

# GHS: Introduction to the Globally Harmonized System of Classification and Labeling of Chemicals

GHS Training Module 1



# What is GHS?

- GHS is a worldwide effort to standardize the way hazardous information is interpreted and presented in order to better protect human health
- GHS sets standards for:
  - Defining health, physical, and environmental hazards of chemicals
  - Creating classification processes for each hazard
  - Communicating hazard information and protective measures on labels and safety data sheets

# How does GHS affect you?

- New standardized format of safety data sheets and labels
- Standardized elements of hazard identification
  - Pictograms
  - Hazard statements & precautionary statements
  - Signal words

# Safety Data Sheets

- 16 category format
  1. Identification of the substance or mixture and of the supplier
  2. Hazards identification
  3. Composition/information on ingredients
  4. First aid measures
  5. Firefighting measures
  6. Accidental release measures
  7. Handling and storage

# Safety Data Sheets

8. Exposure controls/personal protection
9. Physical and chemical properties
10. Stability and reactivity
11. Toxicological information
12. Ecological information
13. Disposal considerations
14. Transport information
15. Regulatory information
16. Other information including info on preparation and revision of the SDS

# Safety Data Sheets

Safety Data Sheets (SDS)

908950 MAGICO

6/7/2013

**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



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**2. Hazard Identification:**

**Classification:**

<b>Health Class</b>	<b>Physical Class</b>	<b>Environment Class</b>
Mild Skin Irritation Category 3		
Eye Irritant Category 2		

**Label Symbols**



**Hazard Statements:**

Causes eye and mild skin irritation.

**Precautionary Statements:**

Wash hands thoroughly after handling.  
 If skin irritation occurs: Get medical attention.  
 IF IN EYES: Rinse cautiously with water. Remove contact lenses, if present and easy to do. Continue rinsing.  
 If eye irritation persists: Get medical attention.

**3. Composition/Information on Ingredients**

Ingredient	CAS Number	Percent by Weight
Biodegradable Surfactant	Proprietary	1 - 5
Sodium Xylene Sulfonate	1300-72-7	5 - 10
Water	7732-18-5	60 - 100
Fragrance	Proprietary	1 - 5

**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.

**5. Fire Fighting Measures:**

**Suitable Extinguishing Media:** Not Applicable  
**Special Fire Fighting Procedures:** Not Applicable  
**Unusual Fire and Explosion Hazards:** None are known

**6. Accidental Release Measures:**

Dike and contain spill with inert material (sand, earth, etc.). Collect spill with a mop, absorbent material (example: floor-dry) or vacuum. Thoroughly rinse affected area with water.

**7. Handling and Storage:**

**Handling:** Keep from freezing. Keep out of reach of children.  
**Storage:** Normal care for storage.

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**8. Exposure Controls / Personal Protection:**

<b>Exposure Limits:</b>	<b>CAS Number</b>	<b>Osha PEL</b>	<b>ACGIH TLV</b>
<b>Ingredients</b>	XXXX	XXX	XXX
<b>None Listed</b>			
<b>Exposure Controls:</b>			
<b>Engineering Controls:</b> Normal good ventilation is sufficient			
<b>Personal Protective Equipment:</b>			
<b>Eye Protection:</b> Approved Safety Goggles or Glasses			
<b>Skin Protection:</b> Chemical Resistant Rubber Gloves			
<b>Respiratory Protection:</b> Not required, Avoid breathing spray mist			

**9. Physical and Chemical Properties:**

<b>Physical State:</b> Liquid	<b>pH:</b> 6.5 - 8
<b>Appearance:</b> Blue	<b>Specific Gravity (H2O = 1):</b> 1
<b>Odor:</b> Floral	<b>Flammability:</b> None
<b>Solubility:</b> Complete	<b>Flash Point:</b> None
<b>Evaporation Rate:</b> NA	<b>Boiling Point:</b> > 212° F (100°C)
<b>Vapor Pressure (MM HG):</b> NA	<b>%volatile:</b> > 90%
<b>Vapor Density (Air = 1):</b> NA	

**10. Stability and Reactivity:**

**Chemical Stability:** Stable  
**Possibility of Hazardous Reactions:** None are known  
**Incompatibility (Materials to Avoid):** None are known  
**Hazardous Decomposition or By-products:** None  
**Hazardous Polymerization:** Will not Occur  
**Conditions to Avoid:** None are known

