SAFETY DATA SHEET

1. Identification

Product identifier **1907 Waterborne Urethane Gym Finish**

Other means of identification

SDS number 541N85C

Product code HIL00280

Recommended use Gym Finish

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

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

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A
Reproductive toxicity	Category 1B
Specific target organ toxicity, single exposure	Category 3 respiratory tract irritation

Environmental hazards Not classified.

OSHA defined hazards Not classified.

Label elements

Signal word Danger

Hazard statement Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation. May damage fertility or the unborn child.

Precautionary statement

Prevention Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid breathing mist or vapor. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection.

Response If on skin: Wash with plenty of water. 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. If exposed or concerned: Get medical advice/attention. Call a poison center/doctor if you feel unwell. If skin irritation occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash before reuse.

Storage Store in a well-ventilated place. Keep container tightly closed. Store locked up.

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.
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	%
1-Methyl-2-Pyrrolidinone		872-50-4	3 - < 5
Triethylamine		121-44-8	1 - < 3
Other components below reportable levels			90 - 100

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

4. First-aid measures

Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.
Skin contact	Remove contaminated clothing. Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.
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. Get medical attention if irritation develops and persists.
Ingestion	Rinse mouth. Call a physician or poison control center immediately. Only induce vomiting at the instruction of medical personnel. Never give anything by mouth to an unconscious person.
Most important symptoms/effects, acute and delayed	Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause respiratory irritation. Skin irritation. May cause redness and pain.
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	IF exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible). 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.

5. Fire-fighting measures

Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).
Unsuitable extinguishing media	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 methods	Use 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. Avoid breathing mist or vapor. 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. Cover with plastic sheet to prevent spreading. 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

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid breathing mist or vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Pregnant or breastfeeding women must not handle this product. Should be handled in closed systems, if possible. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.
Notice: Saw dust from freshly sanded floors or dust from wood floors that have been abraded between coats will spontaneously catch fire if improperly discarded. Immediately after abrading or sanding wood floors, place dust waste in a sealed, water-filled metal container and immediately remove from building.
Notice: Rags or applicators soaked in a combustible liquid will spontaneously catch fire if improperly discarded. Immediately after using rags or applicators soaked in a combustible liquid, place waste in a sealed, water-filled metal container and immediately remove from building.

Conditions for safe storage, including any incompatibilities

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

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
Triethylamine (CAS 121-44-8)	PEL	100 mg/m3
		25 ppm

US. ACGIH Threshold Limit Values

Components	Type	Value
Triethylamine (CAS 121-44-8)	STEL	3 ppm
	TWA	1 ppm

US. AIHA Workplace Environmental Exposure Level (WEEL) Guides

Components	Type	Value
1-Methyl-2-Pyrrolidinone (CAS 872-50-4)	TWA	40 mg/m3
		10 ppm

Biological limit values

ACGIH Biological Exposure Indices

Components	Value	Determinant	Specimen	Sampling Time
1-Methyl-2-Pyrrolidinone (CAS 872-50-4)	100 mg/l	5-Hydroxy-N-methyl-2-pyrrolidone	Urine	*

* - For sampling details, please see the source document.

Exposure guidelines

US - California OELs: Skin designation

Triethylamine (CAS 121-44-8) Can be absorbed through the skin.

US ACGIH Threshold Limit Values: Skin designation

Triethylamine (CAS 121-44-8) Can be absorbed through the skin.

US WEEL Guides: Skin designation

1-Methyl-2-Pyrrolidinone (CAS 872-50-4) Can be absorbed through the skin.

Appropriate engineering controls	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. Eye wash facilities and emergency shower must be available when handling this product.

Individual protection measures, such as personal protective equipment

Eye/face protection	Chemical splash goggles where there is a potential for eye contact. Avoid contact with eyes.
Skin protection	
Hand protection	Wear appropriate chemical resistant gloves.
Other	None normally required. 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. Wear appropriate thermal protective clothing, when necessary.
General hygiene considerations	When using, do not eat, drink or 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	Milky white liquid
Physical state	Liquid.
Form	Liquid.
Color	Milky white
Odor	Amine odor
Odor threshold	Not available
pH	7.5 - 8.5
Melting point/freezing point	Not available
Initial boiling point and boiling range	> 212 °F (> 100 °C)
Flash point	> 200.0 Tag Closed Cup
Evaporation rate	< 1 Ethyl ether = 1
Flammability (solid, gas)	Not available.
Upper/lower flammability or explosive limits	
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	16.7 mm Hg
Vapor density	0.81 AIR=1
Relative density	1.02 at 77°F
Solubility(ies)	
Solubility (water)	Dispersible
Partition coefficient (n-octanol/water)	Not available
Auto-ignition temperature	Not available
Decomposition temperature	Not available
Viscosity	Not available
Other information	
Brookfield viscosity	10 - 30 cP
Density	8.49 lb/gal
Percent volatile	70 - 71 %
VOC (Weight %)	< 200 g/l

10. Stability and reactivity

Reactivity	The 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	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

Inhalation	May cause irritation to the respiratory system. Prolonged inhalation may be harmful.
Skin contact	Causes skin irritation.
Eye contact	Causes serious eye irritation.
Ingestion	Expected to be a low ingestion hazard.
Symptoms related to the physical, chemical and toxicological characteristics	Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause respiratory irritation. Skin irritation. May cause redness and pain.

