MATERIAL SAFETY DATA SHEET

NFPA RATING: Health = 1 Flammability = 0 Reactivity = 0 **HMIS RATING:** Health = 1 Flammability = 0 Reactivity = 0

SECTION I -- IDENTITY AND MANUFACTURER'S INFORMATION

Manufacturer's Name: HILLYARD INDUSTRIES Product Name: LAUNDRY SPOTTER

Address: 302 North Fourth Street

St. Joseph, MO 64501 **Date Prepared:** July 7, 2010

Prepared by: Regulatory Affairs Department

Emergency Telephone No.: (800) 424-9300 (Only in the event of chemical emergency involving a spill, leak, fire, exposure or accident involving chemicals.) **Other information calls:** (816) 233-1321 (Ext. 8285)

http://www.hillyard.com

SECTION II -- INGREDIENTS/IDENTITY INFORMATION

Components (Specific Chemical Identity:	CAS#	OSHA PEL	ACGIH TLV	OTHER LIMITS RECOMMENDED	%
Common Name(s)					
Water	7732-18-5	none	none	N.A.	
Hydrogen Peroxide	7722-84-1	1.4 mg/m^3	1.4 mg/m^3	N.A.	<7%
Sodium Xylene Sulfonate	1300-72-7	Not	Not established	N.A.	
		established			
Surfactant/Polymer Blend	Unknown to	Not	Not established	N.A.	
	Hillyard	established			
Sodium Bicarbonate	497-19-8	Not	Not established	N.A.	
		established			
Borax	1303-96-4	Not	Not established	N.A.	
		established			

VOC (Ready to use) = 0%

SECTION III -- PHYSICAL / CHEMICAL CHARACTERISTICS

Boiling Point: 739 mm Hg 203°F **Specific Gravity (H20 = 1):** 25°C = 1.04 & 39°C = 1.04

Vapor Pressure (mm Hg.): 17.6 Percent Volatile by Volume (%): 94.82%

Vapor Density (AIR = 1): 0.62 **Evaporation Rate (ethyl ether = 1):** Slower than 1

Solubility in Water: complete Appearance and Odor: Clear, colorless liquid, non-objectionable fragrance

pH (concentrate) = 9.4

SECTION IV -- FIRE AND EXPLOSION HAZARD DATA

Flash point: None to 1300F corrected (T.C.C.) Flammable Limits: LEL = Not established UEL = N.A. Extinguishing Media: Do NOT use CO2 extinguisher on this material: use only water spray or appropriate foam.

Do not use organic compounds on this material.

Special Fire Fighting Procedures: As in any fire, wear self-contained positive-pressure breathing apparatus, (MSHA/NIOSH approved or equivalent) and full protective gear. Containers can build up pressure if exposed to heat (fire). Cool with water spray.

Unusual Fire and Explosion Hazards: Contact with combustible materials may cause a fire. Release of oxygen may support combustion. Contact with incompatible materials (e.g. metals, alkalis, and strong reducing agents) will cause hazardous decomposition resulting in the release of large quantities of heat, steam, and oxygen. Exposure to heat may cause hazardous decomposition. Hydrogen peroxide may spontaneously decompose above 150° C. Do not mix with kerosene or gasoline.

SECTION V -- PHYSICAL HAZARDS

Stability: Stable **Conditions to Avoid:** Heat and flame.

Incompatibility (Materials to Avoid): Metals, Reducing agents, Alkalis, Combustible materials. Organic materials. Salt of heavy metals. Impurities.

Hazardous Decomposition Products or Byproducts: Oxygen, oxides of carbon and steam.

Hazardous Polymerization: Will not occur Conditions to Avoid: None known to Manufacturer

SECTION VI -- HEALTH HAZARD DATA

Routes of entry: Inhalation? yes Skin? yes Ingestion? LD50 greater than 5 g/kg

HEALTH HAZARDS (1. Acute and 2. Chronic)

1. Contact with may cause eye irritation. Prolonged contact may cause skin irritation with sensitive individuals. Ingestion can cause nausea, vomiting and gastrointestinal irritation. Prolonged inhalation may cause respiratory irritation. 2. None known to Hillyard Industries when used according to label directions.

