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* Methyl Cellulose *

12736-1005

HERCULES

MATERIAL SAFETY DATA SHEET

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MSDS NO.: 755 2000 0010 VER: 08
SAP CODE: 100MC1032C00000002
ISSUE DATE: 10/01/2003
SUPERSEDES: 755 2000 0010 VER: 07

1 PRODUCT IDENTIFICATION

PRODUCT NAME CULMINAL® METHYLCELLULOSE
CHEMICAL/COMMON NAME methylcellulose
CAS NUMBER 9004-67-5

2 COMPOSITION / INFORMATION ON INGREDIENTS

This product is considered hazardous according to the OSHA Hazard Communication Standard 29CFR1910.1200 due to flammable dust potential.

3 HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW
WARNING!

Static charges generated by emptying package in or near flammable vapors may cause flash fire.
May form flammable dust-air mixtures.
May cause eye irritation by mechanical abrasion.
May cause skin irritation by mechanical abrasion.
Inhalation of dust may cause respiratory tract irritation.
Surfaces subject to spills may become slippery.

Refer to Section 5 for Hazardous Combustion Products, and Section 10 for Hazardous Decomposition/Hazardous Polymerization Products.

4 FIRST AID MEASURES

SKIN

Wash with soap and water. Get medical attention if irritation develops or persists.

EYE

Remove contact lenses. Hold eyelids apart. Immediately flush eyes with plenty of low-pressure water for at least 15 minutes. Get medical attention if irritation persists.

INHALATION

Remove to fresh air. Get medical attention if nasal, throat or lung irritation develops.

INGESTION

No adverse health effects are expected from accidental ingestion of small amounts of this product. For ingestion of large amounts: if conscious, drink one to two glasses of water (8-16 oz.). Do not induce vomiting. Get immediate medical attention. Never give anything by mouth to an unconscious person.

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5 FIRE FIGHTING MEASURES**EXTINGUISHING MEDIA**

Water spray, dry chemical, foam, carbon dioxide or clean extinguishing agents may be used on fires involving this product.

FIRE FIGHTING PROCEDURES

Wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH approved (or equivalent) and full protective gear when fighting fires involving this product.

CONDITIONS TO AVOID

None known.

HAZARDOUS COMBUSTION PRODUCTS

Combustion products include: carbon monoxide, carbon dioxide and smoke

6 ACCIDENTAL RELEASE MEASURES

Ventilate area. Avoid dust formation. Clean up spills immediately. If product is not contaminated, scoop into clean containers for use. If product is contaminated, scoop into containers, and dispose appropriately. In case of accidental spill or release, refer to Section 8, Personal Protective Equipment and General Hygiene Practices.

7 HANDLING & STORAGE**GENERAL MEASURES**

Ground all equipment.

Blanket vessel with inert gas when emptying bags where flammable vapors may be present.

Ground operator and pour material slowly into conductive, grounded chute.

For large bags (1000 lbs or greater) a ground cable **MUST** be attached to the bag ground connection.

Store in a cool, dry, well-ventilated area at approximately 20° C (68° F).

Keep container closed when not in use.

MATERIALS OR CONDITIONS TO AVOID

Avoid conditions that generate dust; product may form flammable dust-air mixtures.

Avoid emptying package in or near flammable vapors; static charges may cause flash fire.

Keep away from heat, flame, sparks and other ignition sources.

8 EXPOSURE CONTROLS / PERSONAL PROTECTION**WORK PRACTICES & ENGINEERING CONTROLS**

Eyewash fountains and safety showers should be easily accessible.

Provide adequate ventilation.

If upper respiratory tract irritation occurs, use an approved dust/mist respirator to minimize exposure.

Keep floors clean and dry. Clean up spills immediately.

GENERAL HYGIENIC PRACTICES

Avoid contact with eyes, skin, and clothing.

Avoid breathing dust.

Handle in areas with adequate ventilation.

Avoid contamination of food, beverages, or smoking materials.

Wash thoroughly after handling, and before eating, drinking or smoking.

Remove contaminated clothing promptly and clean thoroughly before reuse.

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RECOMMENDED EXPOSURE LIMITS

No exposure limit has been established. This product may irritate the upper respiratory tract if used under conditions that create dust or mist particulates.

PERSONAL PROTECTIVE EQUIPMENT

Safety glasses
 Impervious gloves
 Appropriate protective clothing
 Wear approved dust/mist respirator if user operations create dust/mist that causes irritation.

PROTECTIVE MEASURES DURING REPAIR AND MAINTENANCE

Eliminate ignition sources and prevent build-up of static electrical charges.
 Completely isolate and thoroughly clean all equipment, piping, or vessels before beginning maintenance or repairs.
 Keep area clean.

9 PHYSICAL & CHEMICAL PROPERTIES

PHYSICAL STATE:	powder
COLOR:	white to off-white
ODOR:	odorless
Specific Gravity	0.25
Percent Volatile	negligible at 68° F
Solubility In Water	limited by viscosity
pH Value	5 - 7 (1% solution)

10 STABILITY & REACTIVITY**HAZARDOUS DECOMPOSITION PRODUCTS**

None known.

