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

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.

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.

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

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	>= 1 - < 5
1-Methyl 4-(1-Methylethenyl) Cyclohexene	5989-27-5	>= 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, 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.

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

Notes to physician : Treat symptomatically and supportively.

SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media : Water spray

Alcohol-resistant foam

Dry chemical

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 prod-

ucts

: Carbon oxides

Specific extinguishing

methods

: Use extinguishing measures that are appropriate to local

circumstances and the surrounding environment. Use water spray to cool unopened containers.

Remove undamaged containers from fire area if it is safe to do

so.

Evacuate area.

Special protective equipment

for fire-fighters

: In the event of fire, wear self-contained breathing apparatus.

Use personal protective equipment.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

: Use personal protective equipment.

Follow safe handling advice and personal protective

equipment recommendations.

Environmental precautions : Discharge into the environment must be avoided.

Prevent further leakage or spillage if safe to do so.

Prevent spreading over a wide area (e.g. by containment or oil

barriers).

Retain and dispose of contaminated wash water.

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.

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.

Clean up remaining materials from spill with suitable

absorbent.

Local or national regulations may apply to releases and disposal of this material, as well as those materials and items

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

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.

Do not swallow. Do not get in eyes.

Avoid prolonged or repeated contact with skin.

Handle in accordance with good industrial hygiene and safety

practice.

Keep container tightly closed.

Take care to prevent spills, waste and minimize release to the

environment.

Conditions for safe storage : Keep in properly labeled containers.

Keep tightly closed.

Store in accordance with the particular national regulations.

Materials to avoid : Do not store with the following product types:

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)	5989-27-5
Cyclohexene	

Engineering measures : Ensure adequate ventilation, especially in confined areas.

Minimize workplace exposure concentrations.

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/m3 - total dust, 5 mg/m3 - respirable fraction; and ACGIH TWA for Particles (insoluble or poorly soluble) Not Otherwise Specified of 3 mg/m3 - respirable particles, 10 mg/m3 -

Version Revision Date: 1.1 02/10/2015

MSDS Number: 46940-00002

Date of last issue: 01/14/2015 Date of first issue: 01/14/2015

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

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.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : liquid

Color : green, opaque

Odor : citrus

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

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 : $> 100 \, ^{\circ}\text{C}$

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.

SECTION 10. STABILITY AND REACTIVITY

Reactivity : Not classified as a reactivity hazard.

Chemical stability : Stable under normal conditions.

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

Possibility of hazardous reac-

tions

: 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:

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

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)

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

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 as-

say

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 carcino-

gen 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

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

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.

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

ty) 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 tox-

icity)

: 1

Persistence and degradability

Product:

Biodegradability : Result: Biodegradable

Ingredients:

Ethoxylated lauryl alcohol:

Biodegradability : Result: rapidly degradable

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

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: : log Pow: 4.38

Partition coefficient: n-

octanol/water

Mobility in soil

No data available

Other adverse effects

No data available

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.

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.

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

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

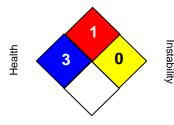
reproductive defects.

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

SECTION 16. OTHER INFORMATION

Further information

NFPA: Flammability



Special hazard.

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 Agen-

cy, 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