SECTION VI -- HEALTH HAZARD DATA continued

Chemical listed as Carcinogen or Potential Carcinogen:

National Toxicology Program = No I.A.R.C. Monograms = No OSHA = No

This product has no carcinogens listed by IARC, NTP, NIOSH, or ACGIH as of this date, greater than or equal to 0.1%.

Signs and Symptoms of Exposure: May cause irritation to eyes. Prolonged contact may cause skin irritation in sensitive individuals. Inhalation of fine mist or aerosols can lead to irritation and inflammation of the respiratory tract. Symptoms may occur with delay. Ingestion may cause the rapid release of oxygen thus cause distension, especially in the event of greater intakes.

Medical Conditions Generally Aggravated by Exposure: No data is available that addresses medical conditions that are generally recognized as being aggravated by exposure to this product.

Emergency and First Aid Procedures: Flush with plenty of water for 15 minutes. Call a physician. **Skin:** Wash with soap and water. If irritation persists, call a physician. **Ingestion:** Drink large amounts of water. Call a physician. **Inhalation:** Move person to fresh air. If unconscious, call a physician.

SECTION VII -- PRECAUTIONS FOR SAFE HANDLING AND USE

Steps To Be Taken In Case Material Is Released Or Spilled: Small spills should be flushed with water and pick up with mop. Hydrogen peroxide quickly decomposes to oxygen and water.

Waste Disposal Method: Dispose of in accordance with state or local regulations.

Precautions To Be Taken In Handling And Storing: Do not get in eyes, on skin, and clothing. Do not mix with ammonia or bleach. Do not ingest. Keep container closed when not in use. Since empty packages retain product residue, follow label warnings even after package is empty.

Other Precautions: Do not dispose of in storm drains or streams. This product contains no reportable quantities of toxic chemicals subject to reporting requirements of Section 313 of SARA Title III Emergency Planning and Community Right to Know Act of 1986 and 40 CFR Part 372.

SECTION VIII -- CONTROL MEASURES

Respiratory Protection (Specify Type): Not normally required with adequate ventilation.

Ventilation:

Local Exhaust = Normally adequate **Mechanical (General)** = Recommended **Special** = N/A **Other** = N/A **Protective Gloves:** Impervious gloves (neoprene or rubber) suggested. **Eye Protection:** Splash goggles recommended. **Other Protective Clothing or Equipment:** Avoid prolonged contact.

Work / Hygienic Practices: Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling; wash clothing before reuse. Completely submerge contaminated clothing or other materials in water prior to drying.

SECTION IX - TRANSPORTATION INFORMATION

APPLICABLE REGULATIONS: 49CFR = No; IMCO = No; IATA = No.

DOT SHIPPING DESCRIPTION ON BILL OF LADING:

Proper shipping name (quarts and gallons): Not regulated

Package Label = NA Hazard Class = NA Package Group = NA Ignitability = No; Corrosivity = No; Reactivity = not applicable.

DISCLAIMER OF WARRANTIES

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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 SAFETY DATA SHEET

NFPA RATING: Health = 1 Flammability = 0 Reactivity = 0 **HMIS RATING:** Health = 1 Flammability = 0 Reactivity = 0

SECTION I -- IDENTITY AND MANUFACTURER'S INFORMATION

Manufacturer's Name: HILLYARD INDUSTRIES Product Name: LAUNDRY SPOTTER

Address: 302 North Fourth Street (Part A)

St. Joseph, MO 64501 **Date Prepared:** May 13, 2008

Prepared by: Regulatory Affairs Department

Emergency Telephone No.: (800) 424-9300 (Only in the event of chemical emergency involving a spill, leak, fire, exposure or accident involving chemicals.) **Other information calls:** (816) 233-1321 (Ext. 8285)

http://www.hillyard.com

SECTION II -- INGREDIENTS/IDENTITY INFORMATION

Components

(Specific Chemical Identity: Common Name(s)	CAS#	OSHA PEL	ACGIH TLV	OTHER LIMITS RECOMMENDED	%
Water	7732-18-5	none	none	N/A	
Sodium Xylene Sulfonate	1300-72-7	not	not	N/A	
		established	established		
Complex Surfactant Blend	Unknown	not	not	N/A	
	to Hillyard	established	established		
Sodium Gluconate	527-07-1	not	not	N/A	
		established	established		
Sodium Bicarbonate	497-19-8	not	not	N/A	
		established	established		

