

## 1. IDENTIFICATION

<b>Product Name</b>	<b>Gelcarin DG 5250</b>
<b>Other Names</b>	Carrageenan; Carrageenan Dg 5250 Stabiliser; Sucrose
<b>Uses</b>	Foodstuff application
<b>Chemical Family</b>	No Data Available
<b>Chemical Formula</b>	Unspecified
<b>Chemical Name</b>	Gelcarin DG 5250
<b>Product Description</b>	No Data Available

### Contact Details of the Supplier of this Safety Data Sheet

<b>Organisation</b>	<b>Location</b>	<b>Telephone</b>
Redox Pty Ltd	2 Swettenham Road Minto NSW 2566 Australia	+61-2-97333000
Redox Pty Ltd	11 Mayo Road Wiri Auckland 2104 New Zealand	+64-9-2506222
Redox Inc.	3960 Paramount Boulevard Suite 107 Lakewood CA 90712 USA	+1-424-675-3200
Redox Chemicals Sdn Bhd	Level 2, No. 8, Jalan Sapir 33/7 Seksyen 33, Shah Alam Premier Industrial Park 40400 Shah Alam Sengalor, Malaysia	+60-3-5614-2111

### Emergency Contact Details

*For emergencies only; DO NOT contact these companies for general product advice.*

<b>Organisation</b>	<b>Location</b>	<b>Telephone</b>
Poisons Information Centre	Westmead NSW	1800-251525 131126
Chemcall	Australia	1800-127406 +64-4-9179888
Chemcall	Malaysia	+64-4-9179888
Chemcall	New Zealand	0800-243622 +64-4-9179888
National Poisons Centre	New Zealand	0800-764766
CHEMTREC	USA & Canada	1-800-424-9300 CN723420 +1-703-527-3887

## 2. HAZARD IDENTIFICATION

**Poisons Schedule (Aust)** Not scheduled

### Globally Harmonised System

**Hazard Classification** NOT hazardous according to the criteria of the Globally Harmonised System of Classification and Labelling of Chemicals (GHS)

**Signal Word** None

### National Transport Commission (Australia)

Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

**Dangerous Goods Classification** NOT Dangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

### Environmental Protection Authority (New Zealand)

Hazardous Substances and New Organisms Amendment Act 2015

**HSNO Classifications** Health Hazards **6.1E** Substances that are acutely toxic –May be harmful, Aspiration hazard

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

### Ingredients

Chemical Entity	Formula	CAS Number	Proportion
Carrageenan	No Data Available	9000-07-1	60.0 - 100.0 %
Sucrose	No Data Available	57-50-1	10.0 - 30.0 %
Potassium Chloride	No Data Available	7447-40-7	3.0 - 7.0 %

## 4. FIRST AID MEASURES

### Description of necessary measures according to routes of exposure

<b>Swallowed</b>	Rinse mouth with water. Give water to drink provided person is conscious. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. If discomfort persists, obtain medical attention.
<b>Eye</b>	Immediately flush eyes with plenty of water for 15 minutes, holding eyelids open. If irritation occurs and persists, obtain medical attention.
<b>Skin</b>	Remove contaminated clothing. Wash affected area with soap and plenty of water. If irritation occurs and persists, seek medical attention.
<b>Inhaled</b>	Remove victim from exposure to fresh air. If not breathing, apply artificial respiration. If breathing is difficult, give oxygen. If breathing difficulty or discomfort occurs and persists, contact medical doctor.
<b>Advice to Doctor</b>	Treat symptomatically based on judgement of doctor and individual reactions of patient. This product is expected to have low oral, dermal and inhalation toxicity. It is expected to be irritating to the eyes and skin, and non-sensitising to the skin.
<b>Medical Conditions Aggravated by Exposure</b>	Aspiration or inhalation of this product could cause chemical pneumonitis. Excessive inhalation of dust can mechanically impede respiration. Due to the hygroscopic properties of the gums, they can form a paste or gel in the airway.

