1. Product and company identification

<table>
<thead>
<tr>
<th>Product name</th>
<th>Condensed Distillers Solubles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Synonym</td>
<td>Syrup, CDS</td>
</tr>
<tr>
<td>Material uses</td>
<td>Animal feed stock and fertilizer.</td>
</tr>
<tr>
<td>Supplier/Manufacturer</td>
<td>Hereford Renewable Energy</td>
</tr>
<tr>
<td></td>
<td>4300 County Road 8</td>
</tr>
<tr>
<td></td>
<td>Hereford, TX 79045</td>
</tr>
<tr>
<td></td>
<td>Tel: +1-806-258-7850</td>
</tr>
<tr>
<td>MSDS authored by</td>
<td>Murphy Oil Corporation USA, Inc.</td>
</tr>
<tr>
<td>In case of emergency</td>
<td>CHEMTREC, U.S.: 1-800-424-9300 International: +1-703-527-3887</td>
</tr>
<tr>
<td>Product type</td>
<td>Liquid</td>
</tr>
</tbody>
</table>

2. Hazards identification

<table>
<thead>
<tr>
<th>Color</th>
<th>Tan.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Liquid.</td>
</tr>
<tr>
<td>Odor</td>
<td>Sweet.</td>
</tr>
<tr>
<td>Hazard statements</td>
<td>NOT EXPECTED TO PRODUCE SIGNIFICANT ADVERSE HEALTH EFFECTS WHEN THE RECOMMENDED INSTRUCTIONS FOR USE ARE FOLLOWED.</td>
</tr>
<tr>
<td>Precautions</td>
<td>No known significant effects or critical hazards. Avoid prolonged contact with eyes, skin and clothing.</td>
</tr>
<tr>
<td>OSHA/HCS status</td>
<td>While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this MSDS contains valuable information critical to the safe handling and proper use of the product. This MSDS should be retained and available for employees and other users of this product.</td>
</tr>
</tbody>
</table>

Potential acute health effects

<table>
<thead>
<tr>
<th>Inhalation</th>
<th>No known significant effects or critical hazards.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ingestion</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td>Skin</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td>Eyes</td>
<td>No known significant effects or critical hazards.</td>
</tr>
</tbody>
</table>

Potential chronic health effects

<table>
<thead>
<tr>
<th>Chronic effects</th>
<th>No known significant effects or critical hazards.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carcinogenicity</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td>Mutagenicity</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td>Teratogenicity</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td>Developmental effects</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td>Fertility effects</td>
<td>No known significant effects or critical hazards.</td>
</tr>
</tbody>
</table>

Over-exposure sign/symptoms

<table>
<thead>
<tr>
<th>Inhalation</th>
<th>No specific data.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ingestion</td>
<td>No specific data.</td>
</tr>
<tr>
<td>Skin</td>
<td>No specific data.</td>
</tr>
<tr>
<td>Eyes</td>
<td>No specific data.</td>
</tr>
<tr>
<td>Medical conditions</td>
<td>None known.</td>
</tr>
</tbody>
</table>

aggravated by over-exposure

See toxicological information (section 11)
3. **Composition/information on ingredients**

There are no ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

4. **First aid measures**

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Eye contact</strong></td>
<td>Immediately flush eyes with plenty of water for at least 20 minutes, occasionally lifting the upper eyelids. Get medical attention if symptoms occur.</td>
</tr>
<tr>
<td><strong>Skin contact</strong></td>
<td>In case of contact, immediately flush skin with plenty of water for at least 20 minutes. Get medical attention if symptoms occur.</td>
</tr>
<tr>
<td><strong>Inhalation</strong></td>
<td>Move exposed person to fresh air. Get Medical attention if symptoms occur.</td>
</tr>
<tr>
<td><strong>Ingestion</strong></td>
<td>Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention if symptoms occur.</td>
</tr>
<tr>
<td><strong>Notes to physician</strong></td>
<td>No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.</td>
</tr>
</tbody>
</table>

5. **Fire-fighting measures**

- **Flammability of the product**: No specific fire or explosion hazard.
- **Extinguishing media**
  - Suitable: Use an extinguishing agent suitable for the surrounding fire.
  - Not suitable: None known.
  - Hazardous decomposition products: No specific data.
  - Special protective equipment for firefighters: No special protection is required.

6. **Accidental release measures**

- **Personal precautions**: Put on appropriate personal protective equipment (see section 8).
- **Environmental precautions**: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
- **Methods for cleaning up**
  - **Spill**: Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Dispose of via a licensed waste disposal contractor. Note: see section 1 for emergency contact information and section 13 for waste disposal.

7. **Handling and storage**

- **Handling**: Put on appropriate personal protective equipment (see section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking.
- **Storage**: Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Keep
container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

### 8. Exposure controls/personal protection

#### Canada

<table>
<thead>
<tr>
<th>Occupational exposure limits</th>
<th>TWA (8 hours)</th>
<th>STEL (15 mins)</th>
<th>Ceiling</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ingredient</td>
<td>List name</td>
<td>ppm mg/m^3 Other ppm mg/m^3 Other ppm mg/m^3 Other Notations</td>
<td></td>
</tr>
<tr>
<td>No known value</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Consult local authorities for acceptable exposure limits.

