

SAFETY DATA SHEET XYLISORB® 700 - XYLITOL

SECTION 1 : Identification

1.1 Product identifier:

Product name: XYLISORB® 700 - XYLITOL

Synonyms: Crystallized D-XYLITOL.

Chemical name: Xylitol

CAS-No.: 87-99-0

EC No.: 201-788-0

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

Identified uses:	Uses advised against:
Food.; Pharmaceuticals.; Intermediate.	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:

World directory of poisons centres : http://www.who.int/gho/phe/chemical_safety/poisons_centres/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: May form explosible dust-air mixture if dispersed.

SECTION 3: Composition/information on ingredients

3.1 Substance:

Chemical name	Concentration	CAS-No.
Xylitol	>99%	87-99-0

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

Skin contact:	Remove contaminated clothing and shoes. Wash with soap and water. Get medical attention if symptoms occur.
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. Dust may irritate the eyes and the respiratory system.
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.
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. Combustible dusts : may form an explosible mixture in the air. See Section 10.
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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:	Not regarded as dangerous for the environment.
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.

SECTION 7: Handling and storage

7.1 Precautions for safe handling:	See Section 8 of the SDS for Personal Protective Equipment.
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7.2 Conditions for safe storage, including any incompatibilities:

Keep containers tightly closed. Store in original container. Avoid contact with oxidizing agents.

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.

8.2 Appropriate engineering controls:

Provide adequate ventilation. Observe Occupational Exposure Limits and minimize the risk of inhalation of dust.

8.3 Individual protection measures, such as personal protective equipment:

Eye/face protection: Wear dust-proof safety goggles where there is a risk of eyes contact.

Skin protection:

Hand Protection: No special precautions.

Other: No specific recommendations. Wear suitable protective clothing.

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

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:	solid
Form:	Powder
Water, moisture:	< 1 %
Color:	White
Odor:	Odorless
pH:	~ 5,4 at 50 %
Melting Point:	~ 93,5 °C ~ 95 °C
Boiling Point:	Not Applicable
Flash Point:	Not Applicable
Vapor pressure:	Not Applicable
Vapor density (air=1):	Not Applicable
Relative density:	~ 0,86
Solubility in Water:	~ 1 500 g/l at 20 °C
Partition coefficient (n-octanol/water):	-2,56 - Literature Reference -

Explosive properties: - INERIS -Data from similar product.

Ignition Temperature:	~ 440 °C (Godbert-Greenwald) MIT in Cloud. ~ 175 °C product in deposit.
MIE (Minimum Ignition Energy):	~ 360 mJ Sensitive to the risk of inflammation by an electrostatic discharge.
dP/dtmax (Maximum Rate of explosion Pressure rise):	~ 315 bar/s (EN 14034-2 / ASTM E1226)
Pmax (Maximum Explosion OverPressure) ±10%:	~ 6,4 bar (EN 14034-1 / ASTM E1226)
Kst value (±20%):	~ 85 barm/s (EN 14034-2 / ASTM E1226)
Dust Explosion Class:	st 1 (VDI 3673)
Volume resistivity:	> 10 ⁹ Ω.m (IEC 61241-2-2 / Group IIIB non-conductive dust.)
Moisture:	0,1 % (ISO 589)
Mv (Median value):	~ 70 µm (ISO 13320)
Other Data:	30-60 g/m3 (EN 14034-3 / ASTM E1515)

9.2 Other information:

Bulk density:	~ 840 kg/m ³
Conductivity:	~ 0,3 µS/cm (at 50%)

The data reported in this section does not take the place of specifications.

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:	Prevent dust cloud. Dust clouds may be explosive under certain conditions. Avoid dust close to ignition sources.
10.5 Incompatible materials:	Strong oxidizing substances.
10.6 Hazardous decomposition products:	Carbon Monoxide. Carbon Dioxide.

SECTION 11: Toxicological information

11.1 Information on toxicological effects:

Acute toxicity :

Test / Substance	Species	Type / Result	Exposure	Remarks
Experimental result Xylitol	Mouse	LD50 - Oral >4000mg/kg Not classified		- ECHA Database -
Experimental result Xylitol	Mouse	LD50 - Oral >5000mg/kg Not classified		- Literature Reference -
Experimental result Xylitol	Rat	LD50 - Oral >4000mg/kg Not classified		- ECHA Database -
Experimental result Xylitol	Rabbit	LD50 - Oral >2000mg/kg Not classified		- ECHA Database -

Skin irritation :

Test / Substance	Species	Result	Exposure	Remarks
Experimental result Xylitol	Rabbit	In vivo Not Irritating	4 h	- ECHA Database -
QSAR Xylitol	Mouse	Slightly irritating.		- ECHA Database -

Serious eye irritation :

Test / Substance	Species	Result	Exposure	Remarks
OECD 437 Xylitol	Bovine cornea.	Not classified.		- Internal data -
QSAR Xylitol	Rabbit	Slightly irritating.		- ECHA Database -

Sensitization :

Test / Substance	Type	Species	Result	Remarks
OECD 442E Xylitol		In vitro	Non-Sensitising	- Internal data -
QSAR Xylitol		In vivo	Non-Sensitising	- ECHA Database -

Repeated dose toxicity :