CHRONIC EFFECTS FROM EXPOSURE: No data available for the formulation. Long term and lifetime feeding studies with carrageenan in laboratory animals were negative, as were reproductive outcomes, and mutagenicity studies. Sucrose is not carcinogenic and tested negative in a variety of in vitro mutagenicity assays. Some animal teratogenicity studies at high doses of sucrose have shown adverse effects on the fetus, possibly due to uncontrolled glucose concentrations in maternal blood. Repeated oral exposure to potassium chloride has resulted in inflammation and ulcers of the gastrointestinal tract.

## 5. FIRE FIGHTING MEASURES

<b>Flammability Conditions</b>	Product is a combustible solid.
<b>Extinguishing Media</b>	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
<b>Fire and Explosion Hazard</b>	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.
<b>Hazardous Products of Combustion</b>	Combustible solid. Avoid generating dust. As with any fine particulate matter, the accumulation of excessive dust on overhead structures may form explosive concentrations when disturbed and dispersed. This product will produce oxides of sulphur on burning.
<b>Personal Protective Equipment</b>	Fire fighters should wear a positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots and gloves). Clear fire area of all non-emergency personnel. Stay upwind. Keep out of low areas. Eliminate ignition sources. Move fire exposed containers from fire area if it can be done without risk. Do NOT allow fire fighting water to reach waterways, drains or sewers. Store fire fighting water for treatment. CAUTION: Powder becomes slippery when wet.
<b>Flash Point</b>	No Data Available
<b>Lower Explosion Limit</b>	No Data Available
<b>Upper Explosion Limit</b>	No Data Available
<b>Auto Ignition Temperature</b>	No Data Available
<b>Hazchem Code</b>	No Data Available

## 6. ACCIDENTAL RELEASE MEASURES

<b>General Response Procedure</b>	Avoid accidents, clean up immediately. Slippery when spilt. Personnel involved in the clean up should wear full protective clothing. Eliminate all sources of ignition. Increase ventilation. Avoid generating dust. Stop leak if safe to do so. Isolate the danger area. Do NOT let product reach drains or waterways. If product does enter a waterway, advise the Environmental Protection Authority or your local Waste Management. Use clean, non-sparking tools and equipment. Maintain good house keeping practices to minimise accumulation of settled dust, especially on overhead surfaces.
<b>Clean Up Procedures</b>	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.
<b>Containment</b>	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.
<b>Environmental Precautionary Measures</b>	The environmental impact of this product has not been fully investigated. Carrageenan is an extract of seaweeds of the class Rhodophyceae (red seaweeds).
<b>Evacuation Criteria</b>	Evacuate all unnecessary personnel.
<b>Personal Precautionary Measures</b>	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.

## 7. HANDLING AND STORAGE

<b>Handling</b>	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.
<b>Storage</b>	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.
<b>Container</b>	Store in original packaging as approved by manufacturer.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

<b>General</b>	<p>No exposure standard has been established for this product by the Australian Safety and Compensation Council (ASCC). However, the exposure standard for dust not otherwise specified is 10mg/m<sup>3</sup> (for inspirable dust) and 3mg/m<sup>3</sup> (for respirable dust).</p> <p>NOTE: The exposure value at the TWA is the average airborne concentration of a particular substance when calculated over a normal 8 hour working day for a 5 day working week.</p> <p>These exposure standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept to as low a level as is workable. These exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.</p>
<b>Exposure Limits</b>	No Data Available
<b>Biological Limits</b>	No information available on biological limit values for this product.
<b>Engineering Measures</b>	<p>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.</p> <p>Use only appropriately classified electrical equipment and powered industrial trucks.</p>
<b>Personal Protection Equipment</b>	<p>RESPIRATOR: Wear an effective dust mask where dusts/vapours are generated and engineering controls are inadequate (AS1715/1716).</p> <p>EYES: Safety glasses with side shields (AS1336/1337).</p> <p>HANDS: Wear impervious gloves (AS2161).</p> <p>CLOTHING: Long-sleeved protective clothing and safety footwear (AS3765/2210).</p>
<b>Work Hygienic Practices</b>	Minimize skin contamination by following good industrial hygiene practices.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical State</b>	Solid
<b>Appearance</b>	Dry, free flowing powder
<b>Odour</b>	Slight Marine Odour
<b>Colour</b>	No Data Available
<b>pH</b>	6.0 - 10.5
<b>Vapour Pressure</b>	No Data Available
<b>Relative Vapour Density</b>	No Data Available
<b>Boiling Point</b>	No Data Available
<b>Melting Point</b>	No Data Available
<b>Freezing Point</b>	No Data Available
<b>Solubility</b>	10% Max 25°C
<b>Specific Gravity</b>	Approx. 1g/cc
<b>Flash Point</b>	No Data Available
<b>Auto Ignition Temp</b>	No Data Available
<b>Evaporation Rate</b>	No Data Available
<b>Bulk Density</b>	No Data Available
<b>Corrosion Rate</b>	No Data Available
<b>Decomposition Temperature</b>	No Data Available
<b>Density</b>	No Data Available
<b>Specific Heat</b>	No Data Available
<b>Molecular Weight</b>	No Data Available
<b>Net Propellant Weight</b>	No Data Available
<b>Octanol Water Coefficient</b>	No Data Available
<b>Particle Size</b>	No Data Available