**Recommended monitoring procedures**: Personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.

**Engineering measures**: No special ventilation requirements. Good general ventilations should be sufficient to control worker exposure to airborne contaminants.

**Hygiene measures**: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period.

**Respiratory**: Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Recommended: A respirator is not needed under normal and intended conditions of product use.

**Hands**: Use gloves appropriate for work or task being performed. Recommended: Disposable vinyl gloves.

**Eyes**: Safety eyewear should be used when there is a likelihood of exposure. Recommended: Safety glasses with side shields.

**Skin**: No special protective clothing is required.

**Environmental exposure controls**: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

### 9. Physical and chemical properties

- **Physical state**: Liquid.
- **Color**: Tan.
- **Odor**: Sweet.
- **Volutility**: 60% (w/w)
- **Solubility**: Not applicable.

### 10. Stability and reactivity

- **Chemical stability**: The product is stable.
- **Conditions to avoid**: No specific data.
- **Materials to avoid**: No specific data.
- **Hazardous decomposition products**: Under normal conditions of storage and use, hazardous decomposition products should not be produced.
- **Possibility of hazardous reactions**: Under normal conditions of storage and use, hazardous reactions will not occur.

**Hazardous polymerization**: Under normal conditions of storage and use, hazardous polymerizations will not occur.
### 11. Toxicological information

**Acute toxicity**: No specific data.

**Chronic toxicity**: No specific data.

### 12. Ecological information

**Environmental effects**: Not established.

### 13. Disposal considerations

**Waste disposal**: The generation of waste should be avoided or minimized wherever possible. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Empty containers or liners may retain some product residues. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor.

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

### 14. Transport information

**DOT/TDG/IMDG/IATA**: Not regulated.

### 15. Regulatory information

**United States**

**HCS Classification**: Not regulated.

**U.S. Federal regulations**

- United States Inventory (TASCA 8b): Not determined.
- SARA 302/304/311/312 extremely hazardous substances: No products were found.
- SARA 302/304 emergency planning and notification: No products were found.
- SARA 302/304/311/312 hazardous chemicals: No products were found.
- SARA 311/312 MSDS distribution – chemical inventory – hazard identification: No products were found.
- Clean Water Act (CWA) 307: No products were found.
- Clean Water Act (CWA) 311: No products were found.
- Clean Air Act (CAA) 112 accidental release prevention: No products were found.
- Clean Air Act (CAA) 112 regulated flammable substances: No products were found.
- Clean Air Act (CAA) 112 regulated toxic substances: No products were found.

**Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs)**: Not listed.

**Clean Air Act Section 602 Class I Substances**: Not listed

**Clean Air Act Section 602 Class II Substances**: Not listed

**DEA List I Chemicals (Precursor Chemicals)**: Not listed

**DEA List II Chemicals (Essential Chemicals)**: Not listed

**State regulations**

- **Connecticut Carcinogen Reporting**: This material is not listed.
- **Connecticut Hazardous Material Survey**: This material is not listed.
- **Florida Substances**: This material is not listed.
- **Illinois Chemical Safety Act**: This material is not listed.
- **Illinois Toxic Substances Disclosure to Employee Act**: This material is not listed.

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MSDS
Louisiana Reporting: This material is not listed.
Louisiana Spill: This material is not listed.
Massachusetts Spill: This material is not listed.
Massachusetts Substances: This material is not listed.
Michigan Critical Material: This material is not listed.
Minnesota Hazardous Substances: This material is not listed.
New Jersey Hazardous Substances: This material is not listed.
New Jersey Spill: This material is not listed.
New Jersey Toxic Catastrophe Prevention Act: This material is not listed.
New York Acutely Hazardous Substances: This material is not listed.
New York Toxic Chemical Release Reporting: This material is not listed.
Pennsylvania RTK Hazardous Substances: This material is not listed.
Rhode Island Hazardous Substances: This material is not listed.

Canada
WHMIS (Canada) : Not controlled under WHMIS (Canada).
Canadian lists:
- CEPA Toxic substances: This material is not listed.
- Canadian ARET: This material is not listed.
- Canadian NPI: This material is not listed.
- Alberta Designated Substances: This material is not listed.
- Ontario Designated Substances: This material is not listed.
- Quebec Designated Substances: This material is not listed.

Canada inventory: Not determined.
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

International regulations
International lists:
- Australia inventory (AICS): Not determined.
- China inventory (IECSC): Not determined.
- Japan inventory: Not determined.
- Korea inventory: Not determined.
- New Zealand Inventory of Chemicals (NZIoC): Not determined.
- Philippines Inventory (PICCS): Not determined.

16. Other information

United States
Hazardous Material Information System (U.S.A.):
- Health: 0
- Flammability: 0
- Physical hazards: 0

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on MSDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Associations (NPCA). HMIS® materials may be purchased exclusively from J.J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

National Fire Protection Association (U.S.A.):
- Health: 0
- Flammability: 0
- Physical hazards: 0

References:

Date of issue: 08/19/2011
Version: 1

Notice to reader: To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.