GHS: Understanding the SDS

GHS Training Module 2
Disclaimer:
This program provides guidance and useful information for qualified personnel conducting employee training. It is up to the user of this information to determine the suitability of these training materials for their specific operations. This program is not designed to be self-directed. It should always be led by someone that has demonstrated knowledge in GHS and the associated requirements mandated by OSHA. Multi-Clean does not make any claims express or implied that this training alone is suitable for training of employees or meets all training requirements. It is up to the user of these training materials to make this determination.
Safety Data Sheets

- New Standard 16 section format.
- Includes hazard information, precautionary information, and corresponding pictograms for easy hazard identification and prevention.

Under GHS, Safety Data Sheets (SDS) will take the place of the old Material Safety Data Sheets (MSDS).
Section 1: Product Identification

This section identifies the chemical product on the SDS as well as the recommended uses. It also provides the essential contact information of the supplier.

Safety Data Sheets (SDS)  908950 MAGICO  5/13/2013

1. Identification:
   Product Identity: MAGICO
   Recommended use: General Purpose Water-Based Cleaner
   Producer / Distributor:
   Multi-Clean
   600 Cardigan Road
   Shoreview, MN 55126

   Telephone Number for Information: 651-481-1900
   Emergency Telephone Number: 800-255-3924
Section 2: Hazard Identification

This section identifies the hazards of the chemical, as classified by GHS, and the warning information associated with those hazards.

The required information consists of:
- Hazard class(es)
- Hazard pictogram(s)
- Signal word
- Hazard statements
- Precautionary statements
Section 2: Hazard Identification

Hazard Classes
- Indicates nature of hazard
- Category 1 is most severe, category 5 is least severe

Hazard Pictograms
- Easy method of recognizing hazards at a glance
- Correspond to hazard classes

**Hazard Identification:**

**Classification:**

**Health**
- Skin Corrosion Category 1
- Serious Eye Damage Category 1
- Skin Sensitizer
- Reproductive Toxicity Category 2
- Specific Target Organ Toxicity Category 2

**Physical**

**Environment**

**Symbols**

**Hazard Statements: Danger**
- Causes severe skin burns and eye damage.
- May cause an allergic skin reaction.
- Suspected of damaging fertility or the unborn child.
- May cause damage to organs (kidneys).

**Precautionary Statements:**
- Do not breathe dusts or mists.
- Wash hands thoroughly after handling.
- Wear protective clothing/eye protection.
- Contaminated work clothing should not be allowed out of the workplace.
- Obtain special instructions before use.
- Do not handle until all safety precautions have been read and understood.
- Do not eat, drink, or smoke when using this product.
- IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
- IF ON SKIN: Take off immediately all contaminated clothing. Rinse skin with water. Wash contaminated clothing before reuse.
- IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- If skin irritation or rash occurs: Get medical attention.
- If exposed or concerned: Get medical attention.
- Store locked up.
Section 2: Hazard Identification

<table>
<thead>
<tr>
<th>Health</th>
<th>Physical</th>
<th>Environment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin Corrosion Category 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Serious Eye Damage Category 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skin Sensitizer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reproductive Toxicity Category 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Specific Target Organ Toxicity Category 2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Label:**
- **Symbols**

**Hazard Identification:**

- **Signal Word**
  - **Danger** – more severe
  - **Warning** – less severe

**Hazard Statements:**
- Causes severe skin and eye damage.
- May cause an allergic skin reaction.
- Suspected of damaging fertility or the unborn child.
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**Precautionary Statements:**
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- Store locked up.
Section 2: Hazard Identification

Hazard Statements
• Provide specific details about the nature & degree of a hazard
Section 2: Hazard Identification

Precautionary Statements
• Supplement the hazard statements by providing measures that can be taken to minimize or prevent damaging effects
Section 3: Ingredient Information

This section identifies the ingredient(s) contained in the product indicated on the SDS. This section includes information on substances, mixtures, and all chemicals where a trade secret is claimed.

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>CAS No.</th>
<th>Percent by Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biodegradable Surfactant</td>
<td>Proprietary</td>
<td>1 - 5</td>
</tr>
<tr>
<td>Sodium Xylene Sulfonate</td>
<td>1300-72-7</td>
<td>5 - 10</td>
</tr>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>60 - 100</td>
</tr>
<tr>
<td>Fragrance</td>
<td>Proprietary</td>
<td>1 - 5</td>
</tr>
</tbody>
</table>
This section describes the initial care that should be given by untrained responders to an individual who has been exposed to the chemical.

4 First-Aid Measures

Ingestion: If Swallowed: Drink water in large amounts and call a physician immediately. Never give anything by mouth to an unconscious person.

Eye Contact: Flush eyes with running water for at least 15 minutes. If irritation persists, obtain medical attention.

Skin Contact: Flush thoroughly with cool water. Remove and wash contaminated clothing before reuse.

Inhalation: Move to fresh air.
Section 5: Fire-Fighting Measures

This section provides recommendations for fighting a fire caused by the chemical.

5 Fire-Fighting Measures:

Suitable Extinguishing Media: Alcohol Foam - CO2 - Dry Chemical - Water Fog - Vaporizing Liquid

Special Fire Fighting Procedures: Water hose stream may spread fire, Use water spray to keep containers cool

Unusual Fire and Explosion Hazards: Vapors are heavier than air and may travel over distances to ignition sources (heat, flames, sparks, pilot lights etc.) where ignition may occur ground all equipment
Section 6: Accidental Release

This section provides recommendations on the response to spills, leaks, or releases, including containment and cleanup practices.

