HILLYARD The Cleaning Resource*

SAFETY DATA SHEET

1. Identification

Product identifier LAUNDRY DETERGENT

Other means of identification

SDS number 554N-54B Product code HIL00459

 Recommended use
 Laundry Warewash

 Recommended restrictions
 For Labeled Use Only

 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 hazards Not classified.

Health hazards Serious eye damage/eye irritation Category 2B

Environmental hazards Not classified.

OSHA defined hazards Not classified.

Label elements

Hazard symbol None.

Signal word Warning

Hazard statement Causes eye irritation.

Precautionary statement

Prevention Wash thoroughly after handling.

Response If swallowed: Call a poison center/doctor if you feel unwell. If on skin: Wash with plenty of water. If

in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and

easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Storage Store away from incompatible materials.

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

Material name: LAUNDRY DETERGENT

| Chemical name | Common name and synonyms | CAS number | % |
|----------------------------|--------------------------|------------|-----------|
| Sodium Alkyl Ether Sulfate | | 68585-34-2 | 5 - < 10 |
| Ethanol | | 64-17-5 | 1 - < 3 |
| Other components below re | portable levels | | 80 - < 90 |

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation Move to fresh air. Call a physician if symptoms develop or persist.

Skin contact Wash off with soap and water. Get medical attention if irritation develops and persists.

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

present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Ingestion Rinse mouth. Get medical attention if symptoms occur.

Most important

symptoms/effects, acute and

delayed

Irritation of eyes. Exposed individuals may experience eye tearing, redness, and discomfort.

Indication of immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically. Keep victim under observation.

Symptoms may be delayed.

General information Ensure that medical personnel are aware of the material(s) involved, and take precautions to

protect themselves.

5. Fire-fighting measures

Suitable extinguishing media

Unsuitable extinguishing

media

Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).

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

Specific hazards arising from

the chemical

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

Move containers from fire area if you can do so without risk.

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

General fire hazards No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. 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

This product is miscible in water.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

Environmental precautions

Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling

Avoid contact with eyes. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities

Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

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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 | Type ` | , Value | | | |
|---|--------|------------|--|--|--|
| Ethanol (CAS 64-17-5) | PEL | 1900 mg/m3 | | | |
| | | 1000 ppm | | | |
| US. ACGIH Threshold Limit Valu | ies | | | | |
| Components | Type | Value | | | |
| Ethanol (CAS 64-17-5) | STEL | 1000 ppm | | | |
| US. NIOSH: Pocket Guide to Chemical Hazards | | | | | |
| Components | Туре | Value | | | |
| Ethanol (CAS 64-17-5) | TWA | 1900 mg/m3 | | | |

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

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. Good general ventilation (typically 10 air changes per hour) 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. Provide eyewash station.

1000 ppm

Individual protection measures, such as personal protective equipment

Avoid contact with eyes. Where splashing of concentrate is a concern, use protective glasses with Eye/face protection

side shield

Skin protection

Hand protection For prolonged or repeated skin contact use suitable protective gloves.

Other Wear suitable protective clothing. None normally required. If unable to avoid prolonged or

repeated contact with skin, wear impervious clothing.

Respiratory protection No personal respiratory protective equipment normally required.

Thermal hazards None known.

General hygiene considerations

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

Clear, slightly viscous blue liquid **Appearance**

Physical state Liquid. Liquid. **Form** Blue Color

Fresh Linen Odor Odor **Odor threshold** Not available

7 - 8

Melting point/freezing point Not applicable / Not available Initial boiling point and boiling

range

200 °F (93.33 °C) Corr.

> 201.0 °F (> 93.9 °C) Flash point < 1 (ethyl ether = 1) **Evaporation rate** Flammability (solid, gas) Not applicable.

Upper/lower flammability or explosive limits Not available. Explosive limit - lower (%) Explosive limit - upper (%) Not available.

