

### 1. IDENTIFICATION

<b>Product Name</b>	<b>Dextrose, monohydrate</b>
<b>Other Names</b>	D(+)-Glucose, monohydrate
<b>Uses</b>	No Data Available
<b>Chemical Family</b>	No Data Available
<b>Chemical Formula</b>	C6H12O6.H2O
<b>Chemical Name</b>	.alpha.-D-Glucopyranose, monohydrate
<b>Product Description</b>	Alternate CAS Number: 14431-43-7

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

Organisation	Location	Telephone
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.*

Organisation	Location	Telephone
Poisons Information Centre	Westmead NSW	1800-251525 131126
Chemcall	Australia	1800-127406 +64-4-9179888

### 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)

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

**Ingredients**

Chemical Entity	Formula	CAS Number	Proportion
Dextrose, monohydrate	C6H12O6.H2O	5996-10-1	<=100 %

**4. FIRST AID MEASURES**

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

- Swallowed** If swallowed: Rinse mouth, then drink plenty of water. Do not induce vomiting. Get medical advice/attention. Never give anything by mouth to an unconscious person.
- Eye** Eye contact: Rinse cautiously with water for several minutes, holding eyelids open and occasionally lifting the upper and lower lids. Remove contact lenses if present and easy to do. Continue rinsing for at least 15 minutes. If eye irritation persists, get medical advice/attention.
- Skin** Skin contact: Wash with plenty of soap and water. Take off contaminated clothing and wash before reuse. If skin irritation occurs, get medical advice/attention.
- Inhaled** If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If respiratory symptoms persist, get medical advice/attention.
- Advice to Doctor** Treat symptomatically.
- Medical Conditions Aggravated by Exposure** No information available.

**5. FIRE FIGHTING MEASURES**

- General Measures** If safe to do so, move undamaged containers from fire area. Cool containers with water spray until well after fire is out.
- Flammability Conditions** Combustible solid; May burn but does not ignite readily.
- Extinguishing Media** Use dry chemical, Carbon dioxide, water spray or foam for extinction.
- Fire and Explosion Hazard** Dust explosion hazard - May form combustible dust clouds in air.
- Hazardous Products of Combustion** Fire may produce irritating and/or toxic fumes, including oxides of Carbon.
- Special Fire Fighting Instructions** Contain runoff from fire control or dilution water - Runoff may pollute waterways.
- Personal Protective Equipment** Wear self-contained breathing apparatus (SCBA) in combination with normal firefighting clothing (fire kit).
- Flash Point** 202.2 °C
- Lower Explosion Limit** No Data Available
- Upper Explosion Limit** No Data Available
- Auto Ignition Temperature** No Data Available
- Hazchem Code** No Data Available

**6. ACCIDENTAL RELEASE MEASURES**

- General Response Procedure** Ensure adequate ventilation. ELIMINATE all ignition sources (no smoking, flares, sparks or flames). Do not touch or walk through spilled material. Avoid breathing dust and contact with eyes, skin and clothing.



<b>Clean Up Procedures</b>	Sweep or vacuum up material and place it into suitable containers for disposal (see SECTION 13); If appropriate, moisten first to prevent dusting.
<b>Containment</b>	Prevent entry into waterways, drains or confined areas. Prevent dust cloud.
<b>Decontamination</b>	Wash area down with excess water.
<b>Environmental Precautionary Measures</b>	Prevent entry into drains and waterways.
<b>Evacuation Criteria</b>	Spill or leak area should be isolated immediately. Keep unauthorised personnel away.
<b>Personal Precautionary Measures</b>	Use personal protective equipment as required (see SECTION 8).

## 7. HANDLING AND STORAGE

<b>Handling</b>	Safety showers and eyewash facilities should be provided within the immediate work area for emergency use. Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice. Avoid breathing dust and contact with eyes, skin and clothing. Use personal protective equipment as required (see SECTION 8). Avoid handling which leads to dust formation - May form combustible dust clouds in air. Take precautionary measures against static discharges.
<b>Storage</b>	Store in a cool, dry, well ventilated place. Keep container tightly closed when not in use - Check regularly for spills. Keep out of direct sunlight. Keep away from heat and sources of ignition. Keep away from incompatible materials (strong oxidising agents).
<b>Container</b>	Keep in the original container.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

