

22-82822

#828

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 (1160A)**Manufacturer's Name:** HILLYARD INDUSTRIES**Product Name:** ARSENAL GREEN SELECT
DEGREASER CLEANER**Address:** 302 North Fourth Street
St. Joseph, MO 64501**Date Prepared:** May 9, 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	---
Alkyl polyglucoside mixture	68515-73-1 & 110615-47-9	not established	not established	N/A	---
Sodium Citrate	68-04-2	not established	not established	N/A	

VOC Concentrate = 46.8 g/l.; VOC (concentrate) 0.5%; VOC (Min. dilution) 0.04%

SECTION III – PHYSICAL / CHEMICAL CHARACTERISTICS

Boiling Point: 208°F **Specific Gravity (H₂O = 1):** 25°C = 1.05 & 39°C = 1.05
Vapor Pressure (mm Hg.): 17.5 **Percent Volatile by Volume (%):** 88.97
Vapor Density (AIR = 1): 0.6 **Evaporation Rate (ethyl ether = 1):** slower than 1
Solubility in Water: complete **Appearance and Odor:** Amber-brown liquid; citrus odor
pH (concentrate) = 7.1

SECTION IV – FIRE AND EXPLOSION HAZARD DATA**Flash point:** None to 200°F (T.C.C.) **Flammable Limits:** LEL = N/A UEL = N/A**Extinguishing Media:** Water spray, Carbon Dioxide, Dry Chemical, Foam**Special Fire Fighting Procedures:** Wear a self-contained breathing apparatus, goggles and nitrile or rubber gloves with concentrate.**Unusual Fire and Explosion Hazards:** None known to manufacturer.**SECTION V – PHYSICAL HAZARDS****Stability:** Stable **Conditions to Avoid:** None known to Hillyard**Incompatibility (Materials to Avoid):** Strong oxidizing materials, strong acids and strong bases.**Hazardous Decomposition Products or Byproducts:** As with any organic material, combustion will produce carbon dioxide and probably carbon monoxide.**Hazardous Polymerization:** Will not occur **Conditions to Avoid:** None known**SECTION VI – HEALTH HAZARD DATA****Routes of entry:** Inhalation? no Eye? yes Skin? no Ingestion? no**HEALTH HAZARDS (1. Acute and 2. Chronic)**

1. When tested per the Federal Hazardous Substance Act method 16 CFR 1500 concentrated product was not a skin irritant; per the FHSA method 16 CFR 1500 the concentrated product was an eye irritant. The concentrated product was not acutely toxic (oral) to rats at 5 gm/kg. per upper limit test. Acute inhalation = 1 hour upper limit test was not able to test because product foamed too much to dose by a mist.

2. None known to Hillyard.

SECTION VI – HEALTH HAZARD DATA continued

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: Overexposure may cause drowsiness, headache and uncoordination.

Medical Conditions Generally Aggravated by Exposure: None known by manufacturer.

Emergency and First Aid Procedures: Eye and skin contact: Flush with plenty of water for 15 minutes; remove contact lenses and flush eyes again with water. If eye irritation persists get medical attention. If swallowed: Call a physician, hospital emergency room or poison control center immediately; induce vomiting.

SECTION VII – PRECAUTIONS FOR SAFE HANDLING AND USE

Steps To Be Taken In Case Material Is Released Or Spilled: Absorb large spills with floor dry material. Small spills: Flush with water and pick up with mop.

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

Precautions To Be Taken In Handling And Storing: Keep container closed when not in use.

Other Precautions: Do not take internally.

SECTION VIII – CONTROL MEASURES

Respiratory Protection (Specify Type): None required.

Ventilation: Follow good engineering practices for public areas.

Local Exhaust = N/A Mechanical (General) = Recommended Special = N/A Other = N/A

Protective Gloves: N/A Eye Protection: Goggles only where splashing of concentrate is a concern.

Other Protective Clothing or Equipment: N/A

Work / Hygienic Practices: Wash thoroughly after handling.

SECTION IX – TRANSPORTATION INFORMATION

Applicable regulations: CFR = No IMCO = No IATA = No.

Proper shipping name for air, foreign water for highway: Cleaning compound

UN No.: not applicable for highway Limited Qty.: not applicable Hazard class: not applicable for highway

Labels required: not required for highway DOT Exception: not applicable

EPA Hazardous waste characteristics:

Ignitability = Not applicable; Corrosivity = Not applicable; Reactivity = Not applicable.

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