SAFETY DATA SHEET



1. Identification

Product identifier	Pre-Game Concentrate		
Other means of identification			
SDS number	585N-02A		
Product code	HIL00452		
Recommended use	Floor Cleaner		
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 2A
Environmental hazards	Hazardous to the aquatic environment, acute hazard	Category 3
OSHA defined hazards	Not classified.	
Label elements		

Signal word	Warning
Hazard statement	Causes serious eye irritation. Harmful to aquatic life.
Precautionary statement	
Prevention	Wash thoroughly after handling. Avoid release to the environment. Wear eye protection/face protection.
Response	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			
Chemical name	Common name and synonyms	CAS number	%
Dipropylene Glycol Methyl Ethe	r	34590-94-8	5 - < 10
Methoxyisopropanol		107-98-2	5 - < 10
Other components below repor	table levels		80 - < 90
4. First-aid measures			
nhalation	Move to fresh air. Call a physician if symptom	s develop or persist.	
Skin contact	Wash off with soap and water. Get medical attention if irritation develops and persists.		id persists.
Eye contact	Immediately flush eyes with plenty of water fo present and easy to do. Continue rinsing. If ey	e irritation persists: Get medi	
ngestion	Rinse mouth. Get medical attention if symptor		
Most important symptoms/effects, acute and delayed	Severe eye irritation. Symptoms may include s vision.	stinging, tearing, redness, swe	elling, and blurred
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and trea Symptoms may be delayed.	at symptomatically. Keep victi	n under observation
General information	Ensure that medical personnel are aware of the protect themselves.	ne material(s) involved, and ta	ke precautions to
5. Fire-fighting measures			
Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carb	on dioxide (CO2).	
Jnsuitable extinguishing nedia	Do not use water jet as an extinguisher, as thi	s will spread the fire.	
Specific hazards arising from the chemical	During fire, gases hazardous to health may be	e formed.	
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full pr	otective clothing must be wor	n in case of fire.
Fire fighting equipment/instructions	Move containers from fire area if you can do s	o without risk.	
Specific methods	Use standard firefighting procedures and cons	sider the hazards of other invo	lved materials.
General fire hazards	No unusual fire or explosion hazards noted.		
6. Accidental release mea	sures		
Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep peo appropriate protective equipment and clothing or spilled material unless wearing appropriate Local authorities should be advised if significa protection, see section 8 of the SDS.	during clean-up. Do not touc protective clothing. Ensure a	h damaged containe dequate ventilation.
Methods and materials for	Prevent product from entering drains.		
containment and cleaning up	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 remove residual contamination.	(e.g. cloth, fleece). Clean surf	ace thoroughly to
Environmental precautions	Never return spills to original containers for re Avoid release to the environment. Inform appr environmental releases. Prevent further leaka drains, water courses or onto the ground.	opriate managerial or supervi	sory personnel of al

7. Handling and storage

Precautions for safe handling Avoid contact with eyes. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. Avoid release to the environment. Observe good industrial hygiene practices.

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 Components	Type	Value
Dipropylene Glycol Methyl Ether (CAS 34590-94-8)	PEL	600 mg/m3
		100 ppm
US. ACGIH Threshold Limi Components	t Values Type	Value
Dipropylene Glycol Methyl	STEL	150 ppm
Ether (CAS 34590-94-8)	T 14/4	100
Mathewsia an an an all (CAC	TWA	100 ppm
Methoxyisopropanol (CAS 107-98-2)	STEL	100 ppm
	TWA	50 ppm
US. NIOSH: Pocket Guide f	o Chemical Hazards	
Components	Туре	Value
Dipropylene Glycol Methyl Ether (CAS 34590-94-8)	STEL	900 mg/m3
, , , , , , , , , , , , , , , , , , ,		150 ppm
	TWA	600 mg/m3
		100 ppm
Methoxyisopropanol (CAS 107-98-2)	STEL	540 mg/m3
,		150 ppm
	TWA	360 mg/m3
		100 ppm
logical limit values	No biological exposure limits	s noted for the ingredient(s).
osure guidelines		
US - California OELs: Skin	•	
Dipropylene Glycol Meth Methoxyisopropanol (CA US - Tennessee OELs: Ski		Can be absorbed through the skin. Can be absorbed through the skin.
Dipropylene Glycol Meth US ACGIH Threshold Limit	yl Ether (CAS 34590-94-8) Values: Skin designation	Can be absorbed through the skin.
	yl Ether (CAS 34590-94-8) Chemical Hazards: Skin desi	Danger of cutaneous absorption ignation
	yl Ether (CAS 34590-94-8) for Air Contaminants (29 CFI	Can be absorbed through the skin. R 1910.1000)
	yl Ether (CAS 34590-94-8)	Can be absorbed through the skin.
propriate engineering trols	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.	
vidual protection measures	, such as personal protective	
Eye/face protection	Avoid contact with eyes. Where splashing of concentrate is a concern, use protective glasses wi side shield	
Skin protection		
Hand protection	Use protective gloves when dealing with the concentrate.	

