

# Gelrite

## Safety Data Sheet

according to Regulation (EU) 2015/830

Date of issue: 16/11/2010      Revision date: 22/09/2017  
Supersedes 03/08/2011

**G1101**

Version: 2.0

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

#### 1.1. Product identifier

Product form : Substance  
Trade name : Gelrite  
EC-No. : 275-117-5  
CAS-No. : 71010-52-1  
Product code : G1101  
Synonyms : Gellan gum / Polysaccharide gum  
Product group : Raw material

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

##### 1.2.1. Relevant identified uses

Main use category : Professional use  
Industrial/Professional use spec : For professional use only. Duchefa Biochemie B.V. products are intended only for "in vitro laboratory" research purposes.

##### 1.2.2. Uses advised against

No additional information available

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

##### Supplier

Duchefa Biochemie B.V.  
A. Hofmanweg 71  
2031 BH Haarlem - The Netherlands  
T +31(0)23-5319093 - F +31(0)23-5318027  
[info@duchefa.nl](mailto:info@duchefa.nl)

#### 1.4. Emergency telephone number

Emergency number : Supplier contact information:  
+31(0)23-5319093 (M-F 09:00-17:00)  
+31(0)6-30109355 (outside office hours)

| Organisation/Company  | Address   | Comment                                   |
|---|---|---|
| World Health Organization world directory of poison centres | <a href="http://apps.who.int/poisoncentres/">http://apps.who.int/poisoncentres/</a> | Consult website 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 [CLP]

Not classified

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

No additional information available

## 2.2. Label elements

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

No labelling applicable

## 2.3. Other hazards

No additional information available

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Comments : Gel strength: 400 - 700 g/cm<sup>2</sup>  
Name : Gelrite  
CAS-No. : 71010-52-1  
EC-No. : 275-117-5

| Name    | Product identifier   | %     |
|---------|----------------------|-------|
| Gelrite | (CAS-No.) 71010-52-1 | >= 98 |

Full text of H-statements: see section 16

### 3.2. Mixtures

Not applicable

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures after inhalation : Remove victim to fresh air.  
First-aid measures after skin contact : Flush with plenty of water.  
First-aid measures after eye contact : Rinse with water.  
First-aid measures after ingestion : Rinse mouth. Seek medical attention if ill effect develops.

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

Symptoms/effects after inhalation : Dust from this product may cause irritation to the respiratory tract.  
Symptoms/effects after eye contact : May cause 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 chemical powder, alcohol-resistant foam, carbon dioxide (CO<sub>2</sub>).

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

Hazardous decomposition products in case of fire : Under fire conditions, hazardous fumes will be present. CO<sub>x</sub>.

### 5.3. Advice for firefighters

Precautionary measures fire : Wear proper protective equipment.

Firefighting instructions : Avoid dust formation. Fine dust dispersed in air may ignite. Prevent fire fighting water from entering the environment.

## SECTION 6: Accidental release measures

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

#### 6.1.1. For non-emergency personnel

Measures in case of dust release : Use good housekeeping practices to avoid rendering dust airborne.

#### 6.1.2. For emergency responders

No additional information available

### 6.2. Environmental precautions

Prevent entry to sewers and public waters.

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

Methods for cleaning up : Dispose in a safe manner in accordance with local/national regulations. Sweep up dry powder and dispose properly.

### 6.4. Reference to other sections

No additional information available

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Precautions for safe handling : Avoid dust formation.

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

Storage conditions : Store in dry, well-ventilated area. Store at room temperature.

### 7.3. Specific end use(s)

For professional use only. Duchefa Biochemie B.V. products are intended only for "in vitro laboratory" research purposes.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

|                             |                                |   |
|-----------------------------|--------------------------------|---|
| <b>Gelrite (71010-52-1)</b> |                                |   |
| USA - ACGIH                 | ACGIH TWA (mg/m <sup>3</sup> ) | 10 mg/m <sup>3</sup> total dust, 3 mg/m <sup>3</sup> respirable |

### 8.2. Exposure controls

#### Hand protection:

| Type   | Material             | Permeation        | Thickness (mm) | Standard |
|--------|----------------------|-------------------|----------------|----------|
| Gloves | Nitrile rubber (NBR) | 6 (> 480 minutes) | 0,11           | EN 374   |

#### Eye protection:

Safety glasses

#### Respiratory protection:

Where excessive dust may result, wear approved mask. Dust production: dust mask with filter type P1 (EN 143)