**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 LD<sub>50</sub>** = > 5000 mg/kg  
**Dermal LD<sub>50</sub>** = > 5000 mg/kg  
**Inhalation (Vapor) LC<sub>50</sub>** = Vapors Considered Non

**12. Ecological Information:**

**Persistence and Degradability:** Not Available  
**Bio Accumulative Potential:** Not Available  
**Mobility in Soil:** Not Available  
**Aquatic Toxicity:** Not Available

**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.

**14. Transportation Information:**

**UN Number:** None  
**Shipping Name:** Cleaning Compound, Liquid  
**Transport Hazard Class:** None  
**Packing Group:** None  
**Marine Pollutant:** NO

# Safety Data Sheets

Safety Data Sheets (SDS)

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6/7/2013

## 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:** None of the chemicals in this product are listed under the CAA

**CERCLA Reportable Quantity:** None

**SARA Title III Information:**

Section 302 Extremely Hazardous Chemicals: None Listed

Section 311 / 312 Hazard Category: None

Section 313 Toxic Chemicals: None Listed

**State Regulations:** None

**International Regulations:** None

## 16. Other Information:

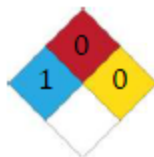
**Prepared By:** Ron Camp

**Telephone Number:** 651-481-1900

**Revision Date:** 6/7/2013

**Supersedes:** 4/1/2012

The information contained herein is based on data considered accurate; however no warranty is expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof. The company assumes no responsibility for personal injury or property damage to vendees, users, or third parties caused by the material. Such vendees or users assume all risks associated with the use of the



<b>Health</b>	1
<b>Flammability</b>	0
<b>Physical hazards</b>	0

# Labels





# Labels

- Requirements of every label:
  - Product identifier
  - Supplier identification
  - Hazard statement(s)
  - Precautionary statements
  - Signal word
  - Hazard pictogram

# Example Multi-Clean Label

CITRUS ASSAULT is a concentrated, multi-use cleaner/degreaser used to effectively clean dirt and oils from a variety of surfaces. Use on walls, cabinets, equipment, concrete floors and a variety of other surfaces. Not for use on finished tile or terrazzo floors. CANADA: For food plant and other industrial use. Avoid contamination of food in the application and storage of the product. Do not use on food contact surfaces. Meets USDA performance Standards for C-1 type products.

**DIRECTIONS:** 1) Dilution: Light soil: 1-2 oz/gal. (8-15 milliter) of water. Use in spray bottles at 4-6 oz/gal. (30-60 milliter) for general purpose cleaning. Heavy grease/oil deposits: 8-16 oz/gal. (80-120 milliter) of water. 2) Apply with an automatic scrubber, pressure washer, mop, pump-up sprayer, sponge, etc. Rubber gloves should be used when cleaning by hand. 3) Allow sufficient time for solution to attack grease or oil. 4) Use only on surfaces resistant to alkaline cleaners. Floor finish and other sensitive surfaces may be adversely affected.

CITRUS ASSAULT est un agent de nettoyage/dégreasant utilisé pour nettoyer de façon efficace la saleté et les huiles d'une variété de surfaces. Utiliser sur les murs, les petits placards, les équipements, les planchers de béton et une variété d'autres surfaces. Ne pas utiliser sur des carreaux finis ou sur les planchers de granito. CANADA: Pour l'usine de nourriture et tout autre usage industriel. Éviter la contamination de la nourriture dans l'application et la mémoire du produit. N'utiliser pas sur des surfaces de contact de nourriture.

**MODE D'EMPLOI:** 1) Dilutions: Nettoyage léger: 1-2 onces/gallon (8-15 millilitre) d'eau. Nettoyage normal: Pour utilisation avec des bouteilles à vaporisateur: diluer de 30 à 60 ml par litre (à 8 onces par gallon) pour le nettoyage général. Nettoyage difficile: 8-16 onces/gallon (80-120 millilitre) d'eau. 2) Appliquer à l'aide de machines de nettoyage automatique, de vaporisateurs à pompe, d'appareils de lavage à haute pression, d'éponges ou de serpillères. Le port de gants protecteurs est conseillé lorsqu'on nettoie à la main. 3) Laisser la solution agir suffisamment longtemps pour qu'elle puisse attaquer la graisse et l'huile. 4) N'utiliser que sur des surfaces résistant aux nettoyeurs alcalins. Le frotton du sol et toute autre surface délicate risquent d'être affectés.

