

Safety Data Sheet

According to Regulation (EC)
No. 1907/2006 (REACH)



LACTASE 'B' GALACTOSIDASE A01829

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

1.1 Product identifier

Product name: Lactozym Pure 6500 L
Product number: A01829

CAS No.: 9031-11-2
EC No.:
Index No.:

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

Identified use(s): Laboratory chemicals. Manufacture of substances
Uses advised against: Follow supplier's recommendations on correct use of the product.

1.3 Details of the supplier of the safety data sheet

Supplier: Philip Harris
2 Gregory Street
Hyde
Cheshire
SK14 4HR

Telephone: +44 (0)845 1200 506

Fax: +44 (0)161 367 2140

E-mail: enquiries@philipharris.co.uk

1.4 Emergency telephone number

In case of emergency, call: +44 (0)845 1200 506
Monday – Friday: 08:30 – 17:00 UK time

SECTION 2: Hazard Identification

2.1 Classification of the substance or mixture

2.1.1. Classification according to Regulation (EC) No. 1272/2008 (CLP)

Not classified

2.1.2. Classification according to Directive 67/548/EEC & Directive 1999/45/EC

R42: May cause sensitisation by inhalation

2.2 Label elements

2.2.1.

Safety Data Sheet

According to Regulation (EC)
No. 1907/2006 (REACH)

Hazard pictogram(s):



Signal Word:

Warning.

Hazard Statement(s):

H302: Harmful if swallowed. H315: Causes skin irritation.
H335: May cause respiratory irritation.

Precautionary Statement(s):

P261: Avoid breathing dust / fume / gas / mist / vapours / spray.
P264: Wash thoroughly after handling.
P301 + P330 + P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310: Immediately call a POISON CENTER or doctor.
P405: Store locked up.
P501: Dispose of contents/container to hazardous waste collection point for disposal in accordance with local, regional, national or international regulations.

Supplemental Hazard information (EU):

None.

2.3 Other hazards
None

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Chemical name	Molecular Weight	CAS No.	EC No.	Formula.	Classification (Regulation (EC) No. 1272/2008 (CLP))	Classification (Directive 67/548/EEC)
Lactozym Pure 6500 L		9031-11-2	232-864-1		Not classified	R42

See Section 16 for full description of R phrases and H statements.

SECTION 4: First Aid Measures

Safety Data Sheet

According to Regulation (EC)
No. 1907/2006 (REACH)



4.1 Description of first aid measures

- INHALATION:** Remove person to fresh air and keep comfortable for breathing. Keep warm and at rest. If irritation persists or if you feel unwell, obtain immediate medical attention.
- SKIN CONTACT:** Take off immediately all contaminated clothing. Rinse skin with water/shower for at least 15 minutes. Obtain immediate medical attention. Contaminated clothing should be washed before reuse.
- EYE CONTACT:** Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing, making sure to rinse under eyelids. Obtain immediate medical attention.
- INGESTION:** Do not induce vomiting. Provided the patient is conscious, rinse mouth out with water and give 200-300 mL of water to drink. Never give anything by mouth to an unconscious person. Obtain immediate medical attention.

4.2 Most important symptoms and effects, both acute and delayed:

May cause an asthma-like shortness of breath. Upper respiratory irritation. Risk of sensitisation or allergic reactions among sensitive individuals.

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

Ingestion: May cause discomfort if swallowed.

Skin Contact: Prolonged skin contact may cause redness and irritation.

Eye Contact: May cause temporary eye irritation.

Inhalation: May cause an asthma-like shortness of breath. Upper respiratory irritation. Risk of sensitisation or allergic reactions among sensitive individuals.

In case of accident or if you feel unwell, seek medical advice immediately. If breathing is laboured, oxygen should be administered by qualified personnel.

SECTION 5: Fire-fighting Measures

5.1 Extinguishing Media

Suitable extinguishing media: Alcohol-resistant foam, CO₂, dry powder or water fog.

Unsuitable extinguishing media: Do not use water jet.

5.2 Special hazards arising from the substance or mixture

Thermal decomposition may liberate carbon oxides and other toxic gases or vapours. (Oxides of: Carbon).

5.3 Advice for fire-fighters

Self contained breathing apparatus and full protective clothing must be worn in the case of fire. Dike and collect extinguishing water.

Safety Data Sheet

According to Regulation (EC)
No. 1907/2006 (REACH)



SECTION 6: Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

6.1.1 For non-emergency personnel

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Avoid breathing dust. Ensure adequate ventilation. Evacuate personnel to safe areas. (See Section 8).

6.1.2 For emergency responders

Keep unnecessary personnel away. Wear suitable protective clothing (See Section 8). Contaminated work clothing should not be allowed out of the workplace. Take off contaminated clothing and wash it before reuse.

6.2 Environmental precautions

Do not allow to enter drains, sewers or watercourses. Spillages or uncontrolled discharges into watercourses must be alerted to the Environment Agency or other appropriate regulatory body.

6.3 Methods and materials for containment and cleaning up

6.3.1 For containment

Stop the leak if it is safe to do so. Contain the spillage with sand, earth or any suitable adsorbent material.

