

SAFETY DATA SHEET

LYCASIN® HBC - MALTITOL SYRUP

SECTION 1 : Identification

1.1 Product identifier:

Product name: LYCASIN® HBC - MALTITOL SYRUP

Chemical name: Syrups, corn, hydrogenated

CAS-No.: 68425-17-2

INCI Name: HYDROGENATED STARCH HYDROLYSATE

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

Identified uses:	Uses advised against:
Intermediate.Formulation and Packaging.Food.; Animal Feed.Pharmaceuticals.	None Reported

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: CHEMTREC international : +1 703-741-5970

World directory of poisons centres : http://www.who.int/gho/phe/chemical_safety/poisons_centres_text/en/

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture:

The product has not been classified as dangerous according to GHS.

2.2 Label elements: Not applicable

2.3 Other hazards: No data available.

SECTION 3: Composition/information on ingredients

3.1 Substance:

Chemical name	Concentration	CAS-No.
Syrups, corn, hydrogenated	>=72%	68425-17-2

SECTION 4: First aid measures

4.1 Description of first aid measures:

Inhalation: Under normal conditions of intended use, this material is not expected to be an inhalation hazard.

Eye contact: Flush thoroughly with water for at least 15 minutes. Get medical assistance.

Skin contact: Wash with soap and water. For hot product: Immediately immerse in or flush affected area with large amounts of cold water to dissipate heat. Cover with clean cotton sheeting or gauze and get prompt medical attention.

Ingestion: Product not hazardous when ingested. Ingestion may cause: Diarrhoea. Get medical attention if any discomfort continues.

4.2 Most important symptoms and effects, both acute and delayed: Ingestion may cause: Diarrhoea. Material may be hot. May cause severe thermal burns.

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

Treatment: Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media:

Suitable extinguishing media: Water spray, foam, dry powder or carbon dioxide.

Unsuitable extinguishing media: None known.

5.2 Special hazards arising from the substance or mixture: Fire or excessive heat may produce hazardous decomposition products. See Section 10.

5.3 Advice for firefighters:

Special Fire Fighting Procedures: Cool containers exposed to heat with water spray and remove container, if no risk is involved.

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: Caution: Contaminated surfaces may be slippery. See Section 8 of the SDS for Personal Protective Equipment.

6.2 Environmental precautions: Not regarded as dangerous for the environment.

6.3 Methods and material for containment and cleaning up: Absorb spillage with suitable absorbent material. Collect and dispose of spillage as indicated in section 13 of the SDS. Flush area with water.

SECTION 7: Handling and storage

7.1 Precautions for safe handling: Material may be hot. See Section 8 of the SDS for Personal Protective Equipment.

7.2 Conditions for safe storage, including any incompatibilities:

Store in a dry place. Avoid contact with oxidizing agents. Maintain an appropriate temperature to avoid crystallisation problems.

SECTION 8: Exposure controls/personal protection**8.1 Control parameters:****Occupational exposure limits:**

This product does not contain any component with occupational exposure limits

8.2 Appropriate engineering controls:

No special precautions.

8.3 Individual protection measures, such as personal protective equipment:

Eye/face protection: If risk of splashing, wear safety goggles or face shield.

Skin protection:

Hand Protection: When material is heated, wear gloves to protect against thermal burns.

Other: Wear suitable protective clothing.

Respiratory Protection: No specific precautions.

Hygiene measures: Handle the product in accordance with the good hygiene practices and safety instructions.

SECTION 9: Physical and chemical properties**9.1 Information on basic physical and chemical properties:**

Physical State:	Liquid
Color:	Colorless
Odor:	Odorless
pH:	~ 5.9 at 50 %
Freezing point:	No data available.
Boiling Point:	> 100 °C
Flash Point:	Not Applicable
Flammability (solid, gas):	Not Applicable
Vapor pressure:	~ 17 hPa
Vapor density (air=1):	~ 0.7
Relative density:	~ 1.36
Solubility in Water:	Completely Soluble at 20 °C

9.2 Other information:

Conductivity: 62 µS/cm

SECTION 10: Stability and reactivity

- 10.1 Reactivity:** Oxidizing agents.
- 10.2 Chemical stability:** Material is stable under normal conditions.
- 10.3 Possibility of hazardous reactions:** No hazardous reactions under ordinary conditions of use and storage.
- 10.4 Conditions to avoid:** Solutions may become hazy, partially precipitate from solution, or gel with time on exposure to low temperature.
- 10.5 Incompatible materials:** Strong oxidizing substances.
- 10.6 Hazardous decomposition products:** Carbon Monoxide. Carbon Dioxide.