<b>General</b>	No specific exposure standards are available for this product. For dusts from solid substances without specific occupational exposure standards: - Safe Work Australia Exposure Standard (Nuisance dusts): 8 hr TWA = 10 mg/m <sup>3</sup> (measured as inhalable dust). - New Zealand WES (Particulates not otherwise classified): TWA = 10 mg/m <sup>3</sup> (total); TWA = 3 mg/m <sup>3</sup> (respirable). - OSHA PEL (Particulates not otherwise regulated): TWA = 15 mg/m <sup>3</sup> (total); TWA = 5 mg/m <sup>3</sup> (respirable).
<b>Exposure Limits</b>	No Data Available
<b>Biological Limits</b>	No information available.
<b>Engineering Measures</b>	A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Ensure ventilation is adequate to maintain air concentrations below Workplace Exposure Standards.
<b>Personal Protection Equipment</b>	Respiratory protection: If determined by a risk assessment an inhalation risk exists, wear a dust mask meeting the requirements of AS/NZS 1715 and AS/NZS 1716. Eye/face protection: Wear appropriate eye protection to avoid eye contact. Recommended: Safety glasses. Hand protection: Handle with gloves. Recommended: Impervious gloves. Skin/body protection: Wear appropriate personal protective clothing to avoid skin contact. Recommended: Overalls, safety shoes.
<b>Special Hazards Precautions</b>	No information available.
<b>Work Hygienic Practices</b>	Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Take off contaminated clothing and wash before storage or reuse.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical State</b>	Solid
<b>Appearance</b>	Crystals, granules, powder
<b>Odour</b>	Odourless
<b>Colour</b>	Colourless to white
<b>pH</b>	No Data Available



<b>Vapour Pressure</b>	No Data Available
<b>Relative Vapour Density</b>	No Data Available
<b>Boiling Point</b>	410.8 °C (@ 760 mmHg)
<b>Melting Point</b>	110 °C
<b>Freezing Point</b>	No Data Available
<b>Solubility</b>	Soluble in water
<b>Specific Gravity</b>	No Data Available
<b>Flash Point</b>	202.2 °C
<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 information available.
<b>Potential for Dust Explosion</b>	Dust explosion hazard - May form flammable dust clouds in air.
<b>Fast or Intensely Burning Characteristics</b>	No information available.
<b>Flame Propagation or Burning Rate of Solid Materials</b>	No information available.
<b>Non-Flammables That Could Contribute Unusual Hazards to a Fire</b>	No information available.
<b>Properties That May Initiate or Contribute to Fire Intensity</b>	Combustible solid; May burn but does not ignite readily.
<b>Reactions That Release Gases or Vapours</b>	Fire may produce irritating and/or toxic fumes, including oxides of Carbon.
<b>Release of Invisible Flammable Vapours and Gases</b>	No information available.

## 10. STABILITY AND REACTIVITY

<b>General Information</b>	No information available.
<b>Chemical Stability</b>	Stable under normal conditions.
<b>Conditions to Avoid</b>	Avoid dust generation. Keep away from heat and sources of ignition.
<b>Materials to Avoid</b>	Incompatible with strong oxidising agents.
<b>Hazardous Decomposition Products</b>	Fire may produce irritating and/or toxic fumes, including oxides of Carbon.
<b>Hazardous Polymerisation</b>	Will not occur.



**11. TOXICOLOGICAL INFORMATION**

<b>General Information</b>	Information on possible routes of exposure: - Eye contact: Dust may cause (mechanical) irritation due to particulate nature. - Skin contact: May cause (mechanical) irritation. - Ingestion: No adverse health effects are expected; however, large amounts may cause nausea and vomiting. - Inhalation: Dust may cause respiratory irritation. Chronic effects: No information available.
<b>Acute</b>	
<b>Ingestion</b>	Acute toxicity (Oral): - LD50, Rat: 25,800 mg/kg
<b>Carcinogen Category</b>	None

**12. ECOLOGICAL INFORMATION**

<b>Ecotoxicity</b>	No information available.
<b>Persistence/Degradability</b>	No information available.
<b>Mobility</b>	No information available.
<b>Environmental Fate</b>	Prevent entry into drains and waterways.
<b>Bioaccumulation Potential</b>	No information available.
<b>Environmental Impact</b>	No Data Available

**13. DISPOSAL CONSIDERATIONS**

<b>General Information</b>	Dispose of contents/container in accordance with local/regional/national regulations.
<b>Special Precautions for Land Fill</b>	No information available.

