

Revision Date: 08/Aug/2011

Revision Number: 1.1

## 1. PRODUCT AND COMPANY IDENTIFICATION

<b>Product Name:</b>	GENUGEL® carrageenan type WR-78
<b>Chemical Name</b>	Carrageenan, standardized with Sucrose
<b>Product Use</b>	Gelling and thickening agent
<b>Specific End Uses</b>	Desserts, Dairy
<b>Company</b>	CP Kelco U.S., Inc. a Huber Company 3100 Cumberland Boulevard, Suite 600 Atlanta, GA 30339 USA Tel: +1 800 535 2687 Fax: +1 678 247-2797
<b>Emergency Telephone Number</b>	CHEMTREC: +1 800 424 9300 or International +1 703 527 3887
<b>Email</b>	cheryl.vandyne@cpkelco.com (PST)
<b>Internet</b>	www.cpkelco.com

## 2. HAZARDS IDENTIFICATION

<b>OSHA Regulatory Status</b>	OSHA Hazard: Warning: Combustible dust. Ensure appropriate electrical classification and avoidance of ignition sources in dusty environments.  Handle in a manner consistent with good industrial hygiene practices--avoid creating or inhaling aerosols of this or any other material.
<b>Principle Routes of Exposure</b>	Inhalation. Skin contact.
<b>Non-classified Hazards</b>	
<b>Slip Hazard</b>	Slip hazard when spilled material becomes wet.
<b>Eyes</b>	Dry powder may cause foreign body irritation in some individuals.
<b>Skin</b>	Prolonged contact with the dry powder may cause drying or chapping.
<b>Inhalation</b>	Hygroscopic properties of the gum can form a paste or gel in the airway. Inhalation of dust may cause respiratory tract irritation. Excessive inhalation of dust may cause coughing and sneezing.
<b>Ingestion</b>	Not toxic if swallowed (less than a mouthful) based on available information.
<b>Additional Toxicology Information</b>	Refer to Section 11

### Other Precautions

#### Carrageenan - 9000-07-1

Avoid dust formation.  
Keep away from heat, flame sparks and other ignition sources.  
Wet material on walking surfaces is slippery

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

COMPONENT(S) / CAS	EC / REACH
Carrageenan 9000-07-1	232-524-2 Exempt
Sucrose 57-50-1	200-334-9 Exempt

**Carrageenan - 9000-07-1**

Regulation (EC) 1907/2006: REACH  
 Exempt

**Sucrose - 57-50-1**

Regulation (EC) 1907/2006: REACH  
 Exempt

### 4. FIRST AID MEASURES

<b>General Advice:</b>	Remove material from eyes, skin and clothing. In case of doubt or when symptoms persist, seek medical attention. Wash heavily contaminated clothing before reuse.
<b>Eye contact</b>	Hold eyelids apart and flush eyes with a steady, gentle stream of water for several minutes. If eye irritation persists, seek medical attention.
<b>Skin contact</b>	Wash off with soap and plenty of water.
<b>Inhalation</b>	Move to fresh air. If symptoms persist, call a physician. If not breathing, give artificial respiration.
<b>Ingestion</b>	No significant adverse health effects are expected to develop if only small amounts (less than a mouthful) are swallowed.

### 5. FIRE-FIGHTING MEASURES

<b>General Advice</b>	Treat as "Class A" fire. Product will burn when in contact with a flame. Self extinguishes when ignition source is removed. Tends to smoulder.
<b>Suitable Extinguishing Media</b>	Water, Dry chemical, Carbon dioxide (CO <sub>2</sub> ).
<b>Hazardous Combustion Products</b>	Carbon dioxide Carbon monoxide
<b>Dust Explosion Hazard</b>	Can contain sufficient fines to cause a combustible dust explosion. Do not breathe smoke, gases or vapors generated.
<b>Special Protective Equipment for Firefighters</b>	As in any fire, wear self-contained breathing apparatus (SCBA) pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

<b>NFPA</b>	<b>Health</b>	1	<b>Flammability</b>	1	<b>Instability</b>	0
<b>HMIS</b>	<b>Health</b>	1	<b>Flammability</b>	1	<b>Physical Hazard (Reactivity)</b>	0

## 6. ACCIDENTAL RELEASE MEASURES

<b>Personal Precautions</b>	Wet material on walking surfaces will be extremely slippery. Avoid dust formation. In case of exposure to high levels of airborne dust, wear a personal respirator in compliance with national legislation.
<b>Methods for Cleaning up</b>	Use vacuum equipment designed specifically for combustible dust. Take precautionary measures against static discharges. The use of water wash down is not recommended unless the spilled material is already wet. Disposal information - Refer to Section 13

