

**D-(+)-RAFFINOSE PENTAHYDRATE****RAF01 – RAF04****SECTION 1 Identification of the substance/mixture and of the company/undertaking****1.1. Product identifier**

Identification of the product : Raw material  
Product code : RAF01 – RAF-04  
Trade name : D-(+)-RaffinosePentahydrate  
CAS number : 17629-30-0, 512-69-6  
EC No: : 208-146-9  
Molecular Weight : 594.52 g/mol

**1.2. Relevant identified uses of the substance or mixture and uses advised against**

1.2.1 Relevant identified uses : For research purposes only  
1.2.2 Uses advised against No additional information available

**1.3. Details of the supplier of the safety data sheet**

Company identification : Formedium Ltd.  
Unit 1B Hunstanton Commercial Park  
Norfolk PE365JQ  
Tel: +44(0)1485 609069  
Fax: +44(0)1485 600510  
E-mail:info@formedium.com

**1.4. Emergency telephone number**

Emergency telephone number : Tel: +44(0)1485 609069 (local time : 9.00 to 17.00)  
National Poison Information Centre :Europe UK : +44 0845 4647 (this service is only available to health professionals)  
See [www.toxbase.org](http://www.toxbase.org) for a local poison centre

**SECTION 2 Hazards identification****2.1. Classification of the substance or mixture****Classification according to Regulation (EC) No 1272/2008**

Not regulated

**2.2. Label elements****Labelling according to Regulation (EC) No. 1272/2008**

Hazards pictograms code : None  
Precautionary statements : None

**2.3 Other hazards**

None under normal conditions.

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### SECTION 3 Composition/information on ingredients

**Components** : This product is not classified as hazardous.

Substance name:	Contents	CAS No:	EC No:
D-(+)-Raffinose Pentahydrate	99%	17629-30-0, 512-69-6	208-146-9

### SECTION 4 First aid measures

#### 4.1. Description of first aid measures

- General information** : No hazards which require special first aid measures.  
Never give anything by mouth to an unconscious person.
- Inhalation** : Remove victim to fresh air.
- Skin contact** : : Wash with water and soap as a precaution.
- Eye contact** : Flush eyes with water as a precaution.
- Ingestion** : If a person vomits when lying on their back, place them in the recovery position.  
Never give anything by mouth to an unconscious person.  
Drink water as a precaution.

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

**Symptoms and effects, both acute and delayed.** : No data available.

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

**Medical attention and special treatment needed.** : No data available.

### SECTION 5 Fire-fighting measures

#### 5.1. Extinguishing media

**Suitable extinguishing media** : Water spray, alcohol-resistant foam, dry chemical or Carbon Dioxide.

**Extinguishing media which shall not be used for safety reasons** : High volume water jet

#### 5.2. Special hazards arising from the substance or mixture

**Specific hazards during fire-fighting** : Do not use a solid water stream as it may scatter and spread fire.

#### 5.3. Advice for firefighters

**Special protective equipment for fire-fighters** : In the event of fire, wear self-contained breathing apparatus.  
**Further information** : In the event of fire and/or explosion do not breathe fumes.  
Use water spray to cool unopened containers.

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### SECTION 6 Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions : Ensure adequate ventilation.

#### 6.2. Environmental precautions

Environmental precautions : No special environmental precautions required.

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

Clean up methods : Pick up and transfer to properly labelled containers.  
Use mechanical handling equipment.

#### 6.4. Reference to other sections

For personal protection see section 8.

### SECTION 7 Handling and storage

#### 7.1. Precautions for safe handling

Advice on safe handling : No special precautions required.

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

Storage area and containers : Store in a dry, cool area.  
Store in original container.  
To maintain product quality, do not store in heat or direct sunlight.

#### 7.3. Specific end use(s)

Specific end use(s) : For research purposes only

### SECTION 8 Exposure controls/personal protection

#### 8.1. Control parameters

No additional information available.

#### 8.2. Exposure controls

- Eye protection : Safety glasses.
- Skin protection : Wash skin after contact.
- Hand protection : Wear chemical-resistant gloves e.g. safety gloves of chloroprene Level 2 or butyl rubber Level 6.
- Respiratory protection : No personal protective equipment normally required.
- Hygiene measures : Wash hands before breaks and immediately after handling the product.
- Protective measures : Avoid contact with skin.  
When using do not eat, drink or smoke.

