

**SAFETY DATA SHEET  
STARLAC****SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1 Product identifier:****Product name:** STARLAC**1.2 Relevant identified uses of the substance or mixture and uses advised against:**

Identified uses:	Uses advised against:
Pharmaceuticals.,	No data available.

**1.3 Details of the supplier of the safety data sheet:****Supplier:**ROQUETTE FRERES  
1 Rue de la Haute Loge  
62136 LESTREM - France**Telephone:** +33 3 21 63 36 00**Fax:** +33 3 21 63 38 50**E-mail:** sds@roquette.com**1.4 Emergency telephone number:**

National Capital Poison Center: 1 800 222 1222 (24/24)

**SECTION 2: Hazards identification****2.1 Classification of the substance or mixture:**

This product is not hazardous according to OSHA 29CFR 1910.1200.

**2.2 Label elements:** Not applicable**2.3 Other hazards:** Dust may form an explosive mixture in the atmosphere.**SECTION 3: Composition/information on ingredients****3.1 Mixture:**

Chemical name	Concentration	CAS-No.
Lactose	85%	64044-51-5
Starch	15%	9005-25-8

**SECTION 4: First aid measures****4.1 Description of first aid measures:****Inhalation:** Move the exposed person to fresh air at once. Get medical attention if any discomfort continues.**Eye contact:** No data available.**Skin contact:** No data available.

**Ingestion:** No data available.

**4.2 Most important symptoms and effects, both acute and delayed:** No data available.

**4.3 Indication of any immediate medical attention and special treatment needed:**

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media:

**Suitable extinguishing media:** Water spray.

**Unsuitable extinguishing media:** Dry chemicals or foams.

**5.2 Special hazards arising from the substance or mixture:** Fire or excessive heat may produce hazardous decomposition products. Dust may form an explosive mixture in the atmosphere. See Section 10.

### 5.3 Advice for firefighters:

**Special Fire Fighting Procedures:** Prevent dust cloud.

**Special protective equipment for fire-fighters:** Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

## SECTION 6: Accidental release measures

**6.1 Personal precautions, protective equipment and emergency procedures:** See Section 8 of the SDS for Personal Protective Equipment.

**6.2 Environmental precautions:** No data available.

**6.3 Methods and material for containment and cleaning up:** Remove material, as much as possible, using mechanical equipment. Prevent dust cloud. Collect and dispose of spillage as indicated in section 13 of the SDS.

**6.4 Reference to other sections:** For waste disposal, see section 13 of the SDS.

## SECTION 7: Handling and storage

**7.1 Precautions for safe handling:** No data available.

**7.2 Conditions for safe storage, including any incompatibilities:** No data available.

**7.3 Specific end use(s):** No data available.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters:

#### Occupational exposure limits:

This product does not contain any components >1% with specific occupational exposure limits.

Chemical name	Type	Exposure Limit Values	Source
Dust - Inhalable particles.	TWA	10 mg/m <sup>3</sup>	US. ACGIH Threshold Limit Values (01 2010)
Dust - Respirable particles.	TWA	3 mg/m <sup>3</sup>	US. ACGIH Threshold Limit Values (01 2010)
Dust - Respirable fraction.	PEL	5 mg/m <sup>3</sup>	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
Dust - Total dust.	PEL	15 mg/m <sup>3</sup>	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
Dust - Total dust.	TWA	15 mg/m <sup>3</sup>	US. OSHA Table Z-3 (29 CFR 1910.1000) (2000)
Dust - Respirable fraction.	TWA	5 mg/m <sup>3</sup>	US. OSHA Table Z-3 (29 CFR 1910.1000) (2000)

### 8.2 Exposure controls:

#### Appropriate engineering controls:

No data available.

#### Individual protection measures, such as personal protective equipment:

##### Eye/face protection:

Wear dust-resistant safety goggles where there is danger of eye contact. (EN 166)

##### Skin protection:

##### Hand Protection:

No data available.

##### Other:

No data available.