## 7. HANDLING AND STORAGE

<b>Handling</b>	Avoid dust formation. Provide appropriate exhaust ventilation in places where dust is formed. In case of insufficient ventilation, wear suitable respiratory equipment. Avoid conditions that generate airborne dust in handling, transfer and clean up. Product may form combustible dust-air mixtures. Keep away from heat, flame sparks and other ignition sources. Avoid emptying package in or near flammable vapors. Static charges may cause flash fire. Remove material from eyes, skin and clothing.
<b>Storage</b>	Store in a roofed and well ventilated area in the unopened original package.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

<b>Engineering Controls</b>	Ventilation: Provide natural or mechanical ventilation to control exposure levels below airborne exposure limits in this section. The use of local mechanical exhaust ventilation is preferred at sources of air contamination such as open process equipment.
<b>Personal Protective Equipment</b>	
<b>Nuisance particles/ Nuisance dust:</b>	If not specified dusts are: ACGIH: 10 mg/m <sup>3</sup> (total dust), 3 mg/m <sup>3</sup> (respirable fraction) OSHA PEL: 15 mg/m <sup>3</sup> (total dust), 5 mg/m <sup>3</sup> (respirable fraction)
<b>Respiratory Protection</b>	Avoid breathing dust. Use NIOSH/MSHA approved respiratory protection equipment when airborne exposures exceeds established guidelines. Consult the respirator manufacturer to determine appropriate type equipment for a given application. Observe respirator use limitations specified by NIOSH or the manufacturer.
<b>Hand Protection</b>	Gloves are recommended if extended exposure is anticipated. EN 420
<b>Eye Protection</b>	This product does not cause significant eye irritation or eye toxicity requiring special protection. Where there is significant potential for eye contact, wear chemical goggles and have eye flushing equipment available.
<b>Skin and Body Protection</b>	Although this product does not present a significant skin concern, minimize skin contamination by following good industrial practice.
<b>Hygiene Measures</b>	Handle in accordance with good industrial hygiene and safety practice.

## Exposure Limits

### Carrageenan - 9000-07-1

Exposure limits Not established.

### Sucrose - 57-50-1

ACGIH - TWA 10 mg/m<sup>3</sup> TWA

#### **NIOSH - Target Organs**

eyes respiratory system

NIOSH - TWA 5 mg/m<sup>3</sup> TWA (respirable dust); 10 mg/m<sup>3</sup> TWA (total dust)

Mexico - TWA 10 mg/m<sup>3</sup> TWA

Canada - Alberta - OEL - TWA 10 mg/m<sup>3</sup> TWA

Canada - British Columbia - OEL - TWA 3 mg/m<sup>3</sup> TWA (respirable fraction); 10 mg/m<sup>3</sup> TWA (total dust)

Canada - British Columbia - OEL - TWA 10 mg/m<sup>3</sup>

TWAs 3 mg/m<sup>3</sup>

10 mg/m<sup>3</sup>

Canada - Manitoba - OEL - TWA 10 mg/m<sup>3</sup> TWA

Canada - Newfoundland & Labrador - OEL - TWA 10 mg/m<sup>3</sup> TWA

OEL - TWA

Canada - Nova Scotia - OEL - TWA 10 mg/m<sup>3</sup> TWA

Canada - Prince Edward Island - OEL 10 mg/m<sup>3</sup> TWA

- TWA

\*Dust: OSHA has not established specific exposure limits for this material. However, OSHA has established limits for particulates not otherwise regulated (PNOR) which are the least stringent exposure limits applicable to dusts.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance</b>	Cream to light tan
<b>Odor</b>	Odorless
<b>Physical State</b>	Powder
<b>pH</b>	7.0 - 10.0 (0.5% solution)
<b>Flash Point</b>	Not applicable
<b>Freeze Point</b>	Not applicable
<b>Water Solubility</b>	Soluble, Forms viscous solutions

**NOTE:** These physical data are typical values based on material tested but may vary from sample to sample. Typical values should not be construed as a guaranteed analysis of any specific lot or as specifications for the product.

## 10. STABILITY AND REACTIVITY

<b>Stability</b>	Stable under recommended storage conditions. Hazardous polymerization does not occur.
<b>Conditions to Avoid</b>	Avoid dust formation.
<b>Materials to avoid (Incompatible Materials)</b>	Strong oxidizing agents
<b>Hazardous Decomposition Products</b>	Thermal decomposition products: Carbon monoxide Carbon dioxide (CO <sub>2</sub> )

## 11. TOXICOLOGICAL INFORMATION

<b>Toxicological Data Sources</b>	Data from laboratory studies conducted by CP Kelco and/or from the scientific literature on components are summarized below
-----------------------------------	---

**Carrageenan - 9000-07-1**

LD50 Oral	5400 mg/kg (rat)
Carcinogenicity	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 Due to the physical nature of this material, may cause eye, skin and respiratory irritation CP Kelco has not received any reports of adverse effects from workers handling this product
Reported Animal Effects	Eye irritation (rabbit): mild Feeding studies of this or similar products indicate no evidence of risk at anticipated workplace exposure levels. Species tested: mice, rats, monkeys
Mutagenicity/Genotoxicity	Not a mutagen in IN VITRO tests

**Sucrose - 57-50-1**

LD50 Oral	29700 mg/kg (rat)
-----------	-------------------

**12. ECOLOGICAL INFORMATION**

<b>Ecotoxicity</b>	Contains no substances known to be hazardous to the environment or not degradable in waste water treatment plants.
<b>Persistence / Degradability</b>	This product is biodegradable.
<b>Bioaccumulative Potential</b>	Inherently biodegradable.