**14. TRANSPORT INFORMATION**

**Land Transport (Australia)**

ADG Code

<b>Proper Shipping Name</b>	DEXTROSE MONOHYDRATE
<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>	DEXTROSE MONOHYDRATE
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<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>	DEXTROSE MONOHYDRATE
<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

**National/Regional Inventories**

<b>Australia (AICS)</b>	Listed
<b>Canada (DSL)</b>	Not Determined
<b>Canada (NDSL)</b>	Not Determined
<b>China (IECSC)</b>	Not Determined
<b>Europe (EINECS)</b>	Not Determined
<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>	Not Determined



Switzerland (Giftliste 1)	Not Determined
Switzerland (Inventory of Notified Substances)	Not Determined
Taiwan (NCSR)	Not Determined
USA (TSCA)	Not Determined

## 16. OTHER INFORMATION

### Related Product Codes

DEXTRO0200, DEXTRO0201, DEXTRO0202, DEXTRO0204, DEXTRO0205, DEXTRO0215, DEXTRO0900, DEXTRO0901, DEXTRO1000, DEXTRO1001, DEXTRO1002, DEXTRO1003, DEXTRO1004, DEXTRO1005, DEXTRO1006, DEXTRO1007, DEXTRO1008, DEXTRO1009, DEXTRO1010, DEXTRO1011, DEXTRO1012, DEXTRO1013, DEXTRO1014, DEXTRO1015, DEXTRO1016, DEXTRO1017, DEXTRO1018, DEXTRO1019, DEXTRO1020, DEXTRO1021, DEXTRO1022, DEXTRO1023, DEXTRO1024, DEXTRO1025, DEXTRO1026, DEXTRO1027, DEXTRO1028, DEXTRO1029, DEXTRO1030, DEXTRO1031, DEXTRO1032, DEXTRO1033, DEXTRO1034, DEXTRO1035, DEXTRO1036, DEXTRO1037, DEXTRO1038, DEXTRO1039, DEXTRO1040, DEXTRO1041, DEXTRO1042, DEXTRO1043, DEXTRO1100, DEXTRO1500, DEXTRO1800, DEXTRO1801, DEXTRO1802, DEXTRO1803, DEXTRO2000, DEXTRO2001, DEXTRO2800, DEXTRO3000, DEXTRO4000, DEXTRO5000, DEXTRO5001, DEXTRO5002, DEXTRO5100, DEXTRO5200, DEXTRO5300, DEXTRO5400, DEXTRO5800, DEXTRO6000, DEXTRO6001, DEXTRO6100, DEXTRO6200, DEXTRO7000, DEXTRO7100, DEXTRO7400, DEXTRO7500, DEXTRO7501, DEXTRO7502, DEXTRO7510, DEXTRO7600, DEXTRO7601, DEXTRO7700, DEXTRO7800, DEXTRO8000, DEXTRO8001, DEXTRO8200, DEXTRO8201, DEXTRO8202, DEXTRO8204, DEXTRO8205, DEXTRO8210, DEXTRO8300, DEXTRO8500, DEXTRO8600, DEXTRO8700, DEXTRO8800, DEXTRO9000, DEXTRO9200, DEXTRO9300, DEXTRO9400, DEXTRO9401, DEXTRO9500, DEXTRO9600, DEXTRO9700, DEXTRO9701, DEXTRO9800, DEXTRO9815, DEXTRO9852, DEXTRO9900

### Revision

3

### Revision Date

19 Dec 2017

### Key/Legend

< Less Than

> Greater Than

**AICS** Australian Inventory of Chemical Substances

**atm** Atmosphere

**CAS** Chemical Abstracts Service (Registry Number)

**cm<sup>2</sup>** Square Centimetres

**CO<sub>2</sub>** Carbon Dioxide

**COD** Chemical Oxygen Demand

**deg C (°C)** Degrees Celcius

**EPA (New Zealand)** Environmental Protection Authority of New Zealand

**deg F (°F)** Degrees Farenheit

**g** Grams

**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 insoluable 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

**LC<sub>50</sub>** LC stands for lethal concentration. LC<sub>50</sub> 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.

**LD<sub>50</sub>** LD stands for Lethal Dose. LD<sub>50</sub> 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