<b>Partition Coefficient</b>	No Data Available
<b>Saturated Vapour Concentration</b>	No Data Available
<b>Vapour Temperature</b>	No Data Available
<b>Viscosity</b>	No Data Available
<b>Volatile Percent</b>	No Data Available
<b>VOC Volume</b>	No Data Available
<b>Additional Characteristics</b>	No Data Available
<b>Potential for Dust Explosion</b>	Settled dust may form explosive concentrations when disturbed and dispersed.
<b>Fast or Intensely Burning Characteristics</b>	No Data Available
<b>Flame Propagation or Burning Rate of Solid Materials</b>	No Data Available
<b>Non-Flammables That Could Contribute Unusual Hazards to a Fire</b>	No Data Available
<b>Properties That May Initiate or Contribute to Fire Intensity</b>	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.
<b>Reactions That Release Gases or Vapours</b>	No Data Available
<b>Release of Invisible Flammable Vapours and Gases</b>	No Data Available

## 10. STABILITY AND REACTIVITY

<b>Chemical Stability</b>	Product is stable under normal conditions of use, storage and temperature. Combustible Solid.
<b>Conditions to Avoid</b>	Avoid excessive heat, direct sunlight, generating dust, moisture, static discharges, open flame and high temperatures.
<b>Materials to Avoid</b>	Oxidizing agents. Strong acids
<b>Hazardous Decomposition Products</b>	Burning produces obnoxious and toxic fumes: Sulfur oxides
<b>Hazardous Polymerisation</b>	Hazardous polymerization does not occur.

## 11. TOXICOLOGICAL INFORMATION

<b>General Information</b>	ACUTE EFFECTS FROM EXPOSURE: This product is expected to have low oral, dermal and inhalation toxicity. It is expected to be irritating to the eyes and skin and non-sensitising to the skin. No significant acute toxicological effects are expected. EYE EFFECTS: Carrageenan: Non-irritating (Rabbit) Potassium Chloride: Non-irritating (Rabbit). SKIN EFFECTS: Carrageenan: Non-irritating (Rabbit) Sucrose: Non-irritating (Rabbit) Potassium Chloride: Irritating (Rabbit) DERMAL LD50: Carrageenan: >2000mg/Kg (Rabbit) ORAL LD50: Carrageenan: >5000mg/Kg (Rat) Sucrose: 2970mg/Kg (Rat) Potassium Chloride: 2600mg/Kg (Rat) INHALATION LC50: Carrageenan : >0.93mg/L/4hr (Rat) Maximum attainable concentration - zero mortality. SENSITISATION: Carrageenan: (Skin) Non-sensitising (Guinea Pig).
<b>EyeIrritant</b>	This product is expected to be irritating to the eyes.
<b>Ingestion</b>	This product is expected to have low oral toxicity.
<b>Inhalation</b>	Aspiration may cause chemical pneumonitis. Excessive inhalation of dust can mechanically impede respiration.
<b>SkinIrritant</b>	This product is expected to have low dermal toxicity. It is expected to be irritating to the skin and non-sensitising to the skin.
<b>Carcinogen Category</b>	No Data Available