Test / Substance	Species	Result	Exposure	Remarks
OECD 408 Xylitol	Rat	NOAEL - 20 g/kg No treatment related effects.	90 day(s)	- ECHA Database -
Experimental result Xylitol	Dog	NOAEL - 200 g/kg	1 - 2 Year(s)	- ECHA Database -

Mutagenesis :

Test / Substance	Type	Species	Result	Remarks
OECD 471 (Ames) Xylitol	In vitro	S. typhimurium	Negative	- Literature Reference -
Chromosomal aberration Xylitol	In vitro	Human lymphocytes.	Negative	- Literature Reference -
micronucleus test Xylitol	In vitro	Mouse	Negative	- Literature Reference -

Carcinogenicity :

Test / Substance	Species	Route of Exposure / Exposure	Result	Remarks
Xylitol	Mouse	Oral 80 Week(s).	Negative	- Literature Reference -

Reproductive toxicity :

Test / Substance	Species	Route of Exposure / Exposure	Result	Remarks
Xylitol	Rabbit	Oral 12 day(s)	No treatment related effects.	- Literature Reference -

Remarks:

The ingredients of this product are not classified as carcinogenic by the ACGIH, the CIRC, the OSHA or the NTP.

SECTION 12: Ecological information

12.1 Toxicity:

Acute toxicity:

Test / Substance	Species	Type/Result	Exposure	Remarks
QSAR Xylitol	Algae	EC50 : 75,5 g/L Not classified	96 h	- ECHA Database -
OECD 202 Xylitol	Ceriodaphnia	LC50 : 48,5 g/L Not classified	48 h	- ECHA Database -
QSAR Xylitol	Daphnia magna	LC50 : 578 g/L Not classified	48 h	- ECHA Database -
OECD 203 Xylitol	Pimephales promelas	LC50 : 52 g/L Not classified	48 h	- ECHA Database -
QSAR Xylitol	Pimephales promelas	LC50 : 1,55 Kg/L Not classified	96 h	- ECHA Database -

Chronic Toxicity: No data available.

12.2 Persistence and degradability:

Test / Substance	Result	Remarks
QSAR Xylitol	79,4 % / 28 d The product is readily biodegradable.	- ECHA Database -
Experimental result Xylitol	82 % / 14 d The product is readily biodegradable.100 mg/kg	- ECHA Database -
Experimental result Xylitol	95 % / 14 d The product is readily biodegradable.100 mg/kg	- ECHA Database -

12.3 Bioaccumulative potential:

Test / Substance	Log Pow (n-Octanol/Water Partition Coefficient)	Bioconcentration Factor (BCF) / Bioaccumulation	Remarks
Xylitol	-2,56	~ 3	This material is readily biodegraded and is not likely to bioconcentrate. - Literature Reference -

12.4 Mobility in soil:

Test / Substance	Medium	Organic Carbon Partition Coefficient (Koc)	Remarks
Xylitol	soil	~ 10	- Literature Reference -

12.5 Other adverse effects: None known.

SECTION 13: Disposal considerations

13.1 Disposal methods:

Product: Dispose of waste in an appropriate authorized treatment facility in accordance with regulations in force and product characteristics at time of disposal.

Packaging material: Single use packaging. Collect for salvage or disposal.

SECTION 14: Transport information

14.1 - 14.4 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 Maritime transport in bulk according to IMO instruments:

Not applicable.

SECTION 15: Regulatory information**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:****International Inventories :**

Australia. Inventory of Chemical Substances (AICS):	Listed.
Canada. Canadian Environmental Protection Act (CEPA). Non-Domestic Substances List (NDSL):	Listed.
China. Inventory of Existing Chemical Substances (IECSC):	Listed.
EU. European Inventory of Existing Commercial Chemical Substances (EINECS):	Listed.
Japan. Inventory of Existing & New Chemical Substances (ENCS):	Listed.
Japan. Industrial Safety & Health Law (ISHL):	Listed.
Japan. Pharmacopoeia Listing:	Listed.
Korea. Existing Chemicals Inventory (KECI):	Listed.
Mexico. National Inventory of Chemical Substances (INSQ):	Listed.
New Zealand. Inventory of Chemicals (NZIoC):	Listed.
Philippines. Inventory of Chemicals and Chemical Substances (PICCS):	Listed.
Taiwan. Existing Chemicals Inventory (TCSI):	Listed.
Thailand. Existing Chemicals Inventory from FDA (TECI):	Listed.
US. Toxic Substances Control Act (TSCA):	Listed.
Vietnam. National Chemical Inventory:	Listed.

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:

JECFA : Joint FAO/WHO Expert Committee on Food Additives.
REACH registration dossier:
<https://echa.europa.eu/en/registration-dossier/-/registered-dossier/13631>

Other information:

Updated version of this document is available at :<https://www.roquette.com/site-search#documents>

Abbreviations and acronyms used in the SDS.:

LD50: lethal dose 50%
CAS: Chemical Abstracts Service (division of the American Chemical Society)
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
OECD : Organisation for Economic Cooperation and Development

Disclaimer:

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.
The information given is designed only as a guidance and is not to be considered a warranty or quality specification.
All information and instructions provided in this SDS are based on the current state of our knowledge at the latest revision date indicated.