

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Product form : Mixture  
Product name : 4-Nitrophenyl- $\alpha$ -D-galactopyranoside  
Product code : O-PNPAGAL

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

##### 1.2.1. Relevant identified uses

Industrial/Professional use spec : For professional use only  
Use of the substance/mixture : Use as laboratory reagent

##### 1.2.2. Uses advised against

No additional information available

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

##### Manufacturer

Megazyme  
Bray Business Park  
A98 YV29 Bray - Ireland  
T +353 12861220 - F +353 12861264  
[cs@megazyme.com](mailto:cs@megazyme.com) - [www.megazyme.com](http://www.megazyme.com)

#### 1.4. Emergency telephone number

Emergency number : +353 12861220 [9 am to 5 pm GMT - Monday to Friday]

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Skin corrosion/irritation, Category 2 H315  
Serious eye damage/eye irritation, Category 2 H319  
Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation H335

Full text of H statements : see section 16

##### Adverse physicochemical, human health and environmental effects

May cause respiratory irritation. Causes skin irritation. Causes serious eye irritation.

#### 2.2. Label elements

##### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS07

Signal word (CLP) : Warning  
Hazardous ingredients : p-nitrophenyl  $\alpha$ -D-galactopyranoside  
Hazard statements (CLP) : H315 - Causes skin irritation.  
H319 - Causes serious eye irritation  
H335 - May cause respiratory irritation.  
Precautionary statements (CLP) : P261 - Avoid breathing dust.  
P264 - Wash hands thoroughly after handling.  
P271 - Use only outdoors or in a well-ventilated area.  
P280 - Wear eye protection, protective clothing, protective gloves  
P302+P352 - IF ON SKIN: Wash with plenty of water.  
P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.

##### Labelling according to: exemption for inner packaging where the contents do not exceed 10ml

Hazardous ingredients : p-nitrophenyl  $\alpha$ -D-galactopyranoside

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### 2.3. Other hazards

No additional information available

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

| Name  | Product identifier                        | %   | Classification according to Regulation (EC) No. 1272/2008 [CLP] |
|---|---|-----|---|
| p-nitrophenyl $\alpha$ -D-galactopyranoside | (CAS-No.) 7493-95-0<br>(EC-No.) 231-343-6 | 100 | Skin Irrit. 2, H315<br>Eye Irrit. 2, H319<br>STOT SE 3, H335    |

Full text of H-statements: see section 16

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

|                                       |  |
|---------------------------------------|--|
| First-aid measures general            | : Call a poison center or a doctor if you feel unwell.   |
| First-aid measures after inhalation   | : Remove person to fresh air and keep comfortable for breathing. Call a poison center or a doctor if you feel unwell.  |
| First-aid measures after skin contact | : Wash skin with plenty of water. Take off contaminated clothing. If skin irritation occurs: Get medical advice/attention.   |
| First-aid measures after eye contact  | : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. |
| First-aid measures after ingestion    | : Call a poison center or a doctor if you feel unwell.   |

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

|                                     |                                     |
|-------------------------------------|-------------------------------------|
| Symptoms/effects after inhalation   | : May cause respiratory irritation. |
| Symptoms/effects after skin contact | : Irritation.                       |
| Symptoms/effects after eye contact  | : Eye irritation.                   |

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

Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam.

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

Hazardous decomposition products in case of fire : Toxic fumes may be released.

### 5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

## SECTION 6: Accidental release measures

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

#### 6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. Avoid breathing dust. Avoid contact with skin and eyes.

#### 6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

### 6.2. Environmental precautions

Avoid release to the environment.

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

Methods for cleaning up : Mechanically recover the product.  
Other information : Dispose of materials or solid residues at an authorized site.

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### 6.4. Reference to other sections

For further information refer to section 13.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Precautions for safe handling : Wear personal protective equipment. Use only outdoors or in a well-ventilated area. Avoid breathing dust. Avoid contact with skin and eyes.

Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product. Wash contaminated clothing before reuse.

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

Storage conditions : Store in a well-ventilated place. Keep cool. Store locked up. Keep container tightly closed.

### 7.3. Specific end use(s)

No additional information available

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

No additional information available

### 8.2. Exposure controls

#### Appropriate engineering controls:

Ensure good ventilation of the work station.

