

MATERIAL SAFETY DATA SHEET

MSDS NO.: 300 0080 0000

VER: 10

ISSUE DATE: 09/09/98

SUPERSEDES 300 0080 0000 VER: 9

Hercules Incorporated Hercules Plaza 1313 North Market Street Wilmington, DE 19894 (302) 594-5000 24 HOURS

HMIS RATINGS HEALTH: FLAMMABILITY: 1 REACTIVITY:

PRODUCT IDENTIFICATION

PRODUCT NAME

AQUALON® CELLULOSE GUM (CMC PURIFIED)

CHEMICAL DESCRIPTION

sodium carboxymethylcellulose; cellulose, carboxymethyl ether, sodium salt

CAS NUMBER

9004-32-4

COMPOSITION / INFORMATION ON INGREDIENTS

This product is not a health hazard according to the OSHA Hazard Communication Standard 29CFR1910.1200.

If this product is used in a manner that could generate particulates (dust), refer to MSDS Section 8, Recommended Exposure Limits and Personal Protective Equipment.

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.

Inhalation of dust may cause respiratory tract irritation.

May cause mild eve irritation.

Surfaces subject to spills can become slippery.

POTENTIAL HEALTH EFFECTS

Repeated ingestion may cause an allergic reaction in suspectible individuals.

Repeated or prolonged skin contact may cause allergic dermatitis in susceptible individuals.

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

FIRST AID MEASURES

SKIN

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

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 cough or other symptoms develop.

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INGESTION

If conscious, drink large quantities of water. Do not induce vomiting. Get medical attention if symptoms persist. NEVER give anything by mouth to an unconscious person.

5 FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA

Water spray, dry chemical, foam, carbon dioxide or halon 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

Avoid conditions that generate dust. This product may form flammable dust-air mixtures. Avoid emptying package in or near flammable vapors. Static charges may cause flash fire.

HAZARDOUS COMBUSTION PRODUCTS

If heated to decomposition, the following substances may be formed: carbon monoxide, carbon dioxide, and smoke.

AUTOIGNITION TEMPERATURE

> 698 F

6 ACCIDENTAL RELEASE MEASURES

Vacuum or sweep up material for use or disposal. Avoid wetting spills, as surfaces can become very slippery. Apply absorbent to wet spills and sweep up for disposal. After removal, flush contaminated area thoroughly with water. 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.

Keep container closed when not in use.

MATERIALS OR CONDITIONS TO AVOID

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

Do not store in direct sunlight or expose to UV radiation.

8 EXPOSURE CONTROLS / PERSONAL PROTECTION

WORK PRACTICES & ENGINEERING CONTROLS

Keep away from ignition sources. May form flammable dust-air mixtures.

Eyewash fountains and safety showers should be easily accessible.

Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Discharge from the ventilation system should comply with applicable air pollution control regulations.

Keep floors clean and dry. Clean up spills immediately.

GENERAL HYGIENIC PRACTICES

Avoid contact with eyes, skin, and clothing.

Avoid breathing dust.

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

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RECOMMENDED EXPOSURE LIMITS

PARTICULATES (dust): If used under conditions that generate particulates (dust), the ACGIH TLV-TWA of 3 mg/m3 respirable fraction (10 mg/m3 total) should be observed.

PERSONAL PROTECTIVE EQUIPMENT

Safety glasses

Impervious gloves

Appropriate respiratory protection is required when exposure to airborne contaminants may exceed acceptable limits. Respirators should be selected and used in accordance with OSHA, Subpart I (29 CFR 1910.134) and manufacturers recommendations.

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. Product will burn.

9 PHYSICAL & CHEMICAL PROPERTIES

APPEARANCE: granular powder

COLOR: white to off-white

ODOR: odorless

Specific Gravity 1.59

Percent Volatile negligible at 20 C
Solubility In Water limited by viscosity

Browning Temperature 440 F

Moisture Content,(Wt.)% 8.0 max. (as packed)

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

None known

11 TOXICOLOGICAL INFORMATION

CARCINOGENICITY INFORMATION

PRODUCT/SIMILAR PRODUCT - Not listed as a carcinogen by NTP. Not regulated as a carcinogen by OSHA. Not evaluated by IARC.

REPORTED HUMAN EFFECTS

PRODUCT/SIMILAR PRODUCT - A single case of allergic dermatitis has been reported after repeated long-term skin contact. A single case of anaphylaxis was reported after ingestion.

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REPORTED ANIMAL EFFECTS

PRODUCT/SIMILAR PRODUCT - Reported to cause rabbit eye irritation after exposure to dust. Low order of oral toxicity based on acute and chronic studies in several species.

MUTAGENICITY/GENOTOXICITY INFORMATION

PRODUCT/SIMILAR PRODUCT - Not mutagenic in Ames assay or chromosome aberration test.

12 ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION

PRODUCT/SIMILAR PRODUCT - Acute aquatic 96-hour static LC50 value falls within the practically nontoxic range of 100-1000 mg/L, according to the U.S.Fish and Wildlife criteria. Rainbow trout and Bluegill sunfish were the species tested.

BIODEGRADABILITY

This product is biodegradable.

13 DISPOSAL CONSIDERATIONS

WASTE DISPOSAL

Incineration in accordance with applicable regulations is the recommended disposal method. Landfilling in a permitted solid or hazardous waste facility, meeting technical regulatory requirements, is a suitable alternative. Wastewater containing this product can be considered for treatment in an acclimated biological treatment system.

14 TRANSPORT INFORMATION

GENERAL

This product is not subject to DOT, ICAO, IMDG or ADR regulations.

For specific information regarding transportation of this product, please contact the Hercules Transportation Department at (302) 594-7356 or FAX at (302) 594-7304.

15 REGULATORY INFORMATION

CHEMICAL INVENTORIES

U.S. TSCA: Included on TSCA 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

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.

LIST OF ACRONYMS

ACGIH: American Conferences of Governmental Industrial Hygienists

AIHA WEEL: American Industrial Hygienists Association - Workplace Environmental Exposure Level

CASRN: Chemical Abstracts Service Registry Number

CERCLA: Comprehensive Emergency Response, Compensation and Liability Act

HMIS: Hazardous Materials Identification System IARC: International Agency for Research on Cancer

NTP: National Toxicology Program

OSHA: Occupational Safety and Health Administration

PEL: OSHA Permissible Exposure Limit

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

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