## 12. ECOLOGICAL INFORMATION

<b>Ecotoxicity</b>	Potassium chloride 72 h EC50: 2500 mg/L (EC50). 96 h LC50: = 1060 mg/L (Lepomis macrochirus) : 96 h LC50: 750 - 1020 mg/L (Pimephales promelas) 48 h EC50: 825 mg/L (Daphnia magna) 48 h EC50: 83 mg/L (Daphnia magna)
<b>Persistence/Degradability</b>	Expected to biodegrade, based on component information.
<b>Mobility</b>	No information available on mobility for this product.
<b>Environmental Fate</b>	Avoid contaminating waterways, drains and sewers.
<b>Bioaccumulation Potential</b>	Bioaccumulation is unlikely.
<b>Environmental Impact</b>	No Data Available

## 13. DISPOSAL CONSIDERATIONS

<b>General Information</b>	Dispose of in accordance with all local, state and federal regulations. All empty packaging should be disposed of in accordance with Local, State, and Federal Regulations or recycled/reconditioned at an approved facility.
<b>Special Precautions for Land Fill</b>	Contact a specialist disposal company or the local waste regulator for advice.

## 14. TRANSPORT INFORMATION

### Land Transport (Australia)

ADG Code

<b>Proper Shipping Name</b>	GELCARIN DG 5250
<b>Class</b>	No Data Available
<b>Subsidiary Risk(s)</b>	No Data Available
	No Data Available
<b>UN Number</b>	No Data Available
<b>Hazchem</b>	No Data Available
<b>Pack Group</b>	No Data Available
<b>Special Provision</b>	No Data Available

### Land Transport (Malaysia)

ADR

<b>Proper Shipping Name</b>	GELCARIN DG 5250
<b>Class</b>	No Data Available
<b>Subsidiary Risk(s)</b>	No Data Available
	No Data Available
<b>UN Number</b>	No Data Available
<b>Hazchem</b>	No Data Available
<b>Pack Group</b>	No Data Available
<b>Special Provision</b>	No Data Available

### Land Transport (New Zealand)

NZS5433

<b>Proper Shipping Name</b>	GELCARIN DG 5250
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<b>Class</b>	No Data Available
<b>Subsidiary Risk(s)</b>	No Data Available
	No Data Available
<b>UN Number</b>	No Data Available
<b>Hazchem</b>	No Data Available
<b>Pack Group</b>	No Data Available
<b>Special Provision</b>	No Data Available

#### Land Transport (United States of America)

US DOT

<b>Proper Shipping Name</b>	GELCARIN DG 5250
<b>Class</b>	No Data Available
<b>Subsidiary Risk(s)</b>	No Data Available
	No Data Available
<b>UN Number</b>	No Data Available
<b>Hazchem</b>	No Data Available
<b>Pack Group</b>	No Data Available
<b>Special Provision</b>	No Data Available

#### Sea Transport

IMDG Code

<b>Proper Shipping Name</b>	GELCARIN DG 5250
<b>Class</b>	No Data Available
<b>Subsidiary Risk(s)</b>	No Data Available
<b>UN Number</b>	No Data Available
<b>Hazchem</b>	No Data Available
<b>Pack Group</b>	No Data Available
<b>Special Provision</b>	No Data Available
<b>EMS</b>	No Data Available
<b>Marine Pollutant</b>	No

#### Air Transport

IATA DGR

<b>Proper Shipping Name</b>	GELCARIN DG 5250
<b>Class</b>	No Data Available
<b>Subsidiary Risk(s)</b>	No Data Available
<b>UN Number</b>	No Data Available
<b>Hazchem</b>	No Data Available
<b>Pack Group</b>	No Data Available
<b>Special Provision</b>	No Data Available

#### National Transport Commission (Australia)

Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

<b>Dangerous Goods Classification</b>	NOT Dangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)
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### 15. REGULATORY INFORMATION

<b>General Information</b>	No Data Available
<b>Poisons Schedule (Aust)</b>	Not scheduled

