

# MATERIAL SAFETY DATA SHEET

## SIZING

Ketene dimer emulsion

Keep refrigerated

Use 2 TBLS. per lb. of pulp

Distributed by Carriage House Paper-Brooklyn NY

Caution  
Corrosive and chemicals  
Should be handled with care  
Keep out of reach of children  
Do not ingest or inhale  
Avoid unnecessary contact

## 1 PRODUCT IDENTIFICATION

PRODUCT NAME	HERCON® 70 SIZING EMULSION
CHEMICAL/Common NAME	alkyl ketene dimer emulsion
CAS NUMBER	mixture

## 2 COMPOSITION / INFORMATION ON INGREDIENTS

This product is not classified as hazardous under OSHA regulations, however, this MSDS contains valuable information important to the safe handling and proper use of the product. This MSDS should be retained and available for employees and other users/handlers of this product.

## 3 HAZARDS IDENTIFICATION

### EMERGENCY OVERVIEW

CAUTION!

May cause skin irritation.

May cause eye irritation.

Inhalation of mist or aerosol particulates may cause respiratory tract irritation.

### POTENTIAL HEALTH EFFECTS

Prolonged or repeated contact may cause skin irritation and may cause skin sensitization (allergic reaction) in susceptible individuals.

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

## 4 FIRST AID MEASURES

### SKIN

Wash thoroughly with soap and water. Remove contaminated clothing. Thoroughly wash clothing before reuse. 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.

## **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**

This material is not expected to support combustion. If heated to decomposition, the following substances may be formed: carbon monoxide , carbon dioxide , nitrogen oxides , hydrogen chloride , hydrogen cyanide , and ammonia

## **6 ACCIDENTAL RELEASE MEASURES**

For small spills: Flush with excess water to a wastewater treatment system. For large spills: Dike to contain and pump into drums for use or disposal. In case of accidental spill or release, refer to Section 8, Personal Protective Equipment and General Hygiene Practices.

## **7 HANDLING & STORAGE**

### **GENERAL MEASURES**

Store at temperatures above freezing and below 32° C (90° F).

### **MATERIALS OR CONDITIONS TO AVOID**

Avoid storing product near incompatible materials. See MSDS Section 10.

## **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.

### **GENERAL HYGIENIC PRACTICES**

Avoid contact with eyes, skin, and clothing.

Avoid inhalation of mist or aerosol particulates.

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.

### **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

Completely isolate and thoroughly clean all equipment, piping, or vessels before beginning maintenance or repairs.

## 9 PHYSICAL & CHEMICAL PROPERTIES

PHYSICAL STATE:	liquid
COLOR:	white
ODOR:	mild
Boiling Point	210 - 212 ° F
Specific Gravity	similar to water
Vapor Pressure	similar to water
Evaporation Rate	similar to water
Solubility In Water	miscible
pH Value	2.1 - 3.4
Freezing Point	32 ° F
Weight % Solids	12.5

## 10 STABILITY & REACTIVITY

### HAZARDOUS DECOMPOSITION PRODUCTS

In aqueous solutions, biocide degrades and forms methyl isothiocyanate, carbon disulfide, formaldehyde, methylamine and hydrogen sulfide.

### 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: alcohols, alkalies and amines

## 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

No human toxicity studies have been carried out with this product. May cause skin, eye or respiratory irritation due to pH.

COMPONENT - biocide: Reported to cause skin sensitization (allergic reaction). Decomposition products cause skin, eye, and respiratory irritation.

### REPORTED ANIMAL EFFECTS

No animal toxicity studies have been carried out with this product.

## 12 ECOLOGICAL INFORMATION

### ECOTOXICOLOGICAL INFORMATION

No ecological studies have been carried out on this product.

## 13 DISPOSAL CONSIDERATIONS

### WASTE DISPOSAL

Neutralize waste material to adjust pH to levels appropriate for discharge, and flush material with water into an acclimated biological waste treatment system permitted to handle such waste. Landfilling in a permitted solid or hazardous waste facility is a suitable alternative after solidification to remove free liquids. Treatment and disposal should be in accordance with 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) 632-7861.

## 15 REGULATORY INFORMATION

### CHEMICAL INVENTORIES

U.S. TSCA: The components of this product are included on the 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

NPH: Not a physical 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

### HMIS RATINGS:

Health	1	Slight Hazard
Flammability	0	Minimal 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
05/20/2003	Sections 2 and 8	02/06/2001