Information on toxicological effects

Acute toxicity May cause respiratory irritation.

Product	Species	Test Results
1907 Waterborne Urethane Gym Finish		
Acute		
Dermal		
LD50	Rabbit	28463.2832 mg/kg estimated
Inhalation		
LC50	Mouse	493.8271 mg/l, 2 Hours estimated
	Rat	493.8271 mg/l, 2 Hours estimated
		34.5679 mg/l, 1 Hours estimated
Oral		
LD50	Guinea pig	8391.6084 g/kg estimated
	Mouse	32323.7988 mg/kg estimated
	Rabbit	30041.1523 mg/kg estimated
	Rat	26221.7129 mg/kg estimated
		94.2547 ml/kg estimated

Components	Species	Test Results
1-Methyl-2-Pyrrolidinone (CAS 872-50-4)		
Acute		
Dermal		
LD50	Rabbit	8000 mg/kg
Oral		
LD50	Mouse	5130 mg/kg
	Rat	3914 mg/kg
		4.2 ml/kg
Triethylamine (CAS 121-44-8)		
Acute		
Dermal		
LD50	Rabbit	416 mg/kg
Inhalation		
LC50	Mouse	6 mg/l, 2 Hours

Components	Species	Test Results
	Rat	6 mg/l, 2 Hours
		0.42 mg/l, 1 Hours
Oral		
LD50	Mouse	546 mg/kg
	Rabbit	365 mg/kg
	Rat	460 mg/kg

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

Skin corrosion/irritation Causes skin irritation.

Serious eye damage/eye irritation Causes serious 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 mutagenicity No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

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

Not listed.

Reproductive toxicity May damage fertility or the unborn child.

Specific target organ toxicity - single exposure May cause respiratory irritation.

Specific target organ toxicity - repeated exposure Not classified.

Aspiration hazard Not an aspiration hazard.

Chronic effects Prolonged inhalation may be harmful.

12. Ecological information

Ecotoxicity The 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.

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

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

1-Methyl-2-Pyrrolidinone	-0.54
Triethylamine	1.45

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 instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.

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).

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. Transport information

DOT

Not regulated as dangerous goods.

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.

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

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Triethylamine (CAS 121-44-8) Listed.

SARA 304 Emergency release notification

Not regulated.

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

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Immediate Hazard - Yes
Delayed Hazard - Yes
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical No

SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
1-Methyl-2-Pyrrolidinone	872-50-4	3 - < 5
Triethylamine	121-44-8	1 - < 3

Other federal regulations

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

Triethylamine (CAS 121-44-8)

Safe Drinking Water Act (SDWA) Not regulated.

US state regulations

US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)

Not listed.

US. Massachusetts RTK - Substance List

1-Methyl-2-Pyrrolidinone (CAS 872-50-4)
Triethylamine (CAS 121-44-8)

US. New Jersey Worker and Community Right-to-Know Act

1-Methyl-2-Pyrrolidinone (CAS 872-50-4)
Triethylamine (CAS 121-44-8)

US. Pennsylvania Worker and Community Right-to-Know Law

1-Methyl-2-Pyrrolidinone (CAS 872-50-4)
Triethylamine (CAS 121-44-8)

US. Rhode Island RTK

1-Methyl-2-Pyrrolidinone (CAS 872-50-4)
Triethylamine (CAS 121-44-8)

US. California Proposition 65

WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

US - California Proposition 65 - CRT: Listed date/Developmental toxin

1-Methyl-2-Pyrrolidinone (CAS 872-50-4) Listed: June 15, 2001

International Inventories

Country(s) or region	Inventory name	On inventory (yes/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 11-20-2014

Revision date 01-20-2015

Version # 02

HMIS® ratings
Health: 2*
Flammability: 0
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.

Revision Information
Hazard(s) identification: Disposal
Exposure controls/personal protection: Eye/face protection
Exposure controls/personal protection: Respiratory protection
Exposure controls/personal protection: Other
Physical & Chemical Properties: Multiple Properties
Toxicological Information: Toxicological Data
Regulatory Information: United States
GHS: Classification