SAFETY DATA SHEET
HILLYARD QUICK & CLEAN SUPER HIL-AIRE® FRESH & CLEAN HIL0105554

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Material name: Hillyard Quick & Clean Super Hil-Aire® Fresh & Clean
Material number: A00223

Manufacturer or supplier’s details
Company: Hillyard Industries
Address: 302 North 4th Street
Joseph, MO 64502
Telephone: 816-233-1321 ext 8285

Emergency telephone numbers
For SDS Information: 816-233-1321 ext 8285
For a Medical Emergency: CHEMTREC 800-424-9300

SECTION 2. HAZARDS IDENTIFICATION

Emergency Overview

<table>
<thead>
<tr>
<th>Appearance</th>
<th>Aerosol containing a liquefied gas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colour</td>
<td>clear, colourless</td>
</tr>
<tr>
<td>Odour</td>
<td>odourized</td>
</tr>
</tbody>
</table>

GHS Classification

- Flammable aerosols: Category 2
- Gases under pressure: Liquefied gas
- Eye irritation: Category 2A

GHS Label element
Hazard pictograms:
- Flammable aerosol
- Pressure
- Warning

Hazard statements:
H223 Flammable aerosol.
H280 Contains gas under pressure; may explode if heated.
H319 Causes serious eye irritation.

Precautionary statements:
Prevention:
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211 Do not spray on an open flame or other ignition source.
P251 Pressurized container: Do not pierce or burn, even after use.
P264 Wash skin thoroughly after handling.
P280 Wear eye protection/face protection.

Emergency telephone numbers:
For SDS Information: 816-233-1321 ext 8285
For a Medical Emergency: CHEMTREC 800-424-9300
Response:
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313 If eye irritation persists: Get medical advice/attention.

Storage:
P410 + P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/ 122 °F.

Disposal:
P501 Dispose of contents/container in accordance with local regulation.

Potential Health Effects

Carcinogenicity:

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.

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

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 equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Hazardous components

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS-No.</th>
<th>Concentration [%]</th>
</tr>
</thead>
<tbody>
<tr>
<td>ethanol</td>
<td>64-17-5</td>
<td>&gt;= 30 - &lt; 50</td>
</tr>
<tr>
<td>butane</td>
<td>106-97-8</td>
<td>&gt;= 10 - &lt; 20</td>
</tr>
<tr>
<td>propane</td>
<td>74-98-6</td>
<td>&gt;= 1 - &lt; 5</td>
</tr>
<tr>
<td>propan-2-ol</td>
<td>67-63-0</td>
<td>&gt;= 1 - &lt; 5</td>
</tr>
<tr>
<td>sodium nitrite</td>
<td>7632-00-0</td>
<td>&gt;= 0.1 - &lt; 1</td>
</tr>
</tbody>
</table>

SECTION 4. FIRST AID MEASURES

General advice  : Move out of dangerous area.
Show this safety data sheet to the doctor in attendance.
Do not leave the victim unattended.

If inhaled      : If unconscious place in recovery position and seek medical advice.
If symptoms persist, call a physician.

In case of skin contact : If on clothes, remove clothes.
If symptoms persist, call a physician. Call a physician if irritation persists. Wash off immediately with plenty of water for at least 15 minutes.

In case of eye contact: If in eyes, rinse with water for 15 minutes. Remove contact lenses. Protect unharmed eye. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist.

If swallowed: Keep respiratory tract clear. DO NOT induce vomiting unless directed to do so by a physician or poison control center. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media: Alcohol-resistant foam Carbon dioxide (CO2) Dry chemical Water spray jet

Unsuitable extinguishing media: High volume water jet

Specific hazards during firefighting: Do not allow run-off from fire fighting to enter drains or water courses.

Hazardous combustion products: Carbon dioxide (CO2) Carbon monoxide Smoke

Specific extinguishing methods: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

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. For safety reasons in case of fire, cans should be stored separately in closed containments. Use a water spray to cool fully closed containers.

Special protective equipment for firefighters: Wear self-contained breathing apparatus for firefighting if necessary.

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.
Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

Environmental precautions:
- Prevent product from entering drains.
- Prevent further leakage or spillage if safe to do so.
- If the product contaminates rivers and lakes or drains inform respective authorities.

