety and Health)
    None of the ingredients is listed.

· GHS label elements
  The product is classified and labeled according to the Globally Harmonized System (GHS).

· Hazard pictograms

  GHS02  GHS07

· Signal word Danger

· Hazard statements
  Highly flammable liquid and vapor.
  Causes serious eye irritation.

· Precautionary statements
  Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
  Keep container tightly closed.
  Ground/bond container and receiving equipment.
  Use explosion-proof electrical/ventilating/lighting/equipment.
  Use only non-sparking tools.
  Take precautionary measures against static discharge.
  Wash thoroughly after handling.
  Wear protective gloves/protective clothing/eye protection/face protection.
  If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
  If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
  If eye irritation persists: Get medical advice/attention.
  In case of fire: Use for extinction: CO2, powder or water spray.
  Store in a well-ventilated place. Keep cool.
  Dispose of contents/container in accordance with local/regional/national/international regulations.

· SB 258
  CAS NO.  INGREDIENTS  FUNCTION
  May contain minimal amount of fragrances and dyes.
16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Department issuing SDS: Environment protection department.
· Contact: Environmental Department
· Date of preparation / last revision 04/24/2020 / -
· Abbreviations and acronyms:
  IMDG: International Maritime Code for Dangerous Goods
  DOT: US Department of Transportation
  IATA: International Air Transport Association
  ACGIH: American Conference of Governmental Industrial Hygienists
  EINECS: European Inventory of Existing Commercial Chemical Substances
  ELINCS: European List of Notified Chemical Substances
  CAS: Chemical Abstracts Service (division of the American Chemical Society)
  NFPA: National Fire Protection Association (USA)
  HMIS: Hazardous Materials Identification System (USA)
  LC50: Lethal concentration, 50 percent
  LD50: Lethal dose, 50 percent
  PBT: Persistent, Bioaccumulative and Toxic
  vPvB: very Persistent and very Bioaccumulative
  NIOSH: National Institute for Occupational Safety
  OSHA: Occupational Safety & Health
  TLV: Threshold Limit Value
  PEL: Permissible Exposure Limit
  REL: Recommended Exposure Limit
  Flam. Liq. 2: Flammable liquids – Category 2
  Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A