### Environmental Protection Authority (New Zealand)

Hazardous Substances and New Organisms Amendment Act 2015

**Approval Code** HSR002727

### National/Regional Inventories

<b>Australia (AICS)</b>	Listed
<b>Canada (DSL)</b>	Listed
<b>Canada (NDSL)</b>	Not Determined
<b>China (IECSC)</b>	Listed
<b>Europe (EINECS)</b>	Listed
<b>Europe (REACH)</b>	Not Determined
<b>Japan (ENCS/METI)</b>	Not Determined
<b>Korea (KECI)</b>	Not Determined
<b>Malaysia (EHS Register)</b>	Not Determined
<b>New Zealand (NZIoC)</b>	Listed
<b>Philippines (PICCS)</b>	Listed
<b>Switzerland (Giftliste 1)</b>	Not Determined
<b>Switzerland (Inventory of Notified Substances)</b>	Not Determined
<b>Taiwan (NCSR)</b>	Not Determined
<b>USA (TSCA)</b>	Listed

## 16. OTHER INFORMATION

<b>Related Product Codes</b>	CARRIG1700, CARRIG1701, CARRIG5250
<b>Revision</b>	2
<b>Revision Date</b>	29 May 2015
<b>Reason for Issue</b>	updated sds
<b>Key/Legend</b>	<p>&lt; Less Than &gt; Greater Than  <b>AICS</b> Australian Inventory of Chemical Substances  <b>atm</b> Atmosphere  <b>CAS</b> Chemical Abstracts Service (Registry Number)  <b>cm<sup>2</sup></b> Square Centimetres  <b>CO<sub>2</sub></b> Carbon Dioxide  <b>COD</b> Chemical Oxygen Demand  <b>deg C (°C)</b> Degrees Celcius  <b>EPA (New Zealand)</b> Environmental Protection Authority of New Zealand  <b>deg F (°F)</b> Degrees Farenheit  <b>g</b> Grams</p>



**g/cm<sup>3</sup>** Grams per Cubic Centimetre  
**g/l** Grams per Litre  
**HSNO** Hazardous Substance and New Organism  
**IDLH** Immediately Dangerous to Life and Health  
**immiscible** Liquids are insoluble in each other.  
**inHg** Inch of Mercury  
**inH<sub>2</sub>O** Inch of Water  
**K** Kelvin  
**kg** Kilogram  
**kg/m<sup>3</sup>** Kilograms per Cubic Metre  
**lb** Pound  
**LC50** LC stands for lethal concentration. LC50 is the concentration of a material in air which causes the death of 50% (one half) of a group of test animals. The material is inhaled over a set period of time, usually 1 or 4 hours.  
**LD50** LD stands for Lethal Dose. LD50 is the amount of a material, given all at once, which causes the death of 50% (one half) of a group of test animals.  
**ltr** or **L** Litre  
**m<sup>3</sup>** Cubic Metre  
**mbar** Millibar  
**mg** Milligram  
**mg/24H** Milligrams per 24 Hours  
**mg/kg** Milligrams per Kilogram  
**mg/m<sup>3</sup>** Milligrams per Cubic Metre  
**Misc** or **Miscible** Liquids form one homogeneous liquid phase regardless of the amount of either component present.  
**mm** Millimetre  
**mmH<sub>2</sub>O** Millimetres of Water  
**mPa.s** Millipascals per Second  
**N/A** Not Applicable  
**NIOSH** National Institute for Occupational Safety and Health  
**NOHSC** National Occupational Health and Safety Commission  
**OECD** Organisation for Economic Co-operation and Development  
**Oz** Ounce  
**PEL** Permissible Exposure Limit  
**Pa** Pascal  
**ppb** Parts per Billion  
**ppm** Parts per Million  
**ppm/2h** Parts per Million per 2 Hours  
**ppm/6h** Parts per Million per 6 Hours  
**psi** Pounds per Square Inch  
**R** Rankine  
**RCP** Reciprocal Calculation Procedure  
**STEL** Short Term Exposure Limit  
**TLV** Threshold Limit Value  
**tne** Tonne  
**TWA** Time Weighted Average  
**ug/24H** Micrograms per 24 Hours  
**UN** United Nations  
**wt** Weight