Methods and materials for containment and cleaning up:
- Sweep up or vacuum up spillage and collect in suitable container for disposal.
- Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).

SECTION 7. HANDLING AND STORAGE

Advice on safe handling:
- Do not breathe vapours or spray mist.
- Avoid contact with skin and eyes.
- For personal protection see section 8.
- Smoking, eating and drinking should be prohibited in the application area.
- Take precautionary measures against static discharges.
- Provide sufficient air exchange and/or exhaust in work rooms.
- Open drum carefully as content may be under pressure.
- Dispose of rinse water in accordance with local and national regulations.
- Always replace cap after use.

Conditions for safe storage:
- BEWARE: Aerosol is pressurized. Keep away from direct sun exposure and temperatures over 50 °C. Do not open by force or throw into fire even after use. Do not spray on flames or red-hot objects.
- No smoking.
- Keep in a dry, cool and well-ventilated place.
- Containers which are opened must be carefully resealed and kept upright to prevent leakage.
- Observe label precautions.
- Electrical installations / working materials must comply with the technological safety standards.

Materials to avoid:
- Oxidizing agents

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>ethanol</td>
<td>64-17-5</td>
<td>TWA</td>
<td>1,000 ppm</td>
<td>ACGIH</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA</td>
<td>1,900 mg/m3</td>
<td>NIOSH REL</td>
</tr>
<tr>
<td>Component</td>
<td>CAS-No.</td>
<td>Control parameters</td>
<td>Biological specimen</td>
<td>Sampling time</td>
</tr>
<tr>
<td>----------</td>
<td>--------</td>
<td>-------------------</td>
<td>---------------------</td>
<td>--------------</td>
</tr>
<tr>
<td>PROPAN-2-OL</td>
<td>67-63-0</td>
<td>Acetone</td>
<td>Urine</td>
<td>End of shift at end of workweek</td>
</tr>
</tbody>
</table>

### Biological occupational exposure limits

#### Personal protective equipment

**Respiratory protection**
- In case of insufficient ventilation, wear suitable respiratory equipment.
- Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines.

**Hand protection**
- Remarks: The suitability for a specific workplace should be discussed with the producers of the protective gloves.

**Eye protection**
- Ensure that eyewash stations and safety showers are close to the workstation location.
- Tightly fitting safety goggles

**Skin and body protection**
- Impervious clothing
- Choose body protection according to the amount and concentration of the dangerous substance at the work place.
Hygiene measures: When using do not eat or drink. When using do not smoke. Wash hands before breaks and at the end of workday.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Aerosol containing a liquefied gas
Colour: clear, colourless
Odour: odourized
Odour Threshold: no data available
pH: no data available
Melting point/freezing point: no data available
Boiling point: not applicable
Flash point: not applicable
Evaporation rate: not applicable
Flammability (solid, gas): Flammable aerosol.
Upper explosion limit: no data available
Lower explosion limit: no data available
Vapour pressure: not applicable
Density: no data available
Solubility(ies):
Water solubility: soluble
Partition coefficient: n-octanol/water: no data available
Auto-ignition temperature: not determined
Thermal decomposition: no data available
Viscosity:
Viscosity, kinematic: no data available
Heat of combustion: 24.21 kJ/g

SECTION 10. STABILITY AND REACTIVITY

Reactivity: Stable
Chemical stability: Stable under normal conditions.
Possibility of hazardous reactions: No decomposition if stored and applied as directed. Vapours may form explosive mixture with air.

Conditions to avoid: Heat, flames and sparks. Extremes of temperature and direct sunlight.

Incompatible materials: Oxidizing agents Ammonium salts Reducing agents

Hazardous decomposition products: Carbon oxides

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

Product:

Acute oral toxicity: Acute toxicity estimate: > 5,000 mg/kg Method: Calculation method

Components:

ethanol: Acute oral toxicity: LD50 Oral rat: 7,060 mg/kg

Acute inhalation toxicity: LC50 rat: 124.7 mg/l Exposure time: 4 h

butane: Acute inhalation toxicity: LC50 mouse: 1,237 mg/l Exposure time: 2 h

propane: Acute inhalation toxicity: LC50 mouse: 1,237 mg/l Exposure time: 2 h

LC50 rat: 658 mg/l Exposure time: 4 h

LC50 rat: 1,355 mg/l

propan-2-ol: Acute oral toxicity: LD50 Oral rat: 4,396 mg/kg Method: Calculation method

Skin corrosion/irritation

Product:
Remarks: May cause skin irritation in susceptible persons.

