SECTION 1: Identification of the substance/mixture and of the supplier

Product name: Corn Syrup

Manufacturer/Supplier Trade name: AquaPhoenix Scientific
Manufacturer/Supplier Article number: S25339

Recommended uses of the product and uses restrictions on use:

Manufacturer Details:
AquaPhoenix Scientific
9 Barnhart Drive, Hanover, PA 17331

Supplier Details:
Fisher Science Education
15 Jet View Drive, Rochester, NY 14624

Emergency telephone number:
Fisher Science Education  Emergency Telephone No.: 800-535-5053

SECTION 2: Hazards identification

Classification of the substance or mixture:
Not classified for physical or health hazards under GHS.

Hazard statements:
Precautionary statements:

Combustible Dust Hazard: 
May form combustible dust concentrations in air (during processing).
Combustible Dust Hazard: 
May form combustible dust concentrations in air (during processing).

Other Non-GHS Classification:

WHMIS
NFPA/HMIS

NFPA SCALE (0-4)
HMIS RATINGS (0-4)

SECTION 3: Composition/information on ingredients

Ingredients:
Safety Data Sheet
going according to 29CFR1910/1200 and GHS Rev. 3

Effective date: 12.27.2014

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Corn Syrup

<table>
<thead>
<tr>
<th>CAS 50-99-7</th>
<th>D-Fructose</th>
<th>&gt;75 %</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS 7732-18-5</td>
<td>water, Purified</td>
<td>&lt;25 %</td>
</tr>
</tbody>
</table>

Percentages are by weight

SECTION 4: First aid measures

Description of first aid measures

After inhalation: Loosen clothing as necessary and position individual in a comfortable position. Remove to fresh air. Give artificial respiration if necessary. If breathing is difficult give oxygen. Get medical assistance if cough or other symptoms appear.

After skin contact: Wash affected area with soap and water. Seek medical attention if irritation persists or if concerned.

After eye contact: Protect unexposed eye. Immediately flush eyes with water for at least 15 minutes. Remove contact lenses while rinsing. Immediately get medical assistance.

After swallowing: Dilute mouth with water or milk. Get medical assistance.

Most important symptoms and effects, both acute and delayed:

Indication of any immediate medical attention and special treatment needed:

If seeking medical attention provide SDS document to physician.

SECTION 5: Firefighting measures

Extinguishing media

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

For safety reasons unsuitable extinguishing agents:

Special hazards arising from the substance or mixture:
Dust can form an explosive mixture in air.

Advice for firefighters:

Protective equipment: Wear protective eyeware, gloves, and clothing. Refer to Section 8.

Additional information (precautions): Avoid contact with skin, eyes, and clothing. Avoid generating dust.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. When necessary use NIOSH approved breathing equipment.

Environmental precautions:

Methods and material for containment and cleaning up:

If necessary use trained response staff or contractor. Clean up spills immediately. Observe precautions for protective equipment. Absorb with suitable absorbent material such as sand or earth and containerize for disposal. Refer to Sections 5, 8, and 10.

Reference to other sections:
Precautions for safe handling:
Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes, and clothing. Minimize dust generation. Avoid ingestion and inhalation. Follow good hygiene procedures when handling chemical materials. Refer to Section 8. Do not eat, drink, smoke, or use personal products when handling chemical substances.

Conditions for safe storage, including any incompatibilities:
Keep container tightly closed in a cool, dry, and well-ventilated area. Store away from incompatible materials. Refer to Section 5.

SECTION 8 : Exposure controls/personal protection

Control Parameters:
, , OSHA PEL TWA (Total Dust) 15 mg/m3 (50 mppcf*)
, , ACGIH TLV TWA (inhalable particles) 10 mg/m3

Appropriate Engineering controls:
Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor and mists below the applicable workplace exposure limits (Occupational Exposure Limits-OELs) indicated above. Normal ventilation is adequate.

Respiratory protection:
Not required under normal conditions of use. Normal ventilation is adequate.

Protection of skin:
Select glove material impermeable and resistant to the substance. Select glove material based on rates of diffusion and degradation.

Eye protection:
Safety glasses with side shields or goggles.

General hygienic measures:
Wash hands before breaks and at the end of work. Avoid contact with the eyes and skin. Perform routine housekeeping to prevent dust generation. Before wearing wash contaminated clothing. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices.

