HILLYARD The Cleaning Resource*

SAFETY DATA SHEET

1. Identification

Product identifier Laundry San 80

Other means of identification

Product code HIL03049
Product registration 7048-15-1658

number

Recommended use Laundry Sanitizer

Recommended restrictions For Labeled Use Only

KEEP FROM FREEZING

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company name HILLYARD INDUSTRIES

Address 302 North Fourth St.

St. Joseph, MO 64501

Contact person Regulatory Affairs

Telephone number (816) 233-1321 (Ext. 8285)

Fax (816) 383-8485

E-mail regulatoryaffairs@hillyard.com

Emergency telephone # (800) 424-9300

(Only in the event of chemical emergency involving a spill, leak, fire, exposure or accident

involving chemicals)

2. Hazard(s) identification

Physical hazardsFlammable liquidsCategory 3Health hazardsAcute toxicity, dermalCategory 4Skin corrosion/irritationCategory 1BSerious eye damage/eye irritationCategory 1Environmental hazardsHazardous to the aquatic environment, acuteCategory 1

hazard

Hazardous to the aquatic environment,

long-term hazard

OSHA defined hazards Not classified.

Label elements



Signal word Danger

Hazard statement Flammable liquid and vapor. Harmful in contact with skin. Causes severe skin burns and eye

damage. Causes serious eye damage. Very toxic to aquatic life. Toxic to aquatic life with long

Category 2

lasting effects.

Material name: Laundry San 80 sps us

Precautionary statement

Prevention Keep away from heat/sparks/open flames/hot surfaces. No smoking. Keep container tightly

closed. Ground/bond container and receiving equipment. Use explosion-proof

electrical/ventilating/lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Do not breathe mist/vapors. Wash thoroughly after handling. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face

protection.

Response If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

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. Immediately call a poison center/doctor. Wash contaminated clothing before reuse. In case of fire: Use appropriate media to extinguish. Collect spillage. IF SWALLOWED: Rinse mouth. Call a POISON CENTER or doctor/physician if you feel unwell. Do NOT induce

Store in a well-ventilated place. Keep cool. Store locked up. Storage

Disposal Buyer assumes all risk and liability associated with disposal of this product (original concentration

or dilution) in violation of applicable law in compliance with applicable federal, state and local requirements. CONTAINER DISPOSAL: Triple rinse (or equivalent), then offer clean, dry

container for recycling or reconditioning.

Hazard(s) not otherwise classified (HNOC)

None known.

Supplemental information

None.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Octyl decyl dimethyl ammonium chloride		32426-11-2	25
Didecyl dimethyl ammonium chloride		7173-51-5	15
Dioctyl dimethyl ammonium chloride		5538-94-3	10
Ethanol		64-17-5	10
Other components below reportable	levels		40

4. First-aid measures

Move to fresh air. Remove victim from immediate source of exposure to fresh air. If breathing is Inhalation

> difficult, administer oxygen if available. If victim is not breathing, administer CPR. If individual experiences nausea, headache, or dizziness, get immediate medical attention. Call a physician if

symptoms develop or persist.

Take off immediately all contaminated clothing. Rinse skin with water/shower. Call a physician or Skin contact

poison control center immediately. Chemical burns must be treated by a physician. Wash

contaminated clothing before reuse.

Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if Eye contact

present and easy to do. Continue rinsing. Call a physician or poison control center immediately.

Call a physician or poison control center immediately. Rinse mouth. Never give anything by mouth Ingestion

to a victim who is unconscious or is having convulsions. Do not induce vomiting. If vomiting occurs,

keep head low so that stomach content doesn't get into the lungs.

Most important

symptoms/effects, acute and

delayed

Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including

blindness could result.

Indication of immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically. Thermal burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Chemical burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

General information

Take off all contaminated clothing immediately. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to

the doctor in attendance. Wash contaminated clothing before reuse.

Material name: Laundry San 80 SDS US

5. Fire-fighting measures

Suitable extinguishing media Unsuitable extinguishing

Water fog. Alcohol resistant foam. Dry chemical powder. Carbon dioxide (CO2).

media

Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from

the chemical

Vapors may form explosive mixtures with air. Vapors may travel considerable distance to a source of ignition and flash back. During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire fighting

equipment/instructions

In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk.