**Serious eye damage/eye irritation**

*Product:*

Remarks: Severe eye irritation

**Respiratory or skin sensitisation**

no data available

**Germ cell mutagenicity**

no data available

**Carcinogenicity**

no data available

**Reproductive toxicity**

no data available

- ethanol:
- butane:
- propane:
- propan-2-ol:
- sodium nitrite:

**STOT - single exposure**

no data available

**STOT - repeated exposure**

no data available

**Aspiration toxicity**

no data available

**Further information**

*Product:*

Remarks: no data available

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**SECTION 12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

no data available

**Persistence and degradability**

no data available

**Bioaccumulative potential**

*Product:*

Partition coefficient: n-octanol/water : Remarks: no data available

**Components:**
butane:
Partition coefficient: n-octanol/water : Pow: 2.89

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).

Additional ecological information: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal., Harmful to aquatic life.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods
Waste from residues: The product should not be allowed to enter drains, water courses or the soil. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of in accordance with local regulations.

Contaminated packaging: Empty remaining contents. Dispose of as unused product. Do not re-use empty containers. Do not burn, or use a cutting torch on, the empty drum.

SECTION 14. TRANSPORT INFORMATION

Transportation Regulation: 49 CFR (USA): ORM-D, CONSUMER COMMODITY

Transportation Regulation: IMDG (Vessel): UN1950, AEROSOLS, 2.1, - Limited quantity

Transportation Regulation: IATA (Cargo Air): UN1950, Aerosols, flammable, 2.1, - Limited quantity

Transportation Regulation: IATA (Passenger Air):
SAFETY DATA SHEET
HILLYARD QUICK & CLEAN SUPER HIL-AIRE® FRESH & CLEAN HIL0105554

Version 1.0 Revision Date 04/30/2015 Print Date 05/29/2015

UN1950, Aerosols, flammable, 2.1, - Limited quantity

Transportation Regulation: TDG (Canada):
UN1950, AEROSOLS, 2.1, - Limited quantity

SECTION 15. REGULATORY INFORMATION

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

CERCLA Reportable Quantity

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Component RQ</th>
<th>Calculated product RQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>sodium nitrite</td>
<td>7632-00-0</td>
<td>100</td>
<td>*</td>
</tr>
</tbody>
</table>

*: Calculated RQ exceeds reasonably attainable upper limit.

SARA 304 Extremely Hazardous Substances Reportable Quantity

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Component RQ</th>
<th>Calculated product RQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>ammonia, anhydrous</td>
<td>7664-41-7</td>
<td>100</td>
<td>*</td>
</tr>
</tbody>
</table>

*: Calculated RQ exceeds reasonably attainable upper limit.

SARA 311/312 Hazards:

- Fire Hazard
- Sudden Release of Pressure Hazard
- Acute Health Hazard

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

SARA 313: 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.

California Prop 65: WARNING! This product contains a chemical known to the State of California to cause cancer.

biphenyl-2-ol 90-43-7

The components of this product are reported in the following inventories:

- TSCA: On TSCA Inventory
- DSL: This product contains one or several components that are not on the Canadian DSL nor NDSL.
- AICS: Not in compliance with the inventory
- NZIoC: Not in compliance with the inventory
- PICCS: Not in compliance with the inventory
- IECSC: Not in compliance with the inventory

Inventory Acronym and Validity Area Legend:
Further information

NFPA:

Flammability

HEALTH FLAMMABILITY PHYSICAL HAZARD

3 3 2

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

Special hazard.

OSHA GHS Label Information:

Hazard pictograms :

Signal word: Warning:

Hazard statements :

Precautionary statements:

Prevention: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use. Wash skin thoroughly after handling. Wear eye protection/face protection.

Response: 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.

Storage: Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

Disposal: Dispose of contents/container in accordance with local regulation.

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