



MATERIAL SAFETY DATA SHEET

v 1.06

Product:

Lactulose concentrate USP/BP/Ph.Eur 66.0% w/v

Composition/information on ingredients:

Synonyms

D-fructose, 4-o-beta-d-galactopyranosyl * 4-o-beta-galactopyranosyl-d-fructofuranose *
4-o-beta-d-galactopyranosyl-d-fructose*lactose*d-lactulose

Hazards identification:

The usual oral dose of this material is up to 50 ml. Taking large doses can cause nausea, diarrhoea and flatulence.

The material is considered non-toxic.

In case of accident, or if you feel unwell, seek medical advice immediately.

First aid:

Ingestion	See section "Hazards identification".
Skin contact	Flush with copious amounts of water. Remove contaminated clothing and shoes. Seek medical aid if irritation or sensitisation occurs.
Inhalation	Remove to fresh air. If breathing becomes difficult, seek medical attention.
Eye contact	Flush with copious amounts of water. Assure adequate flushing by separating the eyelids with fingers. Seek medical attention.

Fire and explosion hazard data:

- Extinguishing media: water spray, carbon dioxide, dry chemicals powders or appropriate foam
- Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.
- Under fire conditions toxic vapours may be emitted.

Accidental release measures, exposure control and personal protection:

Follow normal good housekeeping and hygiene practice.

Physical & chemical data:

Solution (colour and odour)	clear to yellow in colour; odourless
Melting point	not applicable
Solubility	miscible in water at 20° C.

Stability & reactivity data:

- Stability stable. Hazardous polymerization will not occur.
- Hazardous combustion or decomposition products – carbon monoxide and carbon dioxide may occur.

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Page 1 of 2



Toxicological:

Can cause abdominal discomfort, flatulence, potassium depletion, diarrhoea, nausea and vomiting. The toxicological properties have not been thoroughly investigated.

RTECS data and synonyms supplied are for a closely related compound.

RTEC no. is 6965000

Fructofuranose, 4-o-beta-d-galactopyranosyl

Toxicity data:

ORL-RAT LD50:	18160	MG/KG	NYKZAU 96.301.90
IPR-RAT LD50:	16	GM/KG	BCFAAI 115.596.76
SCU-RAT LD50:	33	GM/KG	NIIRDN 6.875.82
IVN-RAT LD50:	4	GM/KG	NIIRDN 6.875.82
ORL-MUS LD50:	31	GM/KG	NIIRDN 6.875.82
IPR-MUS LD50:	16	GM/KG	NIIRDN 6.875.82
SCU-MUS LD50:	30	GM/KG	NIIRDN 6.875.82
IVN-MUS LD50:	10	GM/KG	NIIRDN 6.875.82

Target organ data.

Nutritional and gross metabolic (changes in : na)

Only selected Registry of Toxic Effects of Chemicals Substances (RTECS) data is presented here. See actual entry in RTECS for complete information.

Ecological, spill/leak and removal data:

No specific data available. For removal, clearly identify product to waste contractor.

Handling & storage:

In closed packing, away from odours, in clean and dry conditions. Avoid subfreezing temperatures.

Temperature preferable 10 - 25 ° C.

Transport:

Classified as non-hazardous.

Regulatory information:

Label name	Lactulose concentrate USP/BP/Ph.Eur. 66.0% w/v
Classification	Unclassified
Keyword	-
Symbol	-
Risk phase	-
Safety phrase	-

Legislation:

No special information. Users of the product should check their local legislation.

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