Specific methods

Use standard firefighting procedures and consider the hazards of other involved materials.

General fire hazards

Flammable liquid and vapor.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist/vapors. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. Take precautionary measures against static discharge. Use only non-sparking tools. This material is classified as a water pollutant under the Clean Water Act and should be prevented from contaminating soil or from entering sewage and drainage systems which lead to waterways.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with water.

Small Spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Environmental precautions

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling

Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Explosion-proof general and local exhaust ventilation. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. Do not breathe mist/vapors. Do not get in eyes, on skin, or on clothing. Avoid prolonged exposure. When using, do not eat, drink or smoke. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Avoid release to the environment. Wash contaminated clothing before reuse. Observe good industrial hygiene practices.

Conditions for safe storage. including any incompatibilities Store locked up. Keep away from heat, sparks and open flame. Store in a cool, dry place out of direct sunlight. Store in tightly closed container. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS). Do not contaminate water, food or feed by storage or disposal. Pesticide Storage: Open dumping is prohibited. Store in original container in areas inaccessible to children.

8. Exposure controls/personal protection

Occupational exposure limits

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)					
Components	Туре	Value			
Ethanol (CAS 64-17-5)	PEL	1900 mg/m3			
		1000 ppm			

Material name: Laundry San 80 SDS US 3/9 **US. ACGIH Threshold Limit Values**

 Components
 Type
 Value

 Ethanol (CAS 64-17-5)
 STEL
 1000 ppm

 US. NIOSH: Pocket Guide to Chemical Hazards
 Value

 Components
 Type
 Value

 Ethanol (CAS 64-17-5)
 TWA
 1900 mg/m3

Biological limit values No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls

Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to

maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency

1000 ppm

shower must be available when handling this product.

Individual protection measures, such as personal protective equipment

Eye/face protection Avoid contact with eyes. Chemical safety goggles when working with concentrate.

Skin protection

Hand protection Chemical resistant gloves. Neoprene or butyl rubber gloves are recommended.

Other Avoid contact with the skin. If unable to avoid prolonged or repeated contact with skin, wear

impervious clothing.

Respiratory protection Not normally required with adequate ventilation. If engineering controls do not maintain airborne

concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be

worn.

Thermal hazards None known.

General hygiene considerations

When using do not smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work

clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance Colorless to light straw.

Physical state Liquid.
Form Liquid.

Colorless to light straw.

Odor Ethanolic
Odor threshold Not available.

pH 7 - 9 (10% Solution)

Melting point/freezing point Not applicable / Not available

Initial boiling point and boiling

range

Not available

Flash point 128.0 °F (53.3 °C) Closed Cup

Evaporation rate Not available Flammability (solid, gas) Not applicable. Upper/lower flammability or explosive limits

Explosive limit - lower (%) Not available.

Explosive limit - upper (%) Not available.

Vapor pressure Not available

Vapor density > 1 Heavier than air (Air = 1)

Relative density 0.931

Solubility(ies)

Solubility (water) Soluble

Partition coefficient Not available.

(n-octanol/water)

Not available

Auto-ignition temperature

Material name: Laundry San 80 sps us

Decomposition temperatureNot available. **Viscosity**Not available.

Other information

Density 7.73 lbs/gal
Explosive properties Not explosive.

Molecular weight Not available
Oxidizing properties Not oxidizing.
Percent volatile 1.5 % w/w
VOC Not available

10. Stability and reactivity

ReactivityThe product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability Material is stable under normal conditions.

Possibility of hazardous Hazardous polymerization does not occur.

Possibility of nazardous

reactions

Conditions to avoid Not available.

Incompatible materials Strong oxidizing agents. Reducing agents.

Hazardous decomposition

products

Hydrogen chloride. Carbon oxides. Nitrogen oxides (NOx).

11. Toxicological information

Information on likely routes of exposure

Inhalation May cause irritation to the respiratory system. Prolonged inhalation may be harmful.

