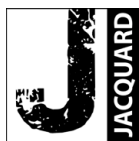


SAFETY DATA SHEET (SDS)



Jacquard Products
Manufactured by Rupert, Gibbon & Spider, Inc.
P.O. Box 425 | Healdsburg, CA 95448
800.442.0455 | Fax: 707.433.4906
www.jacquardproducts.com

Carrageenan - Pg 1

Revision Date: 03/02/2018

SECTION 1 - CHEMICAL, PRODUCT & COMPANY INFORMATION

Product Name:	CARRAGEENAN	
Product Number/Code:	CHM0003 / CHM1003 / CHM2003	
Recommended Use:	Natural gelling agent that provides a viscous surface for marbling	
Description:	Chemical family: Polysaccharides	
Synonym(s):	Chondrus crispus (Carrageenan) extract (INCI name), Carrageenan, Irish moss, Chondrus extract, Seaweed flour	
Restrictions on use:	See section 16 for more information	
Manufacturer:	Rupert, Gibbon & Spider, Inc. 1147 Healdsburg Ave. Healdsburg, CA 95448 1-800-442-0455 / 707-433-9577	
Emergency Number:	ChemTel, Inc. - Contract #MIS9128344	
	North America: 1-800-255-3924	International: 1-813-248-0585

SECTION 2 - HAZARD(S) IDENTIFICATION

Toxicological Data on Ingredients:	
Hazard Classification	May form combustible dust concentrations in air.
Physical Hazards:	Not classified
Health Hazards:	Do not inhale
Environmental Hazards:	Not classified
Label Elements	
Pictogram:	None
Signal Words:	None
Hazard Statements-EU:	The mixture does not meet the criteria for classification.
Precautionary Statements-EU:	
Prevention:	See section 8
Response:	See sections 4, 5 & 6
Storage:	See section 7
Disposal:	See section 13
Hazard(s) not otherwise classified:	None known

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SECTION 3 - COMPOSITION / INFORMATION ON INGREDIENTS

Chemical identity	Content in percent (%)*	CAS #
Carrageenan (Chemical family: polysaccharides)	100%	9000-07-1

SECTION 4 - FIRST AID MEASURES

Description of first aid measures:	
In the event of skin contact:	Wash with water and soap as a precaution.
In the event of eye contact:	Flush eyes with water as a precaution. Get medical attention if eye irritation develops or persists.
In the event of swallowing:	Never give anything by mouth to an unconscious person. Drink plenty of water. Get medical attention if symptoms occur.
In the event of exposure by inhalation:	Remove person to fresh air. If breathing is difficult or if discomfort occurs and persists, obtain medical attention.
Most important symptoms and effects, acute and delayed:	Difficulty breathing. Cough.
Indication of any immediate medical attention and special treatment needed:	Aspiration or inhalation of this product could cause chemical pneumonitis. Treatment is symptomatic and supportive.

SECTION 5 - FIREFIGHTING MEASURES

Suitable extinguishing media:	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Unsuitable extinguishing media:	None known
Special hazards arising from the substance or mixture :	Avoid dust formation fine dust dispersed in air, in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.
Advice for fire fighters:	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.
Explosion data:	
Sensitivity to mechanical impact:	Not sensitive.
Sensitivity to static discharge:	Static electricity might be sufficient to ignite dust clouds. Possibility of ignition will depend on the minimum ignition energy (MIE) and the type of operations undertaken with the material. MIE values are not provided in this SDS.

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SECTION 6 - ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:	Avoid dispersal of dust in the air (i.e., cleaning dust surfaces with compressed air.) Avoid breathing dust. Powder may become slippery when wet. For personal protection see section 8.
Methods and material for containment and clean up:	Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration. Sweep, vacuum or shovel into suitable containers for disposal. Non-sparking tools should be used. Wash down water is not recommended. Powder may become slippery when wet.
Environmental procedures:	See Section 12 for additional Ecological Information.
Reference to other sections:	Section 8: Personal Protection Section 12: Ecological Information

SECTION 7 - HANDLING AND STORAGE

Precautions for safe handling:	Handle in accordance with good industrial hygiene and safety practice. Minimize dust generation and accumulation. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Dry powdered material can build static electricity when subjected to the friction of transfer and mixing operations. Provide adequate precautions, such as electrical grounding and bonding, or inert atmosphere. Ensure adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment if release of airborne dust is expected.
Conditions for safe storage including any incompatibilities:	Store at less than 25°C, in tightly closed containers. Keep out of direct sunlight. Store in dry environment away from heat and sources of ignition, i.e., steam pipes, radiant heaters, hot air vents or welding sparks. Do not store with strong smelling materials. Incompatible products: oxidizing agents, strong acids.

