

# SAFETY DATA SHEET

## HILLYARD® M.D. Plus Citrus Hand Cleaner with Scrubbers

Version	Revision Date:	MSDS Number:	Date of last issue: 01/14/2015
1.1	02/10/2015	46940-00002	Date of first issue: 01/14/2015

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### SECTION 1. IDENTIFICATION

Product name : HILLYARD® M.D. Plus Citrus Hand Cleaner with Scrubbers

Product code : HIL0035903

#### Manufacturer or supplier's details

Company name of supplier : HILLYARD INDUSTRIES, INC.

Address : 302 North Fourth Street  
St. Joseph, MO 64501

Telephone : 1-816-233-1321 EXT 8285

Emergency telephone : 1-800-424-9300

#### Recommended use of the chemical and restrictions on use

Recommended use : Skin-care

Restrictions on use : This is a personal care or cosmetic product that is safe for consumers and other users under normal and reasonably foreseeable use. Cosmetics and consumer products, specifically defined by regulations around the world, are exempt from the requirement of an SDS for the consumer. While this material is not considered hazardous, this SDS contains valuable information critical to the safe handling and proper use of the product for industrial workplace conditions as well as unusual and unintended exposures such as large spills. This SDS should be retained and available for employees and other users of this product. For specific intended-use guidance, please refer to the information provided on the package or instruction sheet.

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### SECTION 2. HAZARDS IDENTIFICATION

#### GHS Classification

Serious eye damage : Category 1

#### GHS Label element

Hazard pictograms :



Signal Word : Danger

Hazard Statements : H318 Causes serious eye damage.

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Precautionary Statements : **Prevention:**  
P280 Wear eye protection/ face protection.  
**Response:**  
P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/ physician.

**Other hazards**  
None known.

### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

#### Hazardous ingredients

Chemical Name	CAS-No.	Concentration (%)
Ethoxylated lauryl alcohol	9002-92-0	$\geq 1$ - $< 5$
1-Methyl 4-(1-Methylethenyl) Cyclohexene	5989-27-5	$\geq 0.1$ - $< 1$

### SECTION 4. FIRST AID MEASURES

General advice : In the case of accident or if you feel unwell, seek medical advice immediately.  
When symptoms persist or in all cases of doubt seek medical advice.

If inhaled : If inhaled, remove to fresh air.  
Get medical attention if symptoms occur.

In case of skin contact : Wash with water and soap as a precaution.  
Get medical attention if symptoms occur.

In case of eye contact : In case of contact, immediately flush eyes with plenty of water for at least 15 minutes.  
If easy to do, remove contact lens, if worn.  
Get medical attention immediately.

If swallowed : If swallowed, DO NOT induce vomiting.  
Get medical attention if symptoms occur.  
Rinse mouth thoroughly with water.

Most important symptoms and effects, both acute and delayed : Causes serious eye damage.

Protection of first-aiders : First Aid responders should pay attention to self-protection, and use the recommended personal protective equipment when the potential for exposure exists.

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Notes to physician : Treat symptomatically and supportively.

### SECTION 5. FIRE-FIGHTING MEASURES

- |  |   |
|--|---|
| Suitable extinguishing media                   | : Water spray<br>Alcohol-resistant foam<br>Dry chemical<br>Carbon dioxide (CO2)   |
| Unsuitable extinguishing media                 | : None known.   |
| Specific hazards during fire fighting          | : Exposure to combustion products may be a hazard to health.  |
| Hazardous combustion products                  | : Carbon oxides   |
| Specific extinguishing methods                 | : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.<br>Use water spray to cool unopened containers.<br>Remove undamaged containers from fire area if it is safe to do so.<br>Evacuate area. |
| Special protective equipment for fire-fighters | : In the event of fire, wear self-contained breathing apparatus.<br>Use personal protective equipment.  |

### SECTION 6. ACCIDENTAL RELEASE MEASURES

- |   |   |
|---|---|
| Personal precautions, protective equipment and emergency procedures | : Use personal protective equipment.<br>Follow safe handling advice and personal protective equipment recommendations.  |
| Environmental precautions   | : Discharge into the environment must be avoided.<br>Prevent further leakage or spillage if safe to do so.<br>Prevent spreading over a wide area (e.g. by containment or oil barriers).<br>Retain and dispose of contaminated wash water.<br>Local authorities should be advised if significant spillages cannot be contained.  |
| Methods and materials for containment and cleaning up               | : Soak up with inert absorbent material.<br>For large spills, provide diking or other appropriate containment to keep material from spreading. If diked material can be pumped, store recovered material in appropriate container.<br>Clean up remaining materials from spill with suitable absorbent.<br>Local or national regulations may apply to releases and disposal of this material, as well as those materials and items |

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employed in the cleanup of releases. You will need to determine which regulations are applicable. Sections 13 and 15 of this SDS provide information regarding certain local or national requirements.

