

## SAFETY DATA SHEET

### LACTOSE 1-HYDRATE AR

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#### 1. Identification of the substance/preparation and of the company or firm

1.1 Identification of the substance or preparation:

Catalogue no. : KA871

Product name : Lactose 1-hydrate AR

1.2 Use of the substance/preparation: For laboratory utilisation, analysis, research and fine chemistry.

1.3 Identification of the company or firm: Elago Enterprises Pty Ltd, 5 The Cloisters, Cherrybrook, N.S.W. 2126, Australia

Tel no. (61) 2 98998169

Fax no. (61) 2 98997976

1.4 Emergency telephone: (61) 2 98998169 (9:00am - 5:00 pm) [ Office hours ]

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#### 2. Identification of dangers

Hazard Class and Category Code(s), Regulation (EC) No 1272/2008 (CLP)

Not classified as dangerous.

Classification EC 67/548 or EC 1999/45

Not classified as dangerous.

Other hazards

None known.

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#### 3. Composition/information on ingredients

Substance / Preparation.

Lactose 1-hydrate

Formular:  $C_{12}H_{22}O_{11} \cdot H_2O$

CAS No : 10039-26-6

Molecular weight : 360.32

Contains no other components or impurities which will influence the classification of the product.

Mixture.

Not applicable.

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#### 4. First-aid measures

4.1 Description of first aid measures.

Inhaling: Take the person out into the fresh air.

Skin contact: Wash with plenty of water. Remove contaminated clothing.

Eyes: Wash with plenty of water, keeping eyelids open.

Ingestion: Never induce vomiting. If feeling unwell seek medical assistance.

4.2 Most important symptoms and effects, both acute and delayed.

Not expected to present a significant hazard under anticipated conditions of normal use.

4.3 Indication of any immediate medical attention and special treatment needed.

In case of doubt or when symptoms of feeling unwell persist, get medical attention. Never administer anything orally to persons who are unconscious.

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#### 5. Fire-fighting measures

5.1 Suitable extinguishing media.

Recommended extinguishing methods: Foam. Dry powder. Carbon dioxide. Water spray. Sand.

5.2 Special hazards arising from the substance.

Special risks: Under fire conditions, hazardous fumes may present.

5.3 Advice for firefighters.

Do not enter fire area without proper protective equipment, including respiratory protection.

Fire protection equipment: According to the size of the fire, it may be necessary to use protective suits against the heat, individual breathing equipment, gloves, protective goggles or facemasks, and gloves.

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#### 6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures.

For exposure control and individual protection measures, see section 8.

6.2 Environmental precautions.

Do not allow it to enter the drainage system. Avoid pollution of the soil, water supplies and drains.

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### 6.3 Methods and material for containment and cleaning up.

The contaminated area should be immediately cleaned with an appropriate de-contaminator. Store away from other materials. Collect spillage.

### 6.4 Reference to other sections.

For exposure control and individual protection measures, see section 8.

For later elimination of waste, follow the recommendations under section 13.

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## 7. Handling and storage

### 7.1 Precautions for safe handling.

Ensure good ventilation and renewal of the air in the premises. Avoid breathing dust, fume, gas, mist, vapours, spray.

Do not eat, drink or smoke when using this product.

### 7.2 Conditions for safe storage, including any incompatibilities.

Well sealed containers. In well ventilated premises. Away from sources of ignition and heat.

### 7.3 Specific end use(s).

None.

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## 8. Exposure controls/personal protection

### 8.1 Control parameters.

The product does NOT contain substances with Professional Exposure Environmental Limit Values.

The product does NOT contain substances with Biological Limit Values.

### 8.2 Exposure controls.

Personal protection : Avoid all unnecessary exposure.

Respiratory protection : Wear approved mask.

Hand protection : Wear protective gloves.

Eye protection : Chemical goggles or safety glasses.

Others : When using, do not eat, drink or smoke.