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SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters:	
Occupational exposure limits:	This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.
Appropriate engineering controls:	It is recommended that all dust control equipment such as local exhaust ventilation and material transport systems involved in the handling of this product contain explosion relief vents or an explosion suppression or an oxygen-deficient environment. Use only appropriately classified electrical equipment and powered industrial trucks.
Individual protection measures, such as personal protective equipment:	
Eye/face protection:	Safety glasses.
Skin protection:	Minimize skin contamination by following good industrial hygiene practices.
Hand protection:	Use protective gloves if extended exposure is anticipated.
Other protective equipment:	Handle in accordance with good industrial hygiene and safety practice.
General information:	Protective engineering solutions should be implemented and in use. These recommendations apply to the product as supplied. If the product is used in mixtures, contact an appropriate protective equipment supplier or industrial hygienist for more information.
Respiratory protection:	If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

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SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

General information:	
Appearance and physical state:	Dry powder, free flowing powder
Color:	Off-white
Type of Odor:	Slight marine
Odor threshold:	No information available
Important health, safety and environmental information:	
Initial Boiling Point and Boiling Range:	No information available
Melting Point/Freezing Point:	Not applicable
Flammability Classification:	No information available
Flash Point:	Not applicable
Auto-ignition Temperature:	No information available
Decomposition Temperature:	No information available
Flammability Limits (lower/upper):	No information available
Evaporation rate:	No information available
Vapor Pressure:	No information available
Vapor Density (Air=1):	No information available
Octanol/Water Partition Coefficient (log Pow):	No information available
Specific Gravity:	No information available
Bulk Density:	No information available
Water Solubility:	10% maximum (% by weight)
pH:	7.0 - 10.5
Viscosity:	No information available
Explosive Properties:	No information available
Oxidizing Properties:	No information available
Molecular Formula:	No information available
Molecular Weight:	No information available
Relative Density:	No information available
K_{st} :	>0 bar m/s

SECTION 10 - STABILITY AND REACTIVITY

Reactivity:	Not applicable
Stability:	Stable under recommended storage conditions.
Possibility of hazardous reactions:	None under normal processing.
Hazardous polymerization:	Hazardous polymerization does not occur.
Conditions to avoid:	Dust formation. Excessive heat. Humid air. Sparks.
Incompatible materials:	Oxidizing agents/ Strong acids.
Hazardous decomposition products:	Burning produces obnoxious and toxic fumes: Sulfur oxides.

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SECTION 11 - TOXICOLOGICAL INFORMATION

Information on toxicological effects:	
Acute toxicity (list all possible routes of exposure)	
Acute Oral Toxicity:	5,400 mg/kg (Rat)
Acute Dermal Toxicity:	---
Acute Inhalation Toxicity:	>0.93 mg/l (4h) (Rat)* <i>* No mortality was observed at the maximum attainable concentration.</i>
Skin Corrosion/Irritation:	---
Serious Eye Damage / Eye Irritation:	---
Respiratory or Skin Sensitization:	Not expected to be sensitizing based on the components.
Germ Cell Mutagenicity:	No known mutagenic or teratogenic effects.
Carcinogenicity:	Contains no ingredient listed as a carcinogen.
Reproductive Toxicity:	This product does not contain any known or suspected reproductive hazards.
Specific Target Organ Toxicity - single exposure (STOT-se):	None known.
Specific Target Organ Toxicity - repeated exposure (STOT-re):	None noted in chronic animal studies.
Aspiration Hazard:	Aspiration may cause chemical pneumonitis. Excessive inhalation of dust can mechanically impede respiration.
Potential Health Effects:	
Skin Contact:	---
Eye Contact:	---
Ingestion:	---
Inhalation:	---
Chronic Health Effects:	Product does not present a chronic toxicity hazard based on known or supplied information.
Additional Data:	---

SECTION 12 - ECOLOGICAL INFORMATION

Toxicity:	
The environmental impact of this product has not been fully investigated. Carrageenan is an extract of seaweeds of the class Rhodophyceae (red seaweeds).	
Persistence and degradability:	Expected to biodegrade, based on component information.
Bioaccumulative potential:	Bioaccumulation is unlikely.
Mobility in soil:	No information available.
Other adverse effects:	None known.

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SECTION 13 - DISPOSAL CONSIDERATIONS

Waste treatment methods:	
Disposal:	This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements.
Container Disposal:	Dispose of in accordance with federal, state and local regulations.