VOS = 0%

SECTION III -- PHYSICAL / CHEMICAL CHARACTERISTICS

Boiling Point: 204°F **Specific Gravity (H20 = 1):** $25^{\circ}\text{C} = 1.06 \& 39^{\circ}\text{C} = 1.06$

Vapor Pressure (mm Hg.): 17.5 Percent Volatile by Volume (%): 86.8

Vapor Density (AIR = 1): 0.6 **Evaporation Rate (ethyl ether = 1):** slower than 1

Solubility in Water: complete Appearance and Odor: clear, colorless liquid; non-objectionable odor

pH (concentrate) = 9-9.8

SECTION IV -- FIRE AND EXPLOSION HAZARD DATA

Flash point: none (T.C.C.) Flammable Limits: LEL = N/A UEL = N/A

Extinguishing Media: Water fog, carbon dioxide, foam, dry chemical

Special Fire Fighting Procedures: Self-contained positive pressure breathing apparatus and protective clothing should be worn in fighting fires involving chemicals.

Unusual Fire and Explosion Hazards: N/A

SECTION V -- PHYSICAL HAZARDS

Stability: Stable Conditions to Avoid: N/A

Incompatibility (Materials to Avoid): Avoid strong oxidizing agents or strong mineral acids.

Hazardous Decomposition Products or Byproducts: Decomposition products under fire conditions: fumes of

ammonia, carbon monoxide, carbon dioxide, oxides of nitrogen and various hydrocarbons

Hazardous Polymerization: Will not occur Conditions to Avoid: N/A

SECTION VI -- HEALTH HAZARD DATA

Routes of entry: Inhalation? No Skin? No Ingestion? No

HEALTH HAZARDS (1. Acute and 2. Chronic)

1. Not a primary skin irritant per Federal Hazardous Substance Act. Prolonged contact with skin may cause slight irritation. Prolonged contact with eye may produce irritation. Concentrate not acute oral toxicity at 5 g/kg. 2. None known to Hillyard

Chemical listed as Carcinogen or Potential Carcinogen:

National Toxicology Program = No I.A.R.C. Monographs = No OSHA = No This product has no carcinogens listed by IARC, NTP, NIOSH, or ACGIH as of this date, greater than or equal to 0.1%.

Signs and Symptoms of Exposure: Concentrate may be irritating to eyes if not removed promptly. Breathing of highly concentrated vapors or spray mists may cause irritation to the respiratory tract.

Medical Conditions Generally Aggravated by Exposure: N/A

Emergency and First Aid Procedures: In case of contact, immediately flush eyes with plenty of water for 15 minutes; get medical attention. If inhaled, remove to fresh air. If breathing is difficult, get medical attention.

SECTION VII -- PRECAUTIONS FOR SAFE HANDLING AND USE

Steps To Be Taken In Case Material Is Released Or Spilled: Pick up with mop or wet vac and wash away with water. Spills of concentrate should be picked up with wet vac and rinsed thoroughly.

Waste Disposal Method: Wash down sewer with large quantity of water. Container disposal: Triple rinse (or equivalent), then offer clean, dry container for recycling or reconditioning.

Precautions To Be Taken In Handling And Storing: Freezing of product may rupture container. Product shelf life is best retained by storage at 45-100°F temperature.

Other Precautions: This product contains no reportable quantities of toxic chemicals subject to reporting requirements of Sec. 313 of SARA Title III Emergency Planning and Community Right to Know Act of 1986 and of 40 CFR Part 372.