SECTION 9 : Physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance (physical state, color)</td>
<td>Clear viscous liquid</td>
</tr>
<tr>
<td>Explosion limit lower</td>
<td>Non Explosive</td>
</tr>
<tr>
<td>Explosion limit upper</td>
<td>Non Explosive</td>
</tr>
<tr>
<td>Odor</td>
<td>Sweet odor</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>Not Available</td>
</tr>
<tr>
<td>pH-value</td>
<td>5.9</td>
</tr>
<tr>
<td>Melting/Freezing point</td>
<td>146.1°C</td>
</tr>
<tr>
<td>Boiling point/Boiling range</td>
<td>Not Available</td>
</tr>
<tr>
<td>Flash point (closed cup)</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Solubilities</td>
<td>Soluble in water</td>
</tr>
<tr>
<td>Partition coefficient (n-octanol/water)</td>
<td>Not Available</td>
</tr>
<tr>
<td>Auto/Self-ignition temperature</td>
<td>Not Applicable</td>
</tr>
</tbody>
</table>
Evaporation rate: Not Available  
Decomposition temperature: Not Available  

Flammability (solid, gaseous): Not Applicable  
Viscosity: 
   a. Kinematic: Not Available  
   b. Dynamic: Not Available  

Density: Not Available  

SECTION 10: Stability and reactivity  

Reactivity: None under normal processing.  
Chemical stability: Stable under normal conditions.  
Possible hazardous reactions:  
Conditions to avoid: Excessive heat. Dust generation. Incompatible materials. Refer to Section 5.  
Incompatible materials: Strong oxidizers.  
Hazardous decomposition products: Carbon oxides. Irritating and highly toxic gases or fumes.  

SECTION 11: Toxicological information  

Acute Toxicity:  
Oral: 25,800 mg/kg  
LD50 Oral - rat

Chronic Toxicity: No additional information.  
Corrosion Irritation: No additional information.  
Sensitization: No additional information.  
Single Target Organ (STOT): No additional information.  
Numerical Measures: No additional information.  
Carcinogenicity: No additional information.  
Mutagenicity: No additional information.  
Reproductive Toxicity: No additional information.  

SECTION 12: Ecological information  

Ecotoxicity Persistence and degradability:  
Bioaccumulative potential:  
Mobility in soil:  
Other adverse effects:  

SECTION 13: Disposal considerations  

Waste disposal recommendations:  
Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste.  
Chemical waste generators must also consult local, regional, and national hazardous waste regulations. Ensure complete and accurate classification. Dispose of empty containers as unused product.  

SECTION 14: Transport information
UN-Number
Not Dangerous Goods

UN proper shipping name
Not Dangerous Goods

Transport hazard class(es)
Packing group: Not Dangerous Goods

Environmental hazard:
Transport in bulk:

Special precautions for user:

SECTION 15 : Regulatory information

United States (USA)

SARA Section 311/312 (Specific toxic chemical listings):
None of the ingredients is listed

SARA Section 313 (Specific toxic chemical listings):
None of the ingredients is listed

RCRA (hazardous waste code):
None of the ingredients is listed

TSCA (Toxic Substances Control Act):
All ingredients are listed.

CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act):
None of the ingredients is listed

Proposition 65 (California):

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:
None of the ingredients is listed

Canada

Canadian Domestic Substances List (DSL):
All ingredients are listed.

Canadian NPRI Ingredient Disclosure list (limit 0.1%):
None of the ingredients is listed

Canadian NPRI Ingredient Disclosure list (limit 1%):
None of the ingredients is listed

SECTION 16 : Other information

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the
 SDS contains all the information required by the Controlled Products Regulations. The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment. The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material. It is the responsibility of the user to comply with all applicable laws and regulations applicable to this material.

**GHS Full Text Phrases:**

**Abbreviations and acronyms:**

IMDG: International Maritime Code for Dangerous Goods  
PNEC: Predicted No-Effect Concentration (REACH)  
CFR: Code of Federal Regulations (USA)  
SARA: Superfund Amendments and Reauthorization Act (USA)  
RCRA: Resource Conservation and Recovery Act (USA)  
TSCA: Toxic Substances Control Act (USA)  
NPRI: National Pollutant Release Inventory (Canada)  
DOT: US Department of Transportation  
IMDG: International Maritime Code for Dangerous Goods  
IATA: International Air Transport Association  
GHS: Globally Harmonized System of Classification and Labelling of Chemicals  
IATA: International Air Transport Association  
ACGIH: American Conference of Governmental Industrial Hygienists  
CAS: Chemical Abstracts Service (division of the American Chemical Society)  
NFPA: National Fire Protection Association (USA)  
HMIS: Hazardous Materials Identification System (USA)  
WHMIS: Workplace Hazardous Materials Information System (Canada)  
DNEL: Derived No-Effect Level (REACH)  
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CFR: Code of Federal Regulations (USA)  
SARA: Superfund Amendments and Reauthorization Act (USA)  
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**Effective date:** 12.27.2014  
**Last updated:** 03.19.2015