### SECTION 9 Physical and chemical properties

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

##### • Appearance

Form : Crystalline powder  
Colour : White.  
Odour : Characteristic  
Odour threshold : No data available

**D-(+)-RAFFINOSE PENTAHYDRATE****RAF01 – RAF04****SECTION 9 Physical and chemical properties (continued)****Safety data**

<b>Flash point (°C)</b>	: Not applicable
<b>Solubility in water</b>	: Completely miscible
<b>Relative Density</b>	: No data available
<b>Bulk Density</b>	: < 1500 kg/m <sup>3</sup>
<b>Relative vapour density (air = 1)</b>	: Not applicable
<b>Vapour pressure</b>	: No data available
<b>Melting point / Freezing point</b>	: Melting point / range ca 78°C
<b>Boiling point (°C)</b>	: No data available.
<b>Partition coefficient: n-octanol / water</b>	: log Pow : not determined
<b>pH</b>	: 6.21
<b>Evaporation rate</b>	: No data available
<b>Flammability (solid, gas)</b>	: Not classified as flammable
<b>Auto ignition temperature (°C)</b>	: Not classified as self heating
<b>Decomposition temperature</b>	: No data available
<b>Oxidising properties</b>	: Not classified as oxidizing
<b>Explosive properties</b>	: Not classified as explosive
<b>Lower explosion limit</b>	: Dust can form an explosive mixture in air
<b>Upper explosion limit</b>	: Dust can form an explosive mixture in air

A final assessment of potential explosion hazards can only be made on a case-by-case basis when precise information is available on product handling, production setup and the circumstances surrounding the use of the product.

**9.2 Other information****No additional information available**

**D-(+)-RAFFINOSE PENTAHYDRATE****RAF01 – RAF04****SECTION 10 Stability and reactivity****10.1. Reactivity**

No data available.

**10.2. Chemical stability**

No data available.

**10.3. Possibility of hazardous reactions**

No dangerous reaction known under conditions of normal use.

**10.4. Conditions to avoid**

No data available.

**10.5. Incompatible materials to avoid**

No data available.

**10.6. Hazardous decomposition products**

No data available.

**SECTION 11 Toxicological information****11.1. Information on toxicological effects**

Acute oral toxicity	: No data available
Acute inhalation toxicity	: No data available
Acute dermal toxicity	: No data available
Repeated dose toxicity	: No data available
Acute toxicity (other routes of administration)	: No data available
Skin irritation	: No data available
Eye irritation	: No data available
Sensitisation	: No data available
Mutagenicity	: No data available
Carcinogenicity	: No data available
Reproductive toxicity	: No data available
Teratogenicity	: No data available
Specific target organ toxicity – single exposure	: No data available
Specific target organ toxicity – repeated exposure	: No data available
Aspiration toxicity	: No data available

**SECTION 12 Ecological information****12.1. Toxicity**

No data available.

**12.2. Persistence and degradability**

No additional information available.

**12.3. Bioaccumulative potential**

No additional information available.

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### SECTION 12 Ecological Information (continued)

#### 12.4. Mobility in soil

No additional information available.

#### 12.5. Results of PBT and vPvB assessment

No data available.

#### 12.6. Other adverse effects

No data available.

### SECTION 13 Disposal considerations

#### 13.1. Waste treatment methods

##### General

Avoid release to the environment.

Dispose in a safe manner in accordance with local / national regulations.

### SECTION 14 Transport information

#### 14.1. UN Number

Not applicable

: Not classified as dangerous in the meaning of transport regulations.

##### General information

#### 14.2. UN Proper shipping name

Not applicable.

#### 14.3. Transport Hazard Class(es)

Not applicable.

#### 14.4. Packing group

Not applicable.

#### 14.5. Environmental hazards

Not applicable.

#### 14.6. Special precautions for user

Not applicable.

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

Not applicable.

### SECTION 15 Regulatory information

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

This safety datasheet complies with the requirements of Regulation (EU) No. 2015/830.

#### 15.2. Chemical Safety Assessment

For this product a chemical safety assessment was not carried out.

### SECTION 16 Other information

##### Further information

: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Formedium Ltd. shall not be held liable for any damage resulting from handling or from contact with the above product.

##### Revision

: Complete SDS revision

End of document