Other	None normally required. If unable to avoid prolonged or repeated contact with skin, wear impervious clothing.
Respiratory protection	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. Not normally needed.
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

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Appearance	Clear, light blue liquid
Physical state	Liquid.
Form	Liquid.
Color	Light blue
Odor	Non-objectional odor.
Odor threshold	Not available.
рН	5.25 - 8
Melting point/freezing point	Not applicable / Not available
Initial boiling point and boiling range	207 °F (97.22 °C)
Flash point	> 200.0 °F (> 93.3 °C) Tag Closed Cup
Evaporation rate	< 1 Ethyl ether=1
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or expl	
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	17.17
Vapor density	1.3235 Air=1
Relative density	1.003 at 77°F
Solubility(ies)	
Solubility (water)	100 %
Partition coefficient	Not available.
(n-octanol/water)	
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Density	8.35 lb/gal
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.
Percent volatile	> 99 %
VOC	3.97 % 1:4 Dilution 19.83 % Concentrate

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	Avoid temperatures exceeding the flash point. Contact with incompatible materials.
Incompatible materials	Strong acids. Strong oxidizing agents.
Hazardous decomposition products	No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation	Prolonged inhalation may be harmful.
Skin contact	No adverse effects due to skin contact are expected.
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.

Information on toxicological effects

Acute toxicity		
Product	Species	Test Results
Pre-Game Concentrate	-	
<u>Acute</u>		
Dermal LD50	Rabbit	56 g/kg
Inhalation	Det	
LC50	Rat	554 mg/l, 4 Hours
Oral	Det	
LD50	Rat	28 g/kg
Components	Species	Test Results
Dipropylene Glycol Methyl Ether (CAS 34590-94-8)	
<u>Acute</u>		
Dermal LD50	Rabbit	9.5 g/kg
	Παροιί	a.a yiry
Oral LD50	Rat	5.35 g/kg
Methoxyisopropanol (CAS 107-98		0.00 g/kg
Acute	-2)	
Dermal		
LD50	Rabbit	13 g/kg
Inhalation	Rabbit	io grig
LC50	Rat	54.6 mg/l, 4 Hours
Oral		
LD50	Rat	5.71 g/kg
Skin corrosion/irritation	Prolonged skin contact may cause ten	
Serious eye damage/eye irritation	Causes serious eye irritation.	
Respiratory or skin sensitization	n	
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	Not classifiable as to carcinogenicity to humans.	
	Evaluation of Carcinogenicity	
	ed Substances (29 CFR 1910.1001-105	3)
	ogram (NTP) Report on Carcinogens	
Reproductive toxicity	This 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

Ecotoxicity	Harmful to aquatic life.		
Product		Species	Test Results
Pre-Game Concentrate			
Aquatic			
Crustacea	EC50	Daphnia	579.2982 mg/l, 48 hours estimated
Fish	LC50	Fish	762.8829 mg/l, 96 hours estimated
Persistence and degradability	No data is available on the degradability of this product.		
Bioaccumulative potential			
Partition coefficient n-octa Methoxyisopropanol	nol / water (log	Kow) -0.49	
Mobility in soil	No data available.		
Other adverse effects	The product contains volatile organic compounds which have a photochemical ozone creation potential.		

13. Disposal considerations

Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. 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).	
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.

ΙΑΤΑ

Not regulated as dangerous goods.

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
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This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

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

categories

Classified hazard 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)

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.

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

Methoxyisopropanol (CAS 107-98-2)

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 Revision date	01-12-2017 04-19-2021
Version #	03
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.

Product and Company Identification: Alternate Trade Names Hazard(s) identification: Disposal Composition/information on ingredients: Component information Exposure controls/personal protection: Thermal hazards Physical & Chemical Properties: Multiple Properties Physical and chemical properties: Odor Stability and reactivity: Conditions to avoid Regulatory information: California Proposition 65 Regulatory information: Safe Drinking Water Act (SDWA) Regulatory information: Toxic Substances Control Act (TSCA) GHS: Classification