6.3.2 For cleaning up

Pick up and arrange disposal without creating dust. Sweep up with shovel. Keep in suitable closed container for disposal according to section 13.

In case of minor leak or seepage from container: Place leaking generator into sealed container for disposal. Wipe contaminated areas with damp tissues. Dispose of contaminated material as waste according to Section 13.

6.3.3 Other advice

6.4 Reference to other sections

See Section 8 for personal protective equipment. See Section 13 for waste disposal.

SECTION 7: Handling and Storage

7.1 Precautions for safe handling

5 Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed.

In unbroken packaging – dry and protected from the sun. The product has been formulated for optimal stability. Extended storage or adverse conditions such as high temperature or higher humidity may lead to a higher dosage requirement

7.3 Specific end use(s)

Safety Data Sheet

According to Regulation (EC)
No. 1907/2006 (REACH)



SECTION 8: Exposure Controls/Personal Protection

8.1 Control parameters

Contains no substances with occupational exposure limit values.

Workplace exposure limits

Source:

Substance	CAS No.	LTEL (8 hr TWA)		STEL (15 min)		Comments
		ppm	mg/m ³	ppm	mg/m ³	

8.2 Exposure controls

8.2.1 Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of the workday

8.2.2 Personal protection

Eye protection:

Goggles or safety glasses with side shields giving complete protection to eyes (EN 166). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN166 (EU)

Skin protection:

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching gloves outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Hand protection:

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN374 derived from it. Immersion & slash protection, Material: Nitrile rubber, minimum thickness 0.11mm, break through time: 480mins

Other:

Long sleeve protective clothing.

Respiratory protection:

For nuisance exposures use type (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 or ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU)

Thermal hazards:

Not applicable.

8.2.3 Environmental exposure controls

Inform environmental manager of all incidents involving this product.

SECTION 9: Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance:

Light Yellow. Colour can vary from batch to batch. Colour intensity is not an indication of enzyme activity.

Odour:

No Data Available

Odour threshold:

No Data Available.

pH:

No Data Available.

Safety Data Sheet

According to Regulation (EC)
No. 1907/2006 (REACH)



Melting/freezing point:	No Data Available.
Initial boiling point and boiling range:	No Data Available
Flash point:	No Data Available.
Evaporation rate:	No Data Available
Flammability (solid; gas):	No Data Available
Upper/lower flammability or explosive limits:	No Data Available
Vapour pressure:	No Data Available
Vapour density:	No Data Available
Relative density:	1.15
Solubility(ies):	No Data Available.
Partition coefficient: n-octanol/water:	No Data Available
Auto-ignition temperature:	No Data Available
Decomposition temperature:	No Data Available
Viscosity:	No Data Available
Explosive properties:	No Data Available
Oxidising properties:	No Data Available

9.2 Other information

No Data Available.

SECTION 10: Stability and Reactivity

10.1 Reactivity:	No Data Available
10.2 Chemical stability:	Stable under normal conditions
10.3 Possibility of hazardous reactions:	No Data Available
10.4 Conditions to avoid:	High temperatures. Sources of ignition
10.5 Incompatible materials:	No specific or groups of materials are likely to react to produce a hazardous situation.
10.6 Hazardous decomposition products:	Fire creates: Carbon monoxide (CO). Carbon dioxide (CO ₂)

SECTION 11: Toxicological Information

11.1 Information on toxicological effects	
Acute toxicity:	Toxic Dose 1 – LD50 >2000 mg/kg (oral rat)
Skin corrosion/irritation:	Irritant
Serious eye damage/irritation:	Irritant
Skin sensitisation:	No Data Available
Inhalation:	May cause sensitisation by inhalation. Vapours may irritate the respiratory system and cause coughing, a

Safety Data Sheet

According to Regulation (EC)
No. 1907/2006 (REACH)



Ingestion:	May cause discomfort if swallowed. Gastrointestinal systems, including upset stomach. May irritate and cause stomach pain, vomiting and diarrhoea
Germ cell mutagenicity:	No Data Available
Carcinogenicity:	No Data Available
Reproductive toxicity	No Data Available
Specific Target Organ Toxicity – single exposure	No Data Available
Specific Target Organ Toxicity – repeated exposure	No Data Available
Aspiration hazard	No Data Available

Information on likely routes of exposure

Inhalation	May be harmful if inhaled. Causes respiratory tract irritation
Skin contact	May be harmful if absorbed through skin. Causes skin irritation
Eye contact	May be harmful. Causes eye irritation
Ingestion	Harmful if swallowed

Symptoms related to the physical, chemical and toxicological characteristics No Data Available

Mixture versus substance Information No Data Available

Other information To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

SECTION 12: Ecological Information

12.1 Toxicity	Not considered toxic to fish
12.2 Persistence and degradability	This product is biodegradable
12.3 Bioaccumulative potential	This product does not contain any substances expected to be bioaccumulating
12.4 Mobility in soil	No Data Available
12.5 Results of PBT and vPvB assessment	No Data Available
12.6 Other adverse effects	. No Data Available

SECTION 13: Disposal Considerations

13.1 Waste treatment methods

Do not puncture or incinerate even when empty. Waste is classified as hazardous waste. Dispose of waste and residues in accordance with local authority requirements.