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## 9. Physical and chemical properties

### 9.1 Information on basic physical and chemical properties.

Appearance:	Solid.
Colour:	White powder.
Odour:	Odourless.
Odour threshold:	No data available.
pH value:	4.0-6.0 (50g/l)
Melting Point:	202°C
Boiling Point:	No data available.
Flash point:	No data available.
Flammability (solid, gas) :	No data available.
Evaporation rate :	No data available.
Vapour pressure:	No data available.
Vapour density :	No data available.
Lower Explosive Limit:	No data available.
Upper Explosive Limit:	No data available.
Solubility:	216 g/l in water (20°C)
Relative Density:	No data available.
Decomposition temperature:	No data available.
Auto-ignition temperature:	390°C
Partition coefficient (n-octanol/water):	-5.03 (log Pow)
Viscosity:	No data available.
Explosive properties:	No data available.
Oxidizing properties:	No data available.

### 9.2 Other information.

None.

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## 10. Stability and reactivity

### 10.1 Reactivity.

The product does not present hazards by their reactivity.

### 10.2 Chemical stability.

Stable under the recommended handling and storage conditions (see section 7).

### 10.3 Possibility of hazardous reactions.

The product does not present possibility of hazardous reactions.

### 10.4 Conditions to avoid.

Avoid any improper handling.

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10.5 Incompatible materials.

Keep away from oxidising agents and from highly alkaline or acidic materials in order to prevent exothermic reactions.

10.6 Hazardous decomposition products.

No decomposition if used for the intended uses.

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**11. Toxicological information**

11.1 Information on toxicological effects.

Acute toxicity: LD50 oral rat : >10000 mg/kg  
Inhalation: Based on available data, the classification criteria are not met.  
Dermal: Based on available data, the classification criteria are not met.  
Ingestion: Based on available data, the classification criteria are not met.  
Corrosion: Based on available data, the classification criteria are not met.  
Irritation: Based on available data, the classification criteria are not met.  
Sensitization: Based on available data, the classification criteria are not met.  
Mutagenicity: Based on available data, the classification criteria are not met.  
Carcinogenicity: Based on available data, the classification criteria are not met.  
Toxic for reproduction: Based on available data, the classification criteria are not met.  
STOT-single exposure: Based on available data, the classification criteria are not met.  
STOT-repeated exposure: Based on available data, the classification criteria are not met.  
Aspiration hazard: Based on available data, the classification criteria are not met.

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**12. Ecological information**

12.1 Toxicity.

Not established.

12.2 Persistence and Degradability.

Biodegradable.

12.3 Bioaccumulative potential.

Partition coefficient: n-octanol/water log Pow: -5.03

12.4 Mobility in soil

Not established.

12.5 Results of PBT and vPvB assessment.

The substance does not fulfil the criteria to be identified as PBT substance or vPvB substance according to Annex XIII of Regulation REACH.

12.6 Other adverse effects.

No information is available about other adverse effects for the environment.

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**13. Disposal considerations**

13.1 Waste treatment methods.

Avoid release to the environment. Dispose in a safe manner in accordance with local/national regulations.

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**14. Transport information**

14.1 UN number.

Not regulated.

14.2 UN proper shipping name.

ADR: Not regulated.

IMDG: Not regulated.

ICAO: Not regulated.

14.3 Transport hazard class(es).

Not regulated.

14.4 Packing group.

Not regulated.

14.5 Environmental hazards.

Not regulated.

14.6 Special precautions for user.

Transportation is not dangerous

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code.

Not applicable

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**15. Regulatory information**

15.1 Safety, health and environmental regulations/legislation specific for the substance.

Ensure all national/local regulations are observed.

The product is not affected by REACH Restrictions - Annex XVII

The product is not affected by REACH Authorisation - Annex XIV

## 16. Other Information

### Abbreviations and acronyms :

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

EC50: Effective concentration, 50%

IC50: Inhibitory Concentration, 50%

LC0: Lethal concentration, 0%.

LD50: Lethal dose, 50%.

Log Pow: Logarithm of the partition octanol-water.

PBT: persistent, bioaccumulative and toxic. vPvB: very persistent and very bioaccumulative.

### Sources of key data used.

REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

### Review number and date.

v. 1.0

### Date published.

24-Feb-2018

### Further information.

None.

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In accordance with REACH Regulation (CE) N° 1907/2006 and with CLP Regulation (CE) N° 1272/2008

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