##### Respiratory Protection:

In case of inadequate ventilation or risk of inhalation of dust, use suitable respiratory equipment with particle filter (type P1). (EN 143)

##### Hygiene measures:

#### Environmental exposure controls:

No data available.

## SECTION 9: Physical and chemical properties

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

<b>Physical State:</b>	solid
<b>Form:</b>	Powder
<b>Color:</b>	White
<b>Odor:</b>	Odorless
<b>pH:</b>	4 - 7 at 10 %
<b>Melting Point:</b>	~ 202 °C
<b>Boiling Point:</b>	Not Applicable

<b>Flash Point:</b>	Not Applicable
<b>Vapor pressure:</b>	Not Applicable
<b>Vapor density (air=1):</b>	Not Applicable
<b>Density:</b>	~ 0.68 g/cm <sup>3</sup>
<b>Solubility in Water:</b>	~ 750 g/l at 20 °C Completely Soluble at 50 °C
<b>Explosive properties: - CHILWORTH -</b>	
<b>Ignition Temperature:</b>	~ 380 °C (EN 50281-2-1) MIT in Cloud. ~ 390 °C > 400 °C (EN 50281-2-1) 5 mm layer (Glowing Temperature).
<b>MIE (Minimum Ignition Energy):</b>	400 - 500 mJ (EN 13821 (Without Inductance, <63 µm).)
<b>dP/dtmax (Maximum Rate of explosion Pressure rise):</b>	~ 148 bar/s (EN 14034-2)
<b>Pmax (Maximum Explosion OverPressure) ±10%:</b>	~ 5.7 bar (EN 14034-1)
<b>Kst value (±20%):</b>	~ 40 barm/s (EN 14034-2)
<b>Dust Explosion Class:</b>	st 1 (VDI 3673)
<b>Volume resistivity:</b>	> 10 <sup>9</sup> Ω.m (IEC 61241-2-2 / Group IIIB non-conductive dust.)
<b>Moisture:</b>	~ 1.4 % (ISO 589)
<b>Mv (Median value):</b>	~ 85.7 µm (NFX 11-666)

## 9.2 Other information:

<b>Bulk density:</b>	~ 570 kg/m <sup>3</sup>
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## SECTION 10: Stability and reactivity

<b>10.1 Reactivity:</b>	No data available.
<b>10.2 Chemical stability:</b>	No data available.
<b>10.3 Possibility of hazardous reactions:</b>	No data available.
<b>10.4 Conditions to avoid:</b>	Prevent dust cloud. Dust clouds may be explosive under certain conditions. Avoid dust close to ignition sources.
<b>10.5 Incompatible materials:</b>	No data available.
<b>10.6 Hazardous decomposition products:</b>	No data available.

## SECTION 11: Toxicological information

<b>11.1 Information on toxicological effects:</b>	No data available.
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## SECTION 12: Ecological information

<b>12.1 Toxicity:</b>	No data available.
<b>12.2 Persistence and degradability:</b>	No data available.

<b>12.3 Bioaccumulative potential:</b>	No data available.
<b>12.4 Mobility in soil:</b>	No data available.
<b>12.5 Results of PBT and vPvB assessment:</b>	No data available.
<b>12.6 Other adverse effects:</b>	None known.

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods:

<b>Product:</b>	No data available.
<b>Packaging material:</b>	No data available.

## SECTION 14: Transport information

**This material is not subject to transport regulations (DOT, IMDG, IATA).'**

## SECTION 15: Regulatory information

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

## SECTION 16: Other information

<b>Revision Information:</b>	Not relevant.
<b>Key literature references and sources for data:</b>	No data available.

### Abbreviations and acronyms used in the SDS.:

<b>Disclaimer:</b>	<p>The information provided in this Safety Data Sheet (SDS) relates only to the specific product designated and may not be applicable when such product is used in combination with other materials or in any process. It is the responsibility of the user to be aware of and to follow the regulations applying to our product for its possession, handling and use.</p> <p>The information given is designed only as a guidance and is not to be considered a warranty or quality specification.</p> <p>All information and instructions provided in this SDS are based on the current state of our knowledge at the latest revision date indicated.</p>
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