SECTION 11: Toxicological information

Component Information :

11.1 Information on toxicological effects:

Acute toxicity :

Test / Substance	Species	Type / Result	Exposure	Remarks
OECD 423 Syrups, hydrolyzed starch, hydrogenated	Rat	LD50 - Oral > 5000mg/kg No mortalities were reported during the study period.		- REACH data -

Skin irritation. :

Test / Substance	Species	Result	Exposure	Remarks
OECD 439 Glucose syrups wheat hydrolysed	Human	Not Irritating	1 h	- REACH data - Data from similar product.

Serious eye irritation :

Test / Substance	Species	Result	Exposure	Remarks
OECD 405 Glucose syrups wheat hydrolysed	Rabbit	Not Irritating	72 h	- REACH data - Data from similar product.

Sensitization :

Test / Substance	Type	Species	Result	Remarks
OECD 429 Glucose syrups wheat hydrolysed	In vivo	Mouse	Non-Sensitising	- REACH data - Data from similar product.

Repeated dose toxicity :

Test / Substance	Species	Result	Exposure	Remarks
OECD 453 Syrups, hydrolyzed starch, hydrogenated	Rat	NOAEL - 4500 mg/kg No treatment related effects.	52 Week(s).	- REACH data -

Mutagenesis :

Test / Substance	Type	Species	Result	Remarks
OECD 473 Syrups, hydrolyzed starch, hydrogenated	In vitro	Hamster	Negative	- REACH data -
OECD 471 (Ames) Syrups, hydrolyzed starch, hydrogenated	In vitro	S. typhimurium	Negative	- REACH data -
OECD 474 Syrups, hydrolyzed starch, hydrogenated	In vivo	Mouse	Negative	- REACH data -

Carcinogenicity :

Test / Substance	Species	Route of Exposure / Exposure	Result	Remarks
OECD 451 Syrups, hydrolyzed starch, hydrogenated	Rat	Oral	No treatment related effects.	- REACH data -

Reproductive toxicity :

Test / Substance	Species	Route of Exposure / Exposure	Result	Remarks
OECD 416 Syrups, hydrolyzed starch, hydrogenated	Rat	Oral	No treatment related effects.	- REACH data -

SECTION 12: Ecological information

Component Information :

12.1 Toxicity:
Acute toxicity:

Test / Substance	Species	Type/Result	Exposure	Remarks
OECD 203 4-O-a-D-glucopyranosyl-D-glucitol	Oryzias latipes	LC50 : > 1500 mg/l Non toxic.	96 h	- REACH data - Data from similar product.
OECD 202 4-O-a-D-glucopyranosyl-D-glucitol	Daphnia magna	LC50 : > 1450 mg/l Non toxic.	48 h	- REACH data - Data from similar product.
OECD 201 4-O-a-D-glucopyranosyl-D-glucitol	Pseudokirchneriella subcapitata	EC50 : >1490 mg/l Non toxic.	72 h	- REACH data - Data from similar product.

12.2 Persistence and degradability:

Test / Substance	Result	Remarks
OECD 301b Glucose syrups wheat hydrolysed	> 73 % / 28 d The product is readily biodegradable.	- REACH data - Data from similar product.
OECD 301b Glucose syrups wheat hydrolysed	> 60 % / 10 d The product is readily biodegradable.	- REACH data - Data from similar product.

12.3 Bioaccumulative potential:

Potential to bioaccumulate is low.

12.4 Mobility in soil:

This material is readily biodegraded and is not likely to bioconcentrate.

12.5 Other adverse effects:

None known.

SECTION 13: Disposal considerations

13.1 Disposal methods:

Product:	Dispose of waste in an appropriate authorised treatment facility in accordance with regulations in force and product characteristics at time of disposal.(for example, energy recovery).
Packaging material:	Single use packaging. Collect for salvage or disposal.

SECTION 14: Transport information

This material is not subject to transport regulations (IMDG, ICAO/IATA, ADR/RID, ADN).'

14.5 Environmental hazards:	Not regulated.
14.6 Special precautions for user:	No special precautions.
14.7 Transport in bulk according to Annex II of MARPOL73/78 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 Data Sheet is in conformity with appendix 4 of the GHS (Globally Harmonised System of Classification and Labelling of Chemicals).

SECTION 16: Other information

Revision Information:	Not relevant.
Key literature references and sources for data:	REACH registration file.

Abbreviations and acronyms used in the SDS.:

LD50: lethal dose 50%
LC50 : lethal concentration 50%
EC50 : The effective concentration of substance that causes 50% of the maximum response.
OECD : Organisation for Economic Cooperation and Development
GHS: Globally Harmonized System of Classification and Labelling of Chemicals

Disclaimer:	<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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