SECTION VIII -- CONTROL MEASURES:

Respiratory Protection (Specify Type): Not required

Ventilation:

Local Exhaust = Not required **Mechanical (General)** = N/A **Special** = N/A **Other** = N/A **Protective Gloves:** None required **Eye Protection:** Safety goggles suggested where splash of concentrate is a concern

Other Protective Clothing or Equipment: None required Work / Hygienic Practices: Wash thoroughly after handling

SECTION IX - TRANSPORTATION INFORMATION:

Applicable regulations: 49 CFR = no; IMCO = no; IATA = no

Proper shipping name: Cleaning compound

UN No.: not applicable Limited Oty.: not applicable Hazard Class = not applicable

Labels required: not required **DOT Exception:** not applicable

EPA Hazardous waste number / code: not listed

Hazardous waste characteristics:

Ignitability = not applicable; **Corrosivity** = not applicable; **Reactivity** = not applicable

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MATERIAL SAFETY DATA SHEET

NFPA RATING: Health = 1 Flammability = 0 Reactivity = 0 **HMIS RATING:** Health = 1 Flammability = 0 Reactivity = 0

SECTION I – IDENTITY AND MANUFACTURER'S INFORMATION

Manufacturer's Name: HILLYARD INDUSTRIES Product Name: LAUNDRY SPOTTER

Address: 302 North Fourth Street (Part B)

St. Joseph, MO 64501 **Date Prepared:** May 13, 2008

Prepared by: Regulatory Affairs Department

Emergency Telephone No.: (800) 424-9300 (Only in the event of chemical emergency involving a spill, leak, fire, exposure or accident involving chemicals.)

Other information calls: (816) 233-1321 (Ext. 8285)

http://www.hillyard.com

SECTION II - INGREDIENTS/IDENTITY INFORMATION

Components

(Specific Chemical Identity: OTHER LIMITS

Common Name(s) **ACGIH TLV** CAS# **OSHA PEL** RECOMMENDED % Hydrogen Peroxide 7722-84-1 1.4 mg/m^3 1.4 mg/m^3 N.A. <7% Water 7732-18-5 none none N.A.

VOC (Ready to use) = 0.0%

SECTION III - PHYSICAL / CHEMICAL CHARACTERISTICS

Boiling Point: 739 mm Hg 206°F **Specific Gravity (H₂O = 1):** 25°C = 1.02 & 39°C = 1.02

Vapor Pressure (mm Hg.): 17.6 Percent Volatile by Volume (%): 100%

Vapor Density (AIR = 1): 0.62 **Evaporation Rate (ethyl ether = 1):** Slower than 1

Solubility in Water: complete Appearance and Odor: Clear, colorless liquid, non-objectionable odor

pH (concentrate) = 4.5

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Flash point: None to 200°F corr. (T.C.C.) Flammable Limits: LEL = Not established UEL = N.A Extinguishing Media: Do NOT use CO_2 extinguisher on this material: use only water spray or appropriate

foam. Do not use organic compounds on this material.

Extinguishing Media: Do NOT use CO2 extinguisher on this material: use only water spray or appropriate foam.

Do not use organic compounds on this material.

Special Fire Fighting Procedures: As in any fire, wear self-contained positive-pressure breathing apparatus, (MSHA/NIOSH approved or equivalent) and full protective gear. Containers can build up pressure if exposed to heat (fire). Cool with water spray.

Unusual Fire and Explosion Hazards: Release of oxygen may support combustion. Contact with incompatible materials (e.g. metals, alkalis, and strong reducing agents) may cause hazardous decomposition resulting in the release of heat, steam, and oxygen. Exposure to heat may cause hazardous decomposition. Hydrogen peroxide may spontaneously decompose above 150° C. Do not mix with kerosene or gasoline.

SECTION V -- PHYSICAL HAZARDS

Stability: Stable **Conditions to Avoid:** Heat and flame.

Incompatibility (Materials to Avoid): Metals, Reducing agents, Alkalis, Combustible materials. Organic materials. Salt of heavy metals. Impurities.

Hazardous Decomposition Products or Byproducts: Oxygen, oxides of carbon and steam.