Skin contact Causes severe skin burns. Harmful in contact with skin.

Eye contactCauses serious eye damage. **Ingestion**Causes digestive tract burns.

Symptoms related to the physical, chemical and toxicological characteristics

Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including

blindness could result.

Information on toxicological effects

Acute toxicity Harmful in contact with skin.

Components Species Test Results

Didecyl dimethyl ammonium chloride (CAS 7173-51-5)

<u>Acute</u>

Oral

LD50 Rat 84 mg/kg

Ethanol (CAS 64-17-5)

Acute

Inhalation

LC50 Mouse 39 mg/l, 4 Hours

Oral

LD50 Rat 6.2 g/kg

Skin corrosion/irritation Causes severe skin burns and eye damage.

Serious eye damage/eye

irritation

Causes serious eye damage.

Respiratory or skin sensitization

Respiratory sensitization

Not a respiratory sensitizer.

Skin sensitization This product is not expected to cause skin sensitization.

Germ cell mutagenicityNo data available to indicate product or any components present at greater than 0.1% are

mutagenic or genotoxic.

Carcinogenicity Not classifiable as to carcinogenicity to humans.

IARC Monographs. Overall Evaluation of Carcinogenicity

Not listed.

Material name: Laundry San 80

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

Reproductive toxicity

Not classified. Not classified.

single exposure

Specific target organ toxicity -

Specific target organ toxicity -

Not classified.

repeated exposure

Aspiration hazard Not an aspiration hazard.

Chronic effects Prolonged inhalation may be harmful.

12. Ecological information

Ecotoxicity Very toxic to aquatic life. Toxic to aquatic life with long lasting effects.

Product		Species	Test Results
Laundry San 80			
Aquatic			
Crustacea	EC50	Daphnia	67025.6641 mg/l, 48 hours estimated
Fish	LC50	Fish	5.1042 mg/l, 96 hours estimated
Components		Species	Test Results
Didecyl dimethyl amm	onium chloride (CA	S 7173-51-5)	
Aquatic			
Fish	LC50	White sturgeon (Acipenser transmontanus)	0.001 - 0.01 mg/l, 96 hours
Ethanol (CAS 64-17-5	5)		
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	7.7 - 11.2 mg/l, 48 hours
Fish	LC50	Fathead minnow (Pimephales promelas)	> 100 mg/l, 96 hours

Persistence and degradability

No data is available on the degradability of any ingredients in the mixture.

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

Ethanol -0.31

No data available. Mobility in soil Other adverse effects Not available.

13. Disposal considerations

Pesticide Disposal: Pesticide wastes are acutely hazardous. Improper disposal of excess **Disposal instructions**

pesticide, spray mixture or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for

guidance.

Local disposal regulations

Dispose in accordance with all applicable regulations.

Hazardous waste code

The waste code should be assigned in discussion between the user, the producer and the waste

disposal company.

Waste from residues / unused

products

Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see:

Disposal instructions).

Container Disposal: Nonrefillable container. Do not reuse or refill this container. Clean container Contaminated packaging

promptly after emptying. (Plastic and Metal Containers:) Triple rinse as follows: Fill container 1/4 full with water and reclose the container. Agitate vigorously, and dispose of rinsate consistent with pesticide disposal instructions. Repeat two more times. Then offer for recycling if available or puncture and dispose in sanitary landfill or by other procedures approved by state and local authorities. Follow pesticide disposal instructions for rinsate. If not triple rinsed, these containers are acute hazardous wastes and must be disposed in accordance with local, state, and federal

regulations.

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14. Transport information

DOT

UN number UN1903

UN proper shipping name Disinfectants, liquid, corrosive, n.o.s., MARINE POLLUTANT

Transport hazard class(es)

Class 8
Subsidiary risk Label(s) 8
Packing group || Environmental hazards

Marine pollutant Yes

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Special provisions A6, A7, B10, T14, TP2, TP27

Packaging exceptionsNonePackaging non bulk201Packaging bulk243ERG number153

IATA

UN number UN1903

UN proper shipping name Disinfectant, liquid, corrosive, n.o.s.

