MSDS - Material Safety Data Sheet

Product Name: Harvey Heat Arctic Grade

MSDS No.: 016900

Part Numbers Covered:

016900
016900-ND
016905
016905-ND
016910

1. Basic Information:

Manufacturer: William H. Harvey Company

Address: 4334 South 67th Street

City, ST Zip: Omaha, NE 68117-1019

Emergency Contact: CHEMTREC

Emergency Telephone Number: (800)424-9300

Contact: Information Telephone Number

Information Telephone Number: (800)228-9681

Last Update: 10/26/2006 **Expiration Date:**

Chemical State: [X] Liquid [ ] Gas [ ] Solid

Chemical Type: [ ] Pure [X] Mixture

0	Health
1	Flammability
0	Reactivity
X	Pers. Protection

2. Ingredients:

[ ] **Trade Secret**

CAS No.	Chemical Name	% Range	EHS	NTP	IARC	SUB Z	SARA 313	OSHA PEL	ACGIH TLV	Other Limits
7758-11-4	Dipotassium Phosphate	1.0 -2.0						NE	NE	NI
57-55-6	Propylene Glycol	95.0 - 97.0						NE	NE	NI

3. Hazardous Identification:

Hazard Category:

[ ] Acute [ ] Chronic [ ] Fire [ ] Pressure [ ] Reactive

Hazardous Identification Information:

PHYSICAL HAZARDS:
Aqueous solutions may produce flammable vapors.
Slightly combustible liquid.

ACUTE HEALTH EFFECTS (Short Term):
No inhalation hazard identified from data available;
Slight eye irritant;
No ingestion hazard identified from data available;
No skin irritation hazard identified from data available;
No skin irritation hazard identified from data available;

CHRONIC HEALTH EFFECTS:
No chronic health effects are expected from anticipated conditions of normal use of this material unless aeroso is generated.

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4. First Aid Measures:

Route(s) of Entry:

Eye Contact, Skin Contact, Inhalation, Ingestion.

Health Hazards (Acute and Chronic):

Not expected to present an acute health hazard upon short term exposure.

No chronic health effects are expected from anticipated conditions of normal use of this material unless aeroso is generated.

Signs and Symptoms:

INHALATION:
Not a primary route. No significant signs or symptoms indicative of any adverse health hazard are expected to occur as a result of inhalation exposure.

EYE CONTACT:
Primary route. May cause minor eye irritation.

SKIN ABSORPTION:
Not a primary route. No significant signs or symptoms indicative of any health hazard are expected to occur as a result of skin absorption exposure.

SKIN IRRITATION:
Not a primary route. No significant signs or symptoms indicative of any health hazard are expected to occur as a result of skin skin exposure.

INGESTION:
Not a primary route. No significant signs or symptoms indicative of any health hazard are expected to occur as a result of ingestion.

Medical Conditions Generally Aggravated by Exposure:

This material or its emissions may aggravate pre-existing eye disease.

Emergency and First Aid Procedures:

EMERGENCY FIRST AID
Call toll free: 1-800-740-5015

INHALATION:
Not expected to present a significant inhalation hazard under anticipated conditions of normal use. If overcome by vapors, remove victim to fresh air and give oxygen or artificial respiration if needed. Get immediate medical attention.

EYE CONTACT:
In case of eye contact, immediately flush with plenty of water for 5 minutes. Remove contacts if present and continue flushing with water while holding eyelids open with thumb and index finger for 15 minutes. Seek medical attention if irritation develops or persists.

SKIN CONTACT:
Not expected to present a significant skin hazard under anticipated conditions of normal use. Wash off skin with clean water and soap.

INGESTION:
Not expected to present a significant ingestion hazard under anticipated conditions of normal use. If large amounts are ingested, induce vomiting and get immediate medical attention.

Other Health Warnings:

NI

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5. Fire Fighting Measures:

Flash Point: ~ 214º F **Lower Explosive Limit:** ~ 2.4 **Upper Explosive Limit:** ~ 17.4

F.P. Method: PMCC

Fire Extinguishing Media: Carbon dioxide, dry chemical, alcohol type foam, water spray, water fog.

Special Fire Fighting Procedures:

Prevent human exposure to fire, fumes, smoke, and products of combustion. Evacuate nonessential personnel. Liquid may form slippery film. Firefighters should wear full face, self contained breathing apparatus and impervious protective clothing. Water or foam may cause frothing. Use water to cool containers exposed to fire.
Notify authorities if liquid enters sewers or public waters.

Unusual Fire and Explosion:

None known.