SECTION 14: Transport Information

ADR

14.1 UN Number	Not classified as hazardous for transport
14.2 UN Proper shipping name	Not classified as hazardous for transport
14.3 Transport hazard class(es)	Not classified as hazardous for transport

Safety Data Sheet

According to Regulation (EC)
No. 1907/2006 (REACH)



14.4	Packing group	Not classified as hazardous for transport
14.5	Environmental hazards	Not classified as hazardous for transport
14.6	Special precautions for the user	Not classified as hazardous for transport

ADN

14.1	UN Number	Not classified as hazardous for transport
14.2	UN Proper shipping name	Not classified as hazardous for transport
14.3	Transport hazard class(es)	Not classified as hazardous for transport
14.4	Packing group	Not classified as hazardous for transport
14.5	Environmental hazards	Not classified as hazardous for transport
14.6	Special precautions for the user	Not classified as hazardous for transport

RID

14.1	UN Number	Not classified as hazardous for transport
14.2	UN Proper shipping name	Not classified as hazardous for transport
14.3	Transport hazard class(es)	Not classified as hazardous for transport
14.4	Packing group	Not classified as hazardous for transport
14.5	Environmental hazards	Not classified as hazardous for transport
14.6	Special precautions for the user	Not classified as hazardous for transport

IATA/ICAO

14.1	UN Number	Not classified as hazardous for transport
14.2	UN Proper shipping name	Not classified as hazardous for transport
14.3	Transport hazard class(es)	Not classified as hazardous for transport
14.4	Packing group	Not classified as hazardous for transport
14.5	Environmental hazards	Not classified as hazardous for transport
14.6	Special precautions for the user	Not classified as hazardous for transport

IMDG

14.1	UN Number	Not classified as hazardous for transport
14.2	UN Proper shipping name	Not classified as hazardous for transport
14.3	Transport hazard class(es)	Not classified as hazardous for transport
14.4	Packing group	Not classified as hazardous for transport
14.5	Environmental hazards	Not classified as hazardous for transport
14.6	Special precautions for the user	Not classified as hazardous for transport
14.7	Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code	Not classified as hazardous for transport

SECTION 15: Regulatory Information

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

This Safety Data Sheet was prepared in accordance with EC Regulation (EC) No. 1907/2006 as amended. The product has been classified in accordance with Regulation (EC) No. 1272/2008 (CLP), Directive 67/548/EEC & Directive 1999/45/EC.

Safety Data Sheet

According to Regulation (EC)
No. 1907/2006 (REACH)



15.2 Chemical Safety Assessment

A chemical safety assessment is not required and has not been carried out.

SECTION 16: Other Information

Full text of relevant R-phrases and/or H-statements:

Hazard Statement(s):

H302: Harmful if swallowed. H315: Causes skin irritation.
H335: May cause respiratory irritation.

Supplemental Hazard information (EU):

None.

Risk phrase(s):

P261: Avoid breathing dust / fume / gas / mist / vapours / spray.
P264: Wash thoroughly after handling.
P301 + P330 + P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310: Immediately call a POISON CENTER or doctor.
P405: Store locked up.
P501: Dispose of contents/container to hazardous waste collection point for disposal in accordance with local, regional, national or international regulations.

Abbreviations:

CAS:	Chemical Abstracts Service;
EINECS:	European Inventory of Existing Commercial Chemical Substances
EC ₅₀ :	Effective Concentration 50%
EL ₅₀ :	Effective Loading rate 50%
IC ₅₀ :	Inhibitory Concentration 50%
LC ₅₀ :	Lethal Concentration 50%
LD ₅₀ :	Lethal Dose 50%
LL ₅₀ :	Lethal Loading rate 50%
LCLo:	Lowest lethal concentration
LOEL:	Lowest Observed Effect Level
NOEL:	No Observed Effect Level
PBT:	Persistent, Bioaccumulative and Toxic.
vPvB:	Very Persistent and Very Bioaccumulative.

Safety Data Sheet

According to Regulation (EC)
No. 1907/2006 (REACH)



References:

Supplier's Safety Data Sheets for ingredients
ECHA disseminated REACH dossiers
ECHA Classification & Labelling Inventory
Approved Classification and Labelling Guide (Sixth edition)
The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (CHIP)
Regulation (EC) No. 1272/2008 on classification, labelling and packaging of substances and mixtures (CLP)

Disclaimer:

THE INFORMATION PRESENTED HEREIN IS BELIEVED TO BE ACCURATE, BUT IS NOT WARRANTED TO BE, WHETHER ORIGINATING WITH THE COMPANY OR NOT. RECIPIENTS ARE ADVISED TO CONFIRM, IN ADVANCE OF NEED, THAT THE INFORMATION IS CURRENT, APPLICABLE, AND SUITABLE TO THEIR CIRCUMSTANCES.

Version history:

Version:	2.0
Issue date:	08/01/2014
Previous Version:	1
Issue date of previous version:	Not Known
Sections changed from previous version:	All