#### Hand protection:

Protective gloves

| Type              | Material             | Permeation       | Thickness (mm) | Penetration | Standard |
|-------------------|----------------------|------------------|----------------|-------------|----------|
| Disposable gloves | Nitrile rubber (NBR) | 3 (> 60 minutes) |                | 2 (< 1.5)   | EN 374-2 |

#### Eye protection:

Safety glasses

| Type           | Use  | Characteristics   | Standard |
|----------------|------|-------------------|----------|
| Safety glasses | Dust | With side shields | EN 166   |

#### Skin and body protection:

Wear suitable protective clothing

| Type     | Standard |
|----------|----------|
| Lab coat |          |

#### Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

| Device    | Filter type | Condition                      | Standard       |
|-----------|-------------|--------------------------------|----------------|
| Dust mask | Type P1     | Protection for Solid particles | EN 143, EN 149 |



#### Environmental exposure controls:

Avoid release to the environment.

## SECTION 9: Physical and chemical properties

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

Physical state : Solid

Colour : White to light yellow.

Odour : None.

Odour threshold : No data available

pH : No data available

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|  |                     |
|--|---------------------|
| Relative evaporation rate (butylacetate=1) | : No data available |
| Melting point                              | : No data available |
| Freezing point                             | : Not applicable    |
| Boiling point                              | : No data available |
| Flash point                                | : Not applicable    |
| Auto-ignition temperature                  | : Not applicable    |
| Decomposition temperature                  | : No data available |
| Flammability (solid, gas)                  | : Non flammable.    |
| Vapour pressure                            | : No data available |
| Relative vapour density at 20 °C           | : No data available |
| Relative density                           | : Not applicable    |
| Solubility                                 | : Soluble in water. |
| Log Pow                                    | : No data available |
| Viscosity, kinematic                       | : Not applicable    |
| Viscosity, dynamic                         | : No data available |
| Explosive properties                       | : No data available |
| Oxidising properties                       | : No data available |
| Explosive limits                           | : Not applicable    |

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

### 10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

### 10.5. Incompatible materials

No additional information available

### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

|                                   |                                     |
|-----------------------------------|-------------------------------------|
| Acute toxicity (oral)             | : Not classified                    |
| Acute toxicity (dermal)           | : Not classified                    |
| Acute toxicity (inhalation)       | : Not classified                    |
| Skin corrosion/irritation         | : Causes skin irritation.           |
| Serious eye damage/irritation     | : Causes serious eye irritation.    |
| Respiratory or skin sensitisation | : Not classified                    |
| Germ cell mutagenicity            | : Not classified                    |
| Carcinogenicity                   | : Not classified                    |
| Reproductive toxicity             | : Not classified                    |
| STOT-single exposure              | : May cause respiratory irritation. |
| STOT-repeated exposure            | : Not classified                    |
| Aspiration hazard                 | : Not classified                    |

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### SECTION 12: Ecological information

#### 12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

Acute aquatic toxicity : Not classified

Chronic aquatic toxicity : Not classified

#### 12.2. Persistence and degradability

No additional information available

#### 12.3. Bioaccumulative potential

No additional information available

#### 12.4. Mobility in soil

No additional information available

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

No additional information available

#### 12.6. Other adverse effects

No additional information available

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

### SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

| ADR                                     | IATA           |
|---|----------------|
| <b>14.1. UN number</b>                  |                |
| Not applicable                          | Not applicable |
| <b>14.2. UN proper shipping name</b>    |                |
| Not applicable                          | Not applicable |
| <b>14.3. Transport hazard class(es)</b> |                |
| Not applicable                          | Not applicable |
| <b>14.4. Packing group</b>              |                |
| Not applicable                          | Not applicable |
| <b>14.5. Environmental hazards</b>      |                |
| Not applicable                          | Not applicable |
| No supplementary information available  |                |

#### 14.6. Special precautions for user

##### - Overland transport

Not applicable

##### - Air transport

Not applicable

#### 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

### SECTION 15: Regulatory information

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

##### 15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

##### 15.1.2. National regulations

No additional information available

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### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

## SECTION 16: Other information

Full text of H- and EUH-statements:

|               |  |
|---------------|--|
| Eye Irrit. 2  | Serious eye damage/eye irritation, Category 2  |
| Skin Irrit. 2 | Skin corrosion/irritation, Category 2  |
| STOT SE 3     | Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation |
| H315          | Causes skin irritation.  |
| H319          | Causes serious eye irritation  |
| H335          | May cause respiratory irritation.  |

SDS EU (REACH Annex II)

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.*