**13. DISPOSAL CONSIDERATIONS**

**DISPOSAL METHOD:** Dispose in accordance with local, state and national regulations.

**Carrageenan - 9000-07-1**

**European Waste Catalogue (EWC):** 160306

**14. TRANSPORT INFORMATION**

<b>D.O.T. Hazard Classification</b>	Non-hazardous material.
<b>Canada - TDG - Regulated Substances</b>	Not hazardous
<b>IMO / IMDG</b>	Not hazardous
<b>ICAO / IATA</b>	Not hazardous
<b>RID/ADR</b>	Not hazardous

## 14. TRANSPORT INFORMATION

### Other information

Environmental hazards: None known

Special precautions for user: Refer to Sections 2, 7, 8, 9, 10

### General Information

The data provided in this section is for information only.  
Please apply the appropriate regulations to properly classify your shipment for transportation.

## 15. REGULATORY INFORMATION

Component(s) of the product are on the following Inventory lists:

COMPONENT(S) / CAS	EC / REACH	Canada	Australia (AICS)	China (IECSC)	Japan	Korea (KECL)	New Zealand (NZIoC)	Philippines (PICCS)	USA (TSCA)	Taiwan (ECN)
Carrageenan 9000-07-1	232-524-2 Exempt	Present (DSL)	Present	Present	-	-	Present	Present	Present	Nominated
Sucrose 57-50-1	200-334-9 Exempt	Present (DSL)	Present	Present	8-(4)-345 (ISHL)	KE-17258	Present	Present	Present	-

Legend  
Present: Listed  
-: Not Listed  
Exempt  
Nominated

### Component Information

#### Carrageenan - 9000-07-1

Regulation (EC) 1907/2006: REACH  
Exempt

#### Sucrose - 57-50-1

Regulation (EC) 1907/2006: REACH  
Exempt

### Regulatory and Compendia

Refer to Product Data Sheet

## 16. OTHER INFORMATION

### Prepared by

Cheryl A. Van Dyne  
Global Senior Manager  
Regulatory Management Systems  
email: cheryl.vandyne@cpkelco.com  
phone: 1-619-595-5027 (USA)

**Training Advice**

Personnel handling the substance(s) named in this Safety Data Sheet should be skilled and trained in areas associated with the key points named herein.

Personnel should have training and access to appropriate PPE for handling this product.

Personnel handling the substance(s) named in this Safety Data Sheet are responsible for ensuring that appropriate precautions are taken and for satisfying themselves that the data are suitable and sufficient for the substance(s) intended purpose.

If additional information is required, please contact the supplier or an expert.

**Sources of key data**

Literature data and/or investigative reports are available through the manufacturer.

**Acronym / Abbreviation**

ACRONYMS:

INTERNATIONAL:

ADR: International Carriage of Dangerous Goods by Road

BOD: Biochemical Oxygen Demand

CLP: Classification, Labeling and Packaging

COD: Chemical Oxygen Demand

D.O.T.: U.S. Department of Transportation

ICAO International Civil Aviation Organization

IATA: International Air Transport Association (IATA)

IMO::International Maritime Organization.

IMDG::International Maritime Dangerous Goods

INCI: International Nomenclature of Cosmetic Ingredients

OES: Occupational Exposure Standard

OR: EU REACH Only Representative

PPE: Personal protection equipment

RID: International Carriage by Rail

SCBA: self contained breathing apparatus

TLV-STEL: Threshold Limit Values - Short Term Exposure Limits

TWA: Time Weighted Averages

North America:

CERCLA RQ: US EPA Comprehensive Environmental, Response, and Liability Act Reportable Quantity

CERCLA: US EPA Comprehensive Environmental Response, Compensation, and Liability Act of 1980

CONEG: Conference of North Eastern Governors

NIOSH/MSHA - National Institute for Occupational Safety and Health/Mine Safety and Health Administration

SARA: Superfund Amendments and Reauthorization Act (US EPA)

TDG: Canada Transport of Dangerous Goods

WHMIS: Canada's Workplace Hazardous Materials Information System

**Disclaimer:** The information contained in this Safety Data Sheet to the best of CP Kelco's knowledge and belief as of the date indicated is believed to be accurate and reliable. However, no representation, warranty or guarantee is implied or expressed regarding the accuracy, reliability or completeness of this information or the use of the product. Nothing contained herein should be construed as a recommendation to use this product in conflict with National or local regulations or existing patents covering any material or its use. In case of dispute, the English text governs.

**END OF SAFETY DATA SHEET**