## SECTION 9: Physical and chemical properties

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

|   |                       |
|---|-----------------------|
| Physical state                                | : Solid               |
| Appearance                                    | : Powder.             |
| Colour  | : White.              |
| Odour   | : Odourless.          |
| Odour threshold                               | : No data available   |
| pH  | : $\approx 7$         |
| Relative evaporation rate<br>(butylacetate=1) | : No data available   |
| Melting point                                 | : No data available   |
| Freezing point                                | : No data available   |
| Boiling point                                 | : No data available   |
| Flash point                                   | : No data available   |
| Auto-ignition temperature                     | : No data available   |
| Decomposition temperature                     | : No data available   |
| Flammability (solid, gas)                     | : No data available   |
| Vapour pressure                               | : No data available   |
| Relative vapour density at 20 °C              | : No data available   |
| Relative density                              | : No data available   |
| Solubility                                    | : Completely soluble. |
| Log Pow                                       | : No data available   |
| Viscosity, kinematic                          | : No data available   |
| Viscosity, dynamic                            | : No data available   |
| Explosive properties                          | : No data available   |
| Oxidising properties                          | : No data available   |
| Explosive limits                              | : No data available   |

### 9.2. Other information

Other properties : Gel strength: 400 - 700 g/cm<sup>2</sup>. Loss on drying  $\leq$  15%.

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Stable under normal conditions of storage, handling and use.

### 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

No additional information available

### 10.5. Incompatible materials

Strong oxidizers.

### 10.6. Hazardous decomposition products

When heated to decomposition, emits dangerous fumes. CO<sub>x</sub>.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity : Not classified

| Gelrite (71010-52-1) |              |
|----------------------|--------------|
| LD50 oral rat        | > 5000 mg/kg |

Skin corrosion/irritation : Not classified  
pH:  $\approx$  7

Serious eye damage/irritation : Not classified  
pH:  $\approx$  7

Respiratory or skin sensitisation : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

STOT-single exposure : Not classified

STOT-repeated exposure : Not classified

Aspiration hazard : Not classified

## SECTION 12: Ecological information

### 12.1. Toxicity

No additional information available

### 12.2. Persistence and degradability

| Gelrite (71010-52-1)          |                           |
|-------------------------------|---------------------------|
| Persistence and degradability | Product is biodegradable. |

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

## SECTION 14: Transport information

In accordance with ADR / IATA / IMDG

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

### 14.6. Special precautions for user

#### Overland transport

Not regulated

#### - Transport by sea

Not regulated

#### - Air transport

Not regulated

### 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

No REACH Annex XVII restrictions

Gelrite is not on the REACH Candidate List

Gelrite is not on the REACH Annex XIV List

#### 15.1.2. National regulations

Ensure all national/local regulations are observed.

#### Germany

VwVwS Annex reference : Water hazard class (WGK) 2, significant hazard to waters (Classification according to VwVwS, Annex 3; ID No. 8235)

12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV : Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

#### Netherlands

according to Regulation (EU) 2015/830

SZW-lijst van kankerverwekkende stoffen : Gelrite is listed  
 SZW-lijst van mutagene stoffen : The substance is not listed  
 NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding : The substance is not listed  
 NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid : The substance is not listed  
 NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling : The substance is not listed

**15.2. Chemical safety assessment**

No additional information available

**SECTION 16: Other information**

Indication of changes:

|     |  |          |  |
|-----|--|----------|--|
| 1.1 | EC-No.   | Added    |  |
| 1.4 | Emergency number   | Modified |  |
| 2   | Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD] | Removed  | Obsolete   |
| 8.2 | Hand protection  | Modified | Specified material, thickness, et cetera of gloves |

Abbreviations and acronyms:

|       |   |
|-------|---|
| ATE   | Acute Toxicity Estimate   |
| ADR   | European Agreement concerning the International Carriage of Dangerous Goods by Road               |
| BCF   | Bioconcentration factor   |
| CLP   | Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008                       |
| DSD   | Dangerous Substances Directive 67/548/EEC   |
| IATA  | International Air Transport Association   |
| IMDG  | International Maritime Dangerous Goods  |
| LC50  | Median lethal concentration   |
| LD50  | Median lethal dose  |
| LOAEL | Lowest Observed Adverse Effect Level  |
| NOAEC | No-Observed Adverse Effect Concentration  |
| PBT   | Persistent Bioaccumulative Toxic  |
| REACH | Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006 |
| SDS   | Safety Data Sheet   |

Data sources : Supplier. 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.

SDS Biochemicals version 2017

*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*