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Vapor pressure18 mm HgVapor density0.65 AIR=1Relative density1.04 at 77°F

Solubility(ies)

Solubility (water) 100 % Complete
Partition coefficient Not available

(n-octanol/water)

Auto-ignition temperatureNot availableDecomposition temperatureNot availableViscosityNot available

Other information

Density 8.68 lb/gal
Explosive properties Not explosive.
Oxidizing properties Not oxidizing.
Percent volatile 78.5 - 79.5 %
VOC 2.03 %

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

reactions

No dangerous reaction known under conditions of normal use.

Conditions to avoid Avoid temperatures exceeding the flash point. Contact with incompatible materials.

Incompatible materials Strong oxidizing agents.

Hazardous decomposition

products

No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

InhalationNo adverse effects due to inhalation are expected.Skin contactNo adverse effects due to skin contact are expected.

Eye contact Causes eye irritation.

Ingestion Expected to be a low ingestion hazard.

Symptoms related to the physical, chemical and toxicological characteristics

Irritation of eyes. Exposed individuals may experience eye tearing, redness, and discomfort.

Information on toxicological effects

Acute toxicity Not known.

Skin corrosion/irritation Prolonged skin contact may cause temporary irritation.

Serious eye damage/eye

irritation

Causes eye irritation.

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.

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

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Reproductive toxicityThis product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity -

single exposure

Not classified.

Specific target organ toxicity -

repeated exposure

Not classified.

Aspiration hazard

Not an aspiration hazard.

Chronic effects Prolonged inhalation may be harmful.

12. Ecological information

EcotoxicityThe product is not classified as environmentally hazardous. However, this does not exclude the

possibility that large or frequent spills can have a harmful or damaging effect on the environment.

| Product | | Species | Test Results |
|------------------------|-------------------|------------------------------------|-------------------------------------|
| LAUNDRY DETERGEN | NT | | |
| Aquatic | | | |
| Fish | LC50 | Fish | 28754.5645 mg/l, 96 hours estimated |
| Components | | Species | Test Results |
| Ethanol (CAS 64-17-5) | | | |
| Aquatic | | | |
| Crustacea | EC50 | Water flea (Daphnia magna) | 7.7 - 11.2 mg/l, 48 hours |
| Fish | LC50 | Fathead minnow (Pimephales promela | as) > 100 mg/l, 96 hours |
| Sodium Alkyl Ether Sul | fate (CAS 68585-3 | 34-2) | |
| Aquatic | | | |
| Crustacea | EC50 | Water flea (Ceriodaphnia dubia) | 2.33 - 4.81 mg/l, 48 hours |

^{*} Estimates for product may be based on additional component data not shown.

Persistence and degradability No data is available on the degradability of this product.

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

Ethanol -0.31

Mobility in soil No data available.

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation

potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructionsCollect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not

contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations. Buyer assumes all risk and liability associated with disposal of this product (original concentration or

dilution) in violation of applicable law.

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). Waste from normal product use may be sewered to a public owned treatment works (POTW) in compliance with applicable Federal, State, and local pretreatment

requirements.

Contaminated packaging Since emptied containers may retain product residue, follow label warnings even after container is

emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal. Triple rinse (or equivalent). Then offer clean, dry container for recycling or reconditioning.

14. Transport information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

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IMDG

Not regulated as dangerous goods.

Transport in bulk according to Not established.

Annex II of MARPOL 73/78 and

the IBC Code

15. Regulatory information

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

Standard, 29 CFR 1910.1200.

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.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - Yes

Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous

No

chemical

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

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

US state regulations 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.

International Inventories

Country(s) or region Inventory name On inventory (yes/no)*

Canada Domestic Substances List (DSL) Yes

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
 03-20-2015

 Revision date
 04-06-2017

Version # 02

HMIS® ratings Health: 1

Flammability: 0 Physical hazard: 0

Material name: LAUNDRY DETERGENT

Disclaimer

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Revision information

This document has undergone significant changes and should be reviewed in its entirety.

SDS US

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