Hazardous Polymerization: Will not occur Conditions to Avoid: None known to Manufacturer

SECTION VI -- HEALTH HAZARD DATA

Routes of entry: Inhalation? yes Skin? yes Ingestion? LD50 greater than 5 g/kg **HEALTH HAZARDS (1. Acute and 2. Chronic)**

1. Contact with concentrate may cause severe eye irritation and prolonged skin contact with concentrate may cause slight skin irritation. Ingestion can cause nausea, vomiting and gastrointestinal irritation. Prolonged inhalation may cause respiratory irritation. Acute oral toxicity of concentrate per EPA method = >5000 mg./kg.; Acute dermal irritation = Non –irritating, Toxicity Category IV per EPA Method. Test show the product is not a skin sensitizer. Acute inhalation toxicity = LC50>2.13 mg./Liter. 2. None known to Hillyard Industries when used according to label

directions.

SECTION VI -- HEALTH HAZARD DATA continued

Chemical listed as Carcinogen or Potential Carcinogen:

National Toxicology Program = No I.A.R.C. Monograms = No OSHA = No

This product has no carcinogens listed by IARC, NTP, NIOSH, or ACGIH as of this date, greater thanor equal to 0.1%.

Signs and Symptoms of Exposure: Eye symptoms may occur with delay such as conjunctiva and severe irritation; reaction may be delayed. Prolong skin contact with concentrate may cause irritation. Inhalation of fine mist or aerosols can lead to irritation and inflammation of the respiratory tract and cause pulmonary edema. Symptoms may occur with delay. Swallowing can lead to irritation of the mucous in the mouth, esophagus and stomach.

Medical Conditions Generally Aggravated by Exposure: Open cuts and sores may be irritated by contact.

Emergency and First Aid Procedures Eye and Skin Contact. Flush eyes and skin with plenty of water for 15 minutes; apply water gently and do not rub area. For eyes seek medical attention immediately and for skin, if irritation persists, get medical attention. If swallowed, do not induce vomiting. Seek immediate medical attention. If excess inhaled, remove to fresh air; if breathing is difficult, seek medical attention.

SECTION VII -- PRECAUTIONS FOR SAFE HANDLING AND USE

Steps To Be Taken In Case Material Is Released Or Spilled: Small spills should be flushed with water and pick up with mop. Hydrogen peroxide quickly decomposes to oxygen and water.

Waste Disposal Method: Dispose of in accordance with state or local regulations.

Precautions To Be Taken In Handling And Storing: Keep container closed when not in use. Since empty packages retain product residue, follow label warnings even after package is empty.

Other Precautions: Do not dispose of in storm drains or streams. This product contains no reportable quantities of toxic chemicals subject to reporting requirements of Section 313 of SARA Title III Emergency Planning and Community Right to Know Act of 1986 and 40 CFR Part 372.

SECTION VIII -- CONTROL MEASURES:

Respiratory Protection (Specify Type): Not normally required with adequate ventilation.

Ventilation:

Local Exhaust = Normally adequate **Mechanical (General)** = Recommended **Special** = N/A **Other** = N/A **Protective Gloves:** Impervious gloves (neoprene or rubber) with concentrate. **Eye Protection:** Splash goggles with concentrate.

Other Protective Clothing or Equipment: Avoid prolonged contact. Wear clothing to prevent contact with concentrate if necessary. Eye wash, safety shower available with concentrate.

Work / Hygienic Practices: Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling; wash clothing before reuse. Completely submerge contaminated clothing or other materials in water prior to drying.

SECTION IX -- TRANSPORTATION INFORMATION

Applicable regulations: 49 CFR = no; IMCO = no; IATA = no

Proper shipping name: Cleaning compound

UN NO.: <u>not applicable</u> Limited Qty.: <u>not applicable</u> Hazard Class = <u>not applicable</u>

Labels required: not required DOT Exception: not applicable

EPA Hazardous waste number / code: not listed

Hazardous waste characteristics: Ignitability: not applicable; Corrosivity: not applicable; Reactivity: not applicable

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