6. Accidental Release Measures:

Steps to be Taken in Case Material is Released or Spilled:

Prevent flow to sewers and public waters as it may contaminate said water. Restrict water usage to prevent slip/fall hazard. Soak up smal spill with inert solids. Dike and recover large land spills. Use suitable disposal containers. On water, material is soluble and may float or sink. May biodegrade Contain/collect rapidly to minimize dispersion. Notify appropriate authorities if product enters any waterway.

7. Handling and Storage:

Precautions to be Taken:

Wear protective equipment when handling. Use only with adequate ventilation. Do not get in eyes. Do not breathe vapor or mist. Do not swallow.

Keep container closed when not in use. Store in a cool dry place. Store in accordance with nfpa requirements. Keep out of reach of children

Other Precautions:

Do not reuse product containers and dispose of in accordance with all federal, state and local regulation. Since emptied container contains product reisdues (vapor or liquid), all labeled hazard precautions must be observed.

8. Exposure Controls/Personal Protection:

Ventilation Requirements:

Adequate ventilation is required to minimize exposure or to maintain exposure levels below OSHA/ACGIH requirements.

Personal Protective Equipment:

Eyes: Chemical goggles, always wear eye protection when working with chemicals. Do not wear contact lenses when working with chemicals

Skin: Clean body covering clothing, impervious gloves

Inhalation: If exposure limits are exceeded, or if exposure may occur, use a NIOSH/MSHA respirator approved for your conditions of exposure. Refer to the most recent NIOSH publications concerning chemical hazards, or consult your safety equipment supplier. Respiratory protection programs must be in compliance with OSHA requirements in 29 CFR 1910.134. For emergencies, a NIOSH/MSHA approved positive pressure breathing apparatus should be readily available.

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9. Physical and Chemical Properties:

Boiling Point: ~ 320º F

Melting Point: NA

Evaporation Rate (Butyl Acetate = 1): <.1

Vapor Pressure (mm Hg.): ~.22 @ 68ºF

Specific Gravity (H20 = 1): 1.03400

Vapor Density (AIR = 1): ~2.6

Solubility In Water: Complete

Appearance and Odor: Clear (ND) or Opal Yellow Liquid / Almost Odorless

Other Information: NI

10. Stability and Reactivity:

Stability:

Stable

Incompatibility (Materials to Avoid):

Strong alkalis, strong oxidizing agents.

Conditions To Avoid: Heat, sparks, open flame.

Decomposition/By Products:

Carbon monoxide, carbon dioxide, miscellaneous organic compounds, some possibly toxic

Hazardous Polymerization:

Not expected to occur.

11. Toxicological Information:

SKIN: Based largely or completely on information for similar material(s), i.e., propylene glycol, LD50 for skin absorption in rabbts is >10,000 mg/kg.

INGESTION: Based largely or completely on information for similar material(s), i.e., propylene glycol., the oral LD50 for rats is 20,000 - 34,000 mg/kg.

MUTAGENICITY: Based largely or completely on information for similar material(s), i.e., propylene glycol., in-vitro mutagenicity studies were negative, and animal mutagenicity studies were negative.

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12. Ecological Information:

MOVEMENT & PARTITIONING:

Based largely or completely on information for similar material(s), i.e., propylene glycol. Bioconcentration potential is low (BCF less than 100 or Log Pow less than 3). Log octanoll water partition coefficient (log Pow) is -0.92. Henry Law Constant (H) is 1.2E-8 atm.m3/mole.

DEGRADATION & TRANSFORMATION:

Based largely or completely on information for similar material(s) i.e., propylene glycol. Biodegradation under aerobic static laboratory conditions is high (BOD20 OR BOD28/ThOD greater than 40%). Biodegradation is expected to be achievable in a secondary wastewater treatment plant. 5-day biochemical oxygen demand (BOD5) is 1.16 p/p. 200-day biochemical oxygen demand (BOD20) is 1.45 pip. theoretical oxygen demand (THOD) is calculated to be 1.68 pip. Inhibitory concentration CICSO) in OECD Activated Sludge Respiration Inhibition Test (OECD Test No. 209) is greater than 1 grn/L. Degradation is expected in the atmospheric environment within minutes to hours.

ECOTOXICOLOGY:

Based largely or completely on information for similar material (s), i.e., propylene glycol. Material is practically non-toxic to aquatic organisms on an acute basis (LC50 greater than 100 mg/L in most sensitive species).

Acute LC50 for fathead minnow (Pimephales promelas) is 4,600-54900 mg/L
Acute LC50 for guppy (Poecilia reticulata) is greater than 10000 mg/L,
Acute LCSO for water flea Daphnia magna is 4850-34400 mgIL
Acute LC50 for rainbow trout (Oncorhynchus mykiss) is 44mLIL (about 44000 mgIL)

13. Disposal Considerations:

Material that cannot be used or chemically reprocessed should be disposed of at an approved facility in accordance with any applicable regulation under the Resource Conservation and Recovery Act (RCRA). Dispose of material in accordance with all federal, state and local regulations. Local regulations may be more stringent than federal or state.