Transport hazard class(es)

Class 8
Subsidiary risk Packing group II
Environmental hazards No.
ERG Code 8L

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Other information

Passenger and cargo Allowed with restrictions.

aircraft

Cargo aircraft only Allowed with restrictions.

IMDG

UN number UN1903

UN proper shipping name DISINFECTANT, LIQUID, CORROSIVE, N.O.S., MARINE POLLUTANT

Transport hazard class(es)

Class 8
Subsidiary risk Packing group II
Environmental hazards

Marine pollutant Yes

EmS F-A, S-B

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Transport in bulk according to Not established.

Annex II of MARPOL 73/78 and

the IBC Code

DOT



Material name: Laundry San 80

IATA; IMDG



Marine pollutant



General information IMDG Regulated Marine Pollutant. DOT Regulated Marine Pollutant.

15. Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication

Standard, 29 CFR 1910.1200.

All components are on the U.S. EPA TSCA Inventory List or Exempt.

Toxic Substances Control Act (TSCA)

One or more components of the mixture are not on the TSCA 8(b) inventory

or are designated "inactive".

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous Yes

chemical

Classified hazard Flammable (gases, aerosols, liquids, or solids)

categories Acute toxicity (any route of exposure)

Skin corrosion or irritation

Serious eye damage or eye irritation

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act

Not regulated.

(SDWA)

FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace

Ethanol (CAS 64-17-5) Low priority

Material name: Laundry San 80

FIFRA Information

FIFRA: This product is a U.S. EPA Registered pesticide, EPA Reg. No. 7048-15-1658, and is subject to certain labeling requirements under Federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non-pesticide products. The hazard information required on the pesticide label is reproduced here.

PRECAUTIONARY STATEMENTS: HAZARDS TO HUMANS AND DOMESTIC ANIMALS DANGER. Corrosive: Causes irreversible eye damage and skin burns. Do not get in eyes, on skin or on clothing. May be fatal if swallowed or inhaled. Harmful if absorbed through the skin. Do not breathe vapor. Wear protective eyewear (goggles, face shield, or safety glasses). Wear a minimum of a NIOSH-approved particulate filtering facepiece respirator with any N1, R, or P filter; OR a NIOSH-approved elastomeric particulate respirator with any N1, R, or P filter; OR a NIOSH-approved powered air purifying respirator with a HE filter. Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco or using the toilet. Remove and wash contaminated clothing before reuse. Wear protective clothing and protective gloves (rubber or chemical resistant).

FIRST AID: IF IN EYES: Hold eye open and rinse slowly and gently with water for 15 - 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice. IF ON SKIN OR CLOTHING: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 - 20 minutes. Call a poison control center or doctor for treatment advice. IF SWALLOWED: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person. IF INHALED: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferable by mouth-to-mouth if possible. Call a poison control center or doctor for treatment advice. Call a poison control center or doctor for treatment advice. Have the product container or label with you when calling a Poison Control Center or doctor or going for treatment. For medical emergencies, call the poison control center at 1-800-222-1222. NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage. Measures against circulatory shock, respiratory depression and convulsion may be needed. For general information on this product, call 1-440-247-0948, or contact the National Pesticides Information Center (NPIC) at 1-800-858-7378, Monday through Friday, 8 AM to 12 PM PST, or at http://npic.orst.edu.

US state regulations

California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins. For more information go to www.P65Warnings.ca.gov.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date 10-28-2020

Version # 01

HMIS® ratings Health: 3

Flammability: 3 Physical hazard: 0

Disclaimer

No representations or warranties, either express or implied, of merchantability, fitness for a particular purpose, or of any nature are made with respect to the product(s) or information contained in this material safety data sheet. The information and recommendations contained in this Material Safety Data Sheet are supplied pursuant to 29 CFR 1910.1200 of the Occupational Safety and Health Standards Hazard Communication Rule. All information contained herein is presented in good faith and is believed to be appropriate and accurate. The buyer or user assumes all risks associated with the use, misuse or disposal of this product. The buyer or user is responsible to comply with all federal, state or local regulations concerning the use, misuse or disposal of these products.

Material name: Laundry San 80 sps us