### SECTION 7. HANDLING AND STORAGE

- |                             |   |
|-----------------------------|---|
| Technical measures          | : See Engineering measures under EXPOSURE CONTROLS/PERSONAL PROTECTION section.   |
| Local/Total ventilation     | : Use only with adequate ventilation.   |
| Advice on safe handling     | : Avoid inhalation of vapor or mist.<br>Do not swallow.<br>Do not get in eyes.<br>Avoid prolonged or repeated contact with skin.<br>Handle in accordance with good industrial hygiene and safety practice.<br>Keep container tightly closed.<br>Take care to prevent spills, waste and minimize release to the environment. |
| Conditions for safe storage | : Keep in properly labeled containers.<br>Keep tightly closed.<br>Store in accordance with the particular national regulations.   |
| Materials to avoid          | : Do not store with the following product types:<br>Strong oxidizing agents   |

### SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Ingredients with workplace control parameters

Contains no substances with occupational exposure limit values.

#### Hazardous components without workplace control parameters

Ingredients	CAS-No.
Ethoxylated lauryl alcohol	9002-92-0
1-Methyl 4-(1-Methylethenyl) Cyclohexene	5989-27-5

- |                             |   |
|-----------------------------|---|
| <b>Engineering measures</b> | : Ensure adequate ventilation, especially in confined areas.<br>Minimize workplace exposure concentrations.<br>Dust formation may be relevant in the processing of this product. In addition to substance-specific OELs, general limitations of concentrations of particulates in the air at workplaces have to be considered in workplace risk assessment. Relevant limits include: OSHA PEL for Particulates Not Otherwise Regulated of 15 mg/m <sup>3</sup> - total dust, 5 mg/m <sup>3</sup> - respirable fraction; and ACGIH TWA for Particles (insoluble or poorly soluble) Not Otherwise Specified of 3 mg/m <sup>3</sup> - respirable particles, 10 mg/m <sup>3</sup> - |
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inhalable particles.

### Personal protective equipment

Respiratory protection : General and local exhaust ventilation is recommended to maintain vapor exposures below recommended limits. Where concentrations are above recommended limits or are unknown, appropriate respiratory protection should be worn. Follow OSHA respirator regulations (29 CFR 1910.134) and use NIOSH/MSHA approved respirators. Protection provided by air purifying respirators against exposure to any hazardous chemical is limited. Use a positive pressure air supplied respirator if there is any potential for uncontrolled release, exposure levels are unknown, or any other circumstance where air purifying respirators may not provide adequate protection.

Hand protection  
Material

: Impervious gloves

Remarks

: Choose gloves to protect hands against chemicals depending on the concentration specific to place of work. Breakthrough time is not determined for the product. Change gloves often! For special applications, we recommend clarifying the resistance to chemicals of the aforementioned protective gloves with the glove manufacturer. Wash hands before breaks and at the end of workday.

Eye protection

: Wear the following personal protective equipment:  
Chemical resistant goggles must be worn.  
If splashes are likely to occur, wear:  
Face-shield

Skin and body protection

: Select appropriate protective clothing based on chemical resistance data and an assessment of the local exposure potential.  
Skin contact must be avoided by using impervious protective clothing (gloves, aprons, boots, etc).

Hygiene measures

: Ensure that eye flushing systems and safety showers are located close to the working place.  
When using do not eat, drink or smoke.  
Wash contaminated clothing before re-use.

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### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

: liquid

Color

: green, opaque

Odor

: citrus

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Odor Threshold	: No data available
pH	: 6 - 9
Melting point/freezing point	: No data available
Solidification / Setting point	: 12.50 °C
Initial boiling point and boiling range	: 98.00 °C
Flash point	: > 100 °C
Evaporation rate	: No data available
Flammability (solid, gas)	: Not applicable
Upper explosion limit	: No data available
Lower explosion limit	: No data available
Vapor pressure	: No data available
Relative vapor density	: No data available
Density	: 1.0 g/cm3
Solubility(ies)	
Water solubility	: soluble
Partition coefficient: n-octanol/water	: Not applicable
Autoignition temperature	: No data available
Decomposition temperature	: The substance or mixture is not classified self-reactive.
Viscosity	
Viscosity, kinematic	: 25,000 - 45,000 mm2/s (20.00 °C)
Explosive properties	: Not explosive
Oxidizing properties	: The substance or mixture is not classified as oxidizing.