6 Accidental Release Measures: Extinguish all sources of possible ignition (flames, sparks, pilot lights, etc.) and provide ventilation. For large spills, dike and contain spill with inert material (sand, earth, etc.). Collect spill with absorbent material (example; floor-dry). For small spills, wipe up spill with mop or rag. Dispose of or treat mop or rag properly to avoid fire.
Section 7: Handling and Storage

This section provides guidance on the safe handling practices and conditions for safe storage of chemicals.

7 Handling and Storage:

Handling: Keep out of reach of children

Storage: Do not store near heat sparks or flame.
Section 8: Exposure Controls & Personal Protection

This section indicates the exposure limits, engineering controls, and personal protective measures that can be used to minimize worker exposure.

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS No.</th>
<th>Ref</th>
<th>OSHA PEL</th>
<th>ACGIH TLV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methanol</td>
<td>67-56-1</td>
<td>US</td>
<td>200 ppm</td>
<td>200 ppm</td>
</tr>
</tbody>
</table>

Exposure Controls:
- Engineering Controls: Ventilate to maintain vapor levels below exposure limits.

Personal Protective Equipment
- Eye Protection: Approved Safety Goggles or Glasses
- Skin Protection: Chemical Resistant Rubber Gloves
- Respiratory Protection: An NIOSH/MSHA approved organic vapor respirator should be used in areas where ventilation is insufficient to maintain vapor level below listed TLV.
## Section 9: Physical and Chemical Properties

This section identifies physical and chemical properties associated with the substance or mixture.

### 9 Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical State</td>
<td>Liquid</td>
</tr>
<tr>
<td>Appearance</td>
<td>Red</td>
</tr>
<tr>
<td>Odor</td>
<td>Fresh</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>&gt; 212° F (100°C)</td>
</tr>
<tr>
<td>Flammability</td>
<td>Flammable</td>
</tr>
<tr>
<td>Flash Point</td>
<td>60°F (15°C)</td>
</tr>
<tr>
<td>pH</td>
<td>&lt; 11.5</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>0.949</td>
</tr>
<tr>
<td>% Volatile</td>
<td>&gt; 90%</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>NA</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>&gt; 1</td>
</tr>
<tr>
<td>Solubility</td>
<td>Complete</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>NA</td>
</tr>
</tbody>
</table>
Section 10: Stability and Reactivity

This section describes the reactivity hazards of the chemical and the chemical stability information.

10 Stability and Reactivity
Chemical Stability: Stable
Possibility of Hazardous Reactions: None are known
Incompatibility (Materials to Avoid): Strong Oxidizing Agents
Hazardous Decomposition or By-products: CO₂, CO
Hazardous Polymerization: Will not Occur
Conditions to Avoid: None are known
Section 11: Toxicological Information

This section identifies toxicological and health effects information or indicates that such data are not available.

11 Toxicological Information

Signs and Symptoms of Overexposure: Causes irritation on direct contact

Acute Effects
Eye Contact: Causes irritation on contact
Skin Contact: Causes mild irritation on prolonged or repeated contact
Inhalation: None Known
Ingestion: May be harmful if swallowed
Target Organ Effects: None Known
Chronic Effects: None Known

Acute Toxicity Values
Oral LD₅₀ = > 5000 mg/kg
Dermal LD₅₀ = > 5000 mg/kg
Inhalation (Vapor) LC₅₀ = Vapors Considered Non-Toxic
Section 12: Ecological Information

This section provides information to evaluate the environmental impact of the chemical(s) if it were released to the environment.

12 Ecological Information

Persistence and Degradability: Not Available
Bio Accumulative Potential: Not Available
Mobility in Soil: Not Available
Aquatic Toxicity: Not Available
Section 13: Disposal Considerations

This section provides guidance on proper disposal practices, recycling or reclamation of the chemical(s) or its container, and safe handling practices. To minimize exposure, this section should also refer the reader to Section 8 of the SDS.

13 Disposal Considerations

Material that cannot be used during normal use should be disposed of in accordance with all applicable local, state and federal regulations. Waste from normal cleaning procedures may be disposed of in a sanitary sewer depending on the materials and/or contaminants being cleaned as well as local, state and federal sewer regulations.
Section 14: Transport Information

This section provides guidance on classification information for shipping and transporting of hazardous chemical(s) by road, air, rail, or sea.

14 Transport information
  UN Number: None
  Shipping Name: Cleaning Compound, Liquid
  Transport Hazard Class: None
  Packing Group: None
  Marine Pollutant: NO
Section 15: Regulatory Information

This section identifies the safety, health, and environmental regulations specific for the product that is not indicated anywhere else on the SDS.

15 Regulatory Information
TSCA Status: All ingredients listed
Clean Water Act: None of the chemicals in this product are listed under the CWA
Clean Air Act: Methanol (67-56-1) is listed as a hazardous air pollutant (HAP)
CERCLA Reportable Quality: Methanol (67-56-1), > 5000 lbs.
SARA Title III information:
Section 302 Extremely Hazardous Chemicals: None Listed
Section 311/312 Hazard Category: Immediate Health, Chronic Health, Fire
Section 313 Toxic Chemicals: Methanol (67-56-1)
State Regulations: None
International Regulations: WHMIS Controlled Product Hazard Class B2, DIA, D2B
Section 16: Other Information

This section indicates when the SDS was prepared or when the last known revision was made. The SDS may also state where the changes have been made to the previous version. You may wish to contact the supplier for an explanation of the changes. Other useful information may be included here.

16. Other Information

Prepared By:       Ron Camp
Telephone Number:  651-481-1900
Revised Date:      5/15/2013
Supersedes:        4/1/2012
For SDS information on all Multi-Clean products, please visit www.multi-clean.com

This completes Module 2, go to Module 3....
Understanding GHS Label Elements.