HAZARDOUS POLYMERIZATION

Not anticipated under normal or recommended handling and storage conditions.

GENERAL STABILITY CONSIDERATIONS

Stable under recommended handling and storage conditions.

INCOMPATIBLE MATERIALS

Incompatible with: acids, oxidizing agents, alkalis, strong sunlight or ultraviolet light and free-radicals

11 TOXICOLOGICAL INFORMATION**CARCINOGENICITY INFORMATION**

Not listed as a carcinogen by NTP. Not regulated as a carcinogen by OSHA. Not evaluated by IARC.

REPORTED HUMAN EFFECTS

Laxative and constipating effects from ingestion of 1 gram or more. No skin irritation reported with application of 100% of product. Due to the physical nature of this material, may cause eye, skin and respiratory irritation.

REPORTED ANIMAL EFFECTS

Non-irritating to slightly irritating to rabbit eyes at 1-2% aqueous solutions. Non-irritating to slightly irritating to rabbit skin at 2% aqueous solution. No toxic effects reported in 90-day or lifetime rat feeding studies with 5% dietary concentrations; no toxic effects in 90-day dog feeding studies at 10% dietary concentrations. No reproductive effects in rats, mice or hamsters; no teratogenic effects in mice or hamsters.

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MUTAGENICITY/GENOTOXICITY INFORMATION

PRODUCT/SIMILAR PRODUCT - Not mutagenic in IN VITRO and IN VIVO studies.

12 ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION

No ecological studies have been carried out on this product.

13 DISPOSAL CONSIDERATIONS

WASTE DISPOSAL

Landfilling in a permitted solid or hazardous waste facility is recommended. Handling, transportation, and disposal of material should be conducted in a manner to prevent a nuisance dust hazard. Fully containerize the material before handling, and protect from exposure to the outdoors. Ensure there are no restrictions on disposing of bulk or semi-bulk quantities of waste material. Disposal should be in accordance with all Federal, State and local regulations.

14 TRANSPORT INFORMATION

GENERAL

This product is not subject to DOT regulations.

For specific information regarding transportation of this product, please call the Hercules representative at (905) 279-3338.

15 REGULATORY INFORMATION

CHEMICAL INVENTORIES

U.S. TSCA: The components of this product are included on the TSCA Inventory.
 Canadian CEPA : Included on DSL Inventory.
 Korean KECL : Included on KECL Inventory.

SARA TITLE III - SECTIONS 302/304

This product is not an Extremely Hazardous Substance subject to reporting under 40CFR355.

SARA TITLE III - SECTION 311 AND 312

NHH: Not a health hazard
 HC-3: Fire hazard

SARA TITLE III - SECTION 313

This product does not contain any chemicals subject to reporting under Section 313 of Title III of the Superfund Amendments and Reauthorization Act and 40CFR372.

CERCLA

This product does not contain any chemicals subject to reporting as a CERCLA Hazardous Substance under 40CFR302.4.

RCRA

This product is not a hazardous waste as listed in 40CFR261.33. It does not exhibit any of the hazardous characteristics listed in 40CFR261, Subpart C.

16 OTHER INFORMATION

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HMIS RATINGS:

Health 1 Slight Hazard
 Flammability 1 Slight Hazard
 Reactivity 0 Minimal Hazard

LIST OF ACRONYMS

ACGIH: American Conferences of Governmental Industrial Hygienists
 AIHA WEEL: American Industrial Hygienists Association-Workplace Environmental Exposure Level
 ANSI: American National Standards Institute
 CASRN: Chemical Abstracts Service Registry Number
 CEPA: Canadian Environmental Protection Act
 CERCLA: Comprehensive Emergency Response, Compensation and Liability Act
 DSL: Domestic Substances List (Canadian)
 HMIS: Hazardous Materials Identification System
 IARC: International Agency for Research on Cancer
 NDSL: Non-Domestic Substances List (Canadian)
 NTP: National Toxicology Program
 OSHA: Occupational Safety and Health Administration
 PEL: Permissible Exposure Limit (OSHA)
 RCRA: Resource Conservation and Recovery Act
 RQ: Reportable Quantity
 SARA: Superfund Amendment Reauthorization Act
 STEL: Short-Term Exposure Limit
 TLV: Threshold Limit Values (registered trademark of ACGIH)
 TPQ: Threshold Planning Quantity
 TSCA: Toxic Substance Control Act
 TWA: Time Weighted Average

DISCLAIMER

The information and recommendations contained in this Material Safety Data Sheet have been compiled from sources believed to be reliable and to represent the most reasonable current opinion on the subject when the MSDS was prepared. No warranty, guaranty or representation is made as to the correctness or sufficiency of the information. The user of this product must decide what safety measures are necessary to safely use this product, either alone or in combination with other products, and determine its environmental regulatory compliance obligations under any applicable federal or state laws.

MSDS STATUS

Effective Date	MSDS Revision(s)	Supersedes Date
10/01/2003	Sections 2, 6 and 8	10/06/1999

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