SECTION 14 - TRANSPORT INFORMATION

General Information:	The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, DOT).
UN number:	Not relevant
UN proper shipping name:	Not relevant
Transport hazard class:	Not relevant
Packing group:	Not relevant
Environmental Hazards:	
Environmentally hazardous substance:	No
Special precautions for user:	Not relevant

SECTION 15 - REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture:		
U.S. Federal Regulations:		
SARA 313: Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA).	This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.	
SARA 311/312 Hazard Categories:	Acute health hazard:	No
	Chronic health hazard:	No
	Fire hazard:	No
	Sudden release of pressure hazard:	No
	Reactive hazard:	No
Clean Water Act:	This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).	
CERCLA:	This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.	
US State Regulations:		
California Proposition 65:	This product does NOT contain any Proposition 65 chemicals.	
U.S. State Right-to-Know Regulations:	This product does not contain any substances regulated by state right-to-know regulations.	

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SECTION 15 - REGULATORY INFORMATION

International Inventories:	
<i>A food additive, drug, cosmetic, or device, when manufactured, processed or distributed in commerce for use as a food additive, drug, cosmetic, or device is not subject to the notification requirements of 40 CFR 720.</i>	
TSCA (United States):	X
DSL (Canada):	X
EINECS/ELINCS (Europe):	X
ENCS (Japan):	-
IECSC (China):	X
KECL (Korea):	-
PICCS (Philippines):	X
AICS (Australia):	X
Mexico - Grade:	Minimum risk, Grade 0
WHMIS Statement:	This product has been classified in accordance with the Hazardous Products Regulations (HPR) and the SDS contains all the information required by the HPR.
WHMIS Class:	See section 2 for more information.

SECTION 16 - OTHER INFORMATION

HMIS Hazard ID:	
Health:	I
Flammability:	I
Physical Hazard:	0
Personal Protection:	X
NFPA Hazard ID:	
Health:	I
Flammability:	I
Instability:	0
Special Hazards:	--
Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; *Chronic health effect	

Disclaimer:

The information contained in this SDS is based on data from sources considered to be reliable but Rupert, Gibbon & Spider, Inc. does not guarantee the accuracy or completeness thereof. Rupert, Gibbon & Spider, Inc. urges each customer or recipient of this SDS to study it carefully to become aware of and understand the hazards associated with this product. The reader should consider consulting reference works or individuals who are experts in ventilation, toxicology or fire and understand the data in this SDS.

Revision Date: 03/02/2018

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National Chemical Inventories:

All components of this product are listed on the following chemical substance inventories: TSCA (USA)

DSL	(Canada)
EINECS	(Europe)
ENCS	(Japan) ECL
	(Korea)
AICS	(Australia) NZIoC
	(New Zealand)
PICCS	(Philippines)
IECSC	(China)

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Abbreviations:	
ACGIH	American Conference of Governmental Industrial Hygienists
ADR	International carriage of Dangerous goods by Road
AICS	Australian Inventory of Chemical Substances
ATE	Acute Toxicity Estimate
BfR	Bundesinstitut für Risikobewertung recommendations for food contact materials
BCF	Bioconcentration Factor
BOD5	5-day Biochemical Oxygen Demand
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CLP	Classification, Labeling and Packaging regulation
COD	Chemical Oxygen Demand DOT Department of Transportation DSL Domestic Substances List
EINECS	European Inventory of Existing Chemical Substances
ECL	Existing Chemicals List (Korea)
ENCS	Existing and New Chemical Substances Inventory (Japan)
EN 689	Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy.
ERG	Emergency Response Guide
GHS	Globally Harmonized System
HMIS	Hazardous Materials Information System IARC International Agency for Research on Cancer IATA International Air Transport Association
ICAO	International Civil Aviation Organization IDLH Immediately Dangerous to Life and Health IMDG International Maritime Dangerous Goods
LD50	Lethal Dose to 50% of test animal population
MAK	Maximale Arbeitsplatz Konzentration
NTP	National Toxicology Program
OEL	Occupational Exposure Limit
OSHA	Occupational Safety & Health Administration
PBT	Persistent, Bioaccumulative and Toxic vPvB Very Persistent and Very Bioaccumulative PEL Permissible exposure limit
PICCS	Philippine Inventory of Commercial Chemical Substances
PNEC	Predicted No Effect Concentration
REACH	Registration, Evaluation and Authorization of Chemical Substances
RID	International carriage of dangerous goods by Rail SARA Superfund Amendments and Reauthorization Act STEL Short Term Exposure Limit
SVHC	Substance of Very High Concern
TLV	Threshold Limit Value
TSCA	Toxic Substances Control Act
TWA	Time Weighted Average
VOC	Volatile Organic Compound
WGK	Wassergefährdungsklasse (Water Hazard Class) WHMIS Workplace Hazardous Material Identification System