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### SECTION 10. STABILITY AND REACTIVITY

Reactivity	: Not classified as a reactivity hazard.
Chemical stability	: Stable under normal conditions.

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Possibility of hazardous reactions	: Can react with strong oxidizing agents.
Conditions to avoid	: None known.
Incompatible materials	: Oxidizing agents
Hazardous decomposition products	: No hazardous decomposition products are known.

### SECTION 11. TOXICOLOGICAL INFORMATION

#### Information on likely routes of exposure

Inhalation  
Skin contact  
Ingestion  
Eye contact

#### Acute toxicity

Not classified based on available information.

#### Product:

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

#### Ingredients:

##### **Ethoxylated lauryl alcohol:**

Acute oral toxicity : LD50 (Rat): > 500 - 2,000 mg/kg  
Remarks: Based on data from similar materials

Acute inhalation toxicity : LC50 (Rat): > 1.6 mg/l  
Exposure time: 4 h  
Test atmosphere: dust/mist  
Remarks: Based on data from similar materials

Acute dermal toxicity : LD50 (Rat): > 2,000 mg/kg  
Remarks: Based on data from similar materials

##### **1-Methyl 4-(1-Methylethenyl) Cyclohexene:**

Acute oral toxicity : LD50 (Rat): > 2,000 mg/kg  
Assessment: The substance or mixture has no acute oral toxicity  
Remarks: Based on data from similar materials

#### **Skin corrosion/irritation**

Not classified based on available information.

#### Product:

Result: No skin irritation

#### Ingredients:

##### **Ethoxylated lauryl alcohol:**

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Species: Rabbit  
Result: No skin irritation  
Remarks: Based on data from similar materials

### **1-Methyl 4-(1-Methylethenyl) Cyclohexene:**

Species: Rabbit  
Result: Skin irritation

### **Serious eye damage/eye irritation**

Causes serious eye damage.

### **Ingredients:**

#### **Ethoxylated lauryl alcohol:**

Species: Rabbit  
Result: Irreversible effects on the eye  
Remarks: Based on data from similar materials

### **1-Methyl 4-(1-Methylethenyl) Cyclohexene:**

Species: Rabbit  
Result: No eye irritation

### **Respiratory or skin sensitization**

Skin sensitization: Not classified based on available information.  
Respiratory sensitization: Not classified based on available information.

### **Product:**

Assessment: Does not cause skin sensitization.

### **Ingredients:**

#### **Ethoxylated lauryl alcohol:**

Test Type: Maximization Test (GPMT)  
Routes of exposure: Skin contact  
Species: Guinea pig  
Method: OECD Test Guideline 406  
Result: negative  
Remarks: Based on data from similar materials

### **1-Methyl 4-(1-Methylethenyl) Cyclohexene:**

Test Type: Local lymph node assay (LLNA)  
Routes of exposure: Skin contact  
Species: Mouse  
Result: positive

Assessment: Probability or evidence of skin sensitization in humans

### **Germ cell mutagenicity**

Not classified based on available information.

### **Ingredients:**

#### **Ethoxylated lauryl alcohol:**

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)



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Method: OECD Test Guideline 471  
Result: negative  
Remarks: Based on data from similar materials

### **1-Methyl 4-(1-Methylethenyl) Cyclohexene:**

Genotoxicity in vitro : Test Type: In vitro mammalian cell gene mutation test  
Result: negative

Genotoxicity in vivo : Test Type: Transgenic rodent somatic cell gene mutation assay  
Species: Rat  
Application Route: Ingestion  
Result: negative

### **Carcinogenicity**

Not classified based on available information.

### **Ingredients:**

#### **1-Methyl 4-(1-Methylethenyl) Cyclohexene:**

Species: Mouse  
Application Route: Ingestion  
Exposure time: 103 weeks  
Result: negative

### **IARC**

No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

### **OSHA**

No ingredient 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 ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

### **Reproductive toxicity**

Not classified based on available information.

### **STOT-single exposure**

Not classified based on available information.

### **STOT-repeated exposure**

Not classified based on available information.

### **Repeated dose toxicity**

### **Ingredients:**

#### **1-Methyl 4-(1-Methylethenyl) Cyclohexene:**

Species: Rat  
NOAEL: 600 mg/kg  
Application Route: Ingestion  
Exposure time: 13 w

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### Aspiration toxicity

Not classified based on available information.