14. Transport Information:

This product is not regualted by DOT.
This product is not regulated by IMDG.
This product is not regulated by IATA.

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15. Regulatory Information:

Federal
Toxic Substance Control Act (TSCA)
The following is the Toxic Substances Control Act (TSCA) Chemical Substance Inventory Status of the components of this material listed in Section 2 - Ingredients:

CHEMICAL	CAS NO.	STATUS
Propylene Glycol	57-55-6	Listed - Non Confidential
Dipotassium Phospate	7758-11-4	Listed - Non Confidential

Superfund Amendments and Reauthurization of 1988 (SARA), Title III
-Section 302/304 Requires emergency planning based on 'Threshold Planning Quantities' (TPQs), and release reporting based on Reportable Quantities (RQs) of 'Extremely Hazardous Substances' (EHS) listed in Appendix A of40 CFR 355.
There are no components of this material with known CAS numbers which are on the EHS list.

-Section 311 & 312 Based upon available infmnation, this material and/or components are not classified as any of the specific health and/or physical hazards defined by Section 311 & 312.

-Section 313 This material does not contain any chemical components with known CAS numbers that exceed the De Minimis reporting levels established by SARA Title IIJ, Section 313 and 40 CFR 372.

Comprehensive Environmental Response, Compensation and Liability Act (CERCLA)
No chemicals in this material with known CAS numbers are subject to the reporting requirements ofCERCLA.

OSHA Regulations
'Chemical-specific' U.S. Occupational Safsty and Health Administration (OSHA) regulations (1910.1002 to 1910.1050) presented under 29 U.S. Code of Federal Regulations (CFR) 1910 do not apply to this material or its components.

Other EPA Regulations
No additional information available

Department of Transportation (DOT)
Other than the normal shipping instructions and infirmation given in this MSDS, there is no other specific U.S. Department of Transportation (DOT) regulations governing the shipment of this material.

State Regulations:

California Safe Drinking Water and Toxic Enforcement Act of 1988 - Proposition 65
This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins under Califirnia Proposition 65 at levels which would be subject to the proposition.

California South Coast Air Quality Management District (SCAQMD) Rule 443.1 (VOC's)
A Volatile Organic Compound (VOe) is any volatile compound of carbon excluding methane, carbon monoxide, carbonic acid, metallic carbides or carbonates, ammonium carbonate, 1, I, l-trichloroethane, methylene chloride, (FC-23), (CFC-I 13), (CFC- 12), (CFC-II), (CFC-22), (CFC-114), and (CFC-l 15).
By this definition, this is a VOC material.

Massachusetts Right to Know Substances List (MSL) [105 CMR 670.000]
Extraordinarily Hazardous Substances (MSL-EHS) must be identified when present in materials at levels greater than state specified criterion. The criterion is>=O.OOOI%. Hazardous Substances (MSL-HS) on the MSL must be identified when present in materials at greater than the state specified criterion. The criterion is>= I %. Components with CAS numbers present in this material, at levels specified in Section 2 - Ingredients, do not require reporting under the statute.

New Jersey Registration
The New Jersey, Registry 3, Registration law does not apply to this material, as none of its components are trade secrets.

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Pennsylvania Right to Know Hazardous Substance List
Hazardous Substances (P A-HS) must be identified when present in materials at levels greater than the state specified criterion. The criterion is >= 1 %. Components with CAS numbers in this material at a level which could require reporting under the statute are:
CHEMICAL CAS NO.
Propylene Glycol 57-55-6
Special Hazardous Substances (P A-SHS) must be identified when present in materials at levels greater than the state specified criterion. The criterion is >= 0.01%. Environmental Hazards (pA-BI·I) must be identified when present in material at levels greater than the state specified criterion. The criterion is >= 0.01 %. Components with CAS numbers in this material, at levels specified in Section 2 - Ingredients, do not require reporting under the statute.

Regulatory Advisory :
If you reformulate or further process this material, you should consider re-evaluation of the regulatory status of the components listed in this sheet.

16. Other Information:

ABBREVIATIONS:

~ = Approximately
< = Less Than
> = Greater Than
ACGIH = American Conference of Governmental Industrial Hygienists
AIHA = American Industrial Hygiene Association
C = Degrees Celcius
Deg = Degrees
EPA = Environmental Protection Agency
F = Degrees Farenheit
HMIS = Hazardous Materials Information System
IARC = International Agency for Research on Cancer
NA = Not Applicable
NDA = No Data Available
NE = Not Established
NFPA = National Fire Protection Association

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