La CITRUS ASSAULT es un limpiador/desengrasador para servicio pesado, destinado a utilizarse en frodoadores automáticos para limpiar pisos industriales de concreto. CANADA: Para la planta del alimento y el otro uso industrial. Evite la contaminación del alimento en la aplicación y el almacenamiento del producto. No utilice en superficies de contacto del alimento.

**INSTRUCCIONES:** 1) Diluciones: Suciedad ligera: 1-2 onzas/galón (8-15 mililitro) de agua. Limpieza normal: 4-6 onzas/galón (30-60 mililitro) de agua; Grasa o aceite abundante: 8-16 onzas/galón (80-120 mililitro) de agua. 2) Aplique con cepillador automático, lavadora a presión, trapeador, rodador de bomba manual, esponja, etc. Debe usar guantes de goma cuando limpie a mano. 3) Espere el tiempo suficiente para que la solución disuelva la grasa o el aceite. 4) Use esta solución solamente en superficies resistentes a limpiadores alcalinos. Puede afectar desfavorablemente el acabado de pisos y otras superficies sensibles.

**Multi-Clean**  
Your Choice to Clean

600 Cardigan Road  
Shoreview, Minnesota  
Phone 651-481-1900  
www.multi-clean.com



## Citrus Assault

**Citrus Based  
All Purpose Degreaser  
Natural d-Limonene  
Economical  
Dilutable  
USDA C-1**

Net Contents 1 US Gallons (3.78L)



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).

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. Dispose of contents in accordance with local regulations.

The following chemicals are listed in accordance with state laws: Sodium Metasilicate, CAS #6834-60-0; Alcohol Ethoxylate, CAS #94365-01-1; Water, CAS #7732-18-5.

**Warning & Disclaimer:** This product is to be used only by appropriately trained personnel. **IMPROPER USE POSSES RISK OF PHYSICAL INJURY OR PROPERTY DAMAGE.** See appropriate Method Bulletin for further warnings and information. The suitability and proper application of this product is the responsibility of the applicator. The manufacturer disclaims all warranties, express and implied, including any warranties of **MERCHANT-ABILITY AND FITNESS OF PURPOSE.** The manufacturer's liability is limited to replacement of or reimbursement for any product proved defective. No person has authority to waive these disclaimers or make any representations or warranties on behalf of the manufacturer, except in writing signed by the manufacturer.

Item No.  
**910473**

Health	2
Flammability	0
Physical Hazards	0

0 89705 10473 2



Citrus Assault 1 Gallon

# Signal Word

- Corresponds with hazard pictogram
- Danger: more severe hazards
- Warning: less severe hazards
- One pictogram may have either signal word depending on severity of hazard
- Only the most severe signal word will appear on the label



DANGER



Warning

# Pictogram

- A symbol that is intended to relay specific hazard information in a quick and easy manner
- Pictograms appear on both a product's label and SDS



# GHS Standard Pictograms

## Health Hazard



- Carcinogen
- Mutagenicity
- Reproductive Toxicity
- Respiratory Sensitizer
- Target Organ Toxicity
- Aspiration Toxicity

## Flame



- Flammables
- Pyrophorics
- Self-Heating
- Emits Flammable Gas
- Self-Reactives
- Organic Peroxides

## Exclamation Mark



- Irritant Skin and Eyes
- Skin Sensitizer
- Acute Toxicity harmful
- Narcotic Effects
- Respiratory Tract Irritant
- Hazardous to Ozone

## Gas Cylinder



- Gases Under Pressure

## Corrosion



- Skin Corrosion
- Eye Damage
- Corrosive to Metals

## Exploding Bomb



- Explosives
- Self Reactives
- Organic Peroxides

## Flame Over Circle



- Oxidizers

## Environment



- Aquatic Toxicity

## Skull & Crossbones



- Acute Toxicity fatal or toxic

THANK YOU