### Ingredients:

#### **1-Methyl 4-(1-Methylethenyl) Cyclohexene:**

The substance or mixture is known to cause human aspiration toxicity hazards or has to be regarded as if it causes a human aspiration toxicity hazard.

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## SECTION 12. ECOLOGICAL INFORMATION

### Ecotoxicity

#### Ingredients:

##### **Ethoxylated lauryl alcohol:**

Toxicity to fish : LC50 (Danio rerio (zebra fish)): > 1 - 10 mg/l  
Exposure time: 96 h  
Remarks: Based on data from similar materials

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 1 - 10 mg/l  
Exposure time: 48 h  
Remarks: Based on data from similar materials

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Daphnia magna (Water flea)): > 0.1 - 1 mg/l  
Exposure time: 21 d  
Remarks: Based on data from similar materials

##### **1-Methyl 4-(1-Methylethenyl) Cyclohexene:**

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): 0.72 mg/l  
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 0.36 mg/l  
Exposure time: 48 h

Toxicity to algae : ErC50 (Desmodesmus subspicatus (green algae)): 150 mg/l  
Exposure time: 72 h  
Test substance: Water Accommodated Fraction  
Remarks: Based on data from similar materials

M-Factor (Acute aquatic toxicity) : 1

### Persistence and degradability

#### Product:

Biodegradability : Result: Biodegradable

#### Ingredients:

##### **Ethoxylated lauryl alcohol:**

Biodegradability : Result: rapidly degradable

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Remarks: Based on data from similar materials

### 1-Methyl 4-(1-Methylethenyl) Cyclohexene:

Biodegradability : Result: Readily biodegradable.  
Biodegradation: 80 %  
Exposure time: 28 d  
Remarks: Based on data from similar materials

### Bioaccumulative potential

#### Ingredients:

#### Ethoxylated lauryl alcohol:

Bioaccumulation : Species: Fish  
Bioconcentration factor (BCF): < 500  
Remarks: Based on data from similar materials

### 1-Methyl 4-(1-Methylethenyl) Cyclohexene:

Partition coefficient: n- : log Pow: 4.38  
octanol/water

### Mobility in soil

No data available

### Other adverse effects

No data available

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## SECTION 13. DISPOSAL CONSIDERATIONS

### Disposal methods

Waste from residues : Dispose of in accordance with local regulations.

Contaminated packaging : Dispose of as unused product.  
Empty containers should be taken to an approved waste  
handling site for recycling or disposal.

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## SECTION 14. TRANSPORT INFORMATION

### International Regulation

#### UNRTDG

Not regulated as a dangerous good

#### IATA-DGR

Not regulated as a dangerous good

#### IMDG-Code

Not regulated as a dangerous good

### Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

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### Domestic regulation

#### 49 CFR

Not regulated as a dangerous good

## SECTION 15. REGULATORY INFORMATION

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

#### CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

#### SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

**SARA 311/312 Hazards** : Acute Health Hazard

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

**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.

### US State Regulations

#### Pennsylvania Right To Know

Water	7732-18-5	90 - 100 %
Ethoxylated lauryl alcohol	9002-92-0	1 - 5 %
Polyethylene	9002-88-4	1 - 5 %

#### New Jersey Right To Know

Water	7732-18-5	90 - 100 %
Ethoxylated lauryl alcohol	9002-92-0	1 - 5 %
Polyethylene	9002-88-4	1 - 5 %

#### California Prop 65

This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

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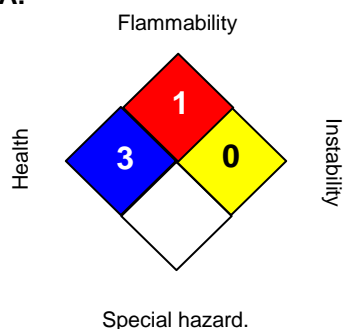
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### SECTION 16. OTHER INFORMATION

#### Further information

##### NFPA:



##### HMIS III:

HEALTH	3
FLAMMABILITY	1
PHYSICAL HAZARD	0

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

Sources of key data used to compile the Material Safety Data Sheet : Internal technical data, data from raw material SDSs, OECD eChem Portal search results and European Chemicals Agency, <http://echa.europa.eu/>

Revision Date : 02/10/2015

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and shall not be considered a warranty or quality specification of any type. The information provided relates only to the specific material identified at the top of this SDS and may not be valid when the SDS material is used in combination with any other materials or in any process, unless specified in the text. Material users should review the information and recommendations in the specific context of their intended manner of handling, use, processing and storage, including an assessment of the appropriateness of the SDS material in the user's end product, if applicable.

US / Z8