

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Version 7.3 Revision Date 16.01.2024 Print Date 04.05.2025

GENERIC EU MSDS - NO COUNTRY SPECIFIC DATA - NO OEL DATA

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

1.1 Product identifiers

Product name : PENTOSE PHOSPHATE METABOLITE LIBRARY

Product Number : ML0012 Brand : Sigma

REACH No. : This product is a mixture. REACH Registration Number see

section 3.

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

Identified uses : Laboratory chemicals, Manufacture of substances

Uses advised against : For R&D use only. Not for pharmaceutical, household or other

uses.

1.3

CHEMIKART

1.4 Emergency telephone

Emergency Phone # : 000 800 1007 141 (CHEMTREC)

This is a summary SDS for a kit. For the full SDS for each of the components listed in section 16 please visit our website.

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Skin irritation, (Category 2) H315: Causes skin irritation.

Eye irritation, (Category 2) H319: Causes serious eye irritation.

Specific target organ toxicity - single exposure, (Category 3),

H335: May cause respiratory irritation.

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2.2 Label elements

Labelling according Regulation (EC) No 1272/2008

Pictogram

Signal Word Warning

Hazard Statements

H315 Causes skin irritation.

H319 Causes serious eye irritation. H335 May cause respiratory irritation.

Precautionary Statements

P261 Avoid breathing dust.

P264 Wash skin thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.

P280 Wear protective gloves/ eye protection/ face protection.

P302 + P352 IF ON SKIN: Wash with plenty of water.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue

rinsing.

Supplemental Hazard

Statements

none

Reduced Labeling (<= 125 ml)

Pictogram

Signal Word Warning

Hazard Statements none
Precautionary Statements none
Supplemental Hazard none
Statements

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Ecological information:

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher. Toxicological information:

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

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SECTION 3: Composition/information on ingredients

Refer to component SDS

SECTION 4: First aid measures

Refer to component SDS

SECTION 5: Firefighting measures

Refer to component SDS

SECTION 6: Accidental release measures

Refer to component SDS

SECTION 7: Handling and storage

7.1 Precautions for safe handling

For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

Tightly closed. Dry.

Storage stabilityRecommended storage temperature -20 °C

Storage class

Storage class (TRGS 510): 11: Combustible Solids

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

SECTION 8: Exposure controls/personal protection

Refer to component SDS

SECTION 9: Physical and chemical properties

Refer to component SDS

SECTION 10: Stability and reactivity

Refer to component SDS

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SECTION 11: Toxicological information

Refer to component SDS

SECTION 12: Ecological information

Refer to component SDS

SECTION 13: Disposal considerations

Refer to component SDS

SECTION 14: Transport information

14.1 UN number

ADR/RID: - IMDG: - IATA: -

14.2 UN proper shipping name

ADR/RID: Not dangerous goods IMDG: Not dangerous goods IATA: Not dangerous goods

14.3 Transport hazard class(es)

ADR/RID: - IMDG: - IATA: -

14.4 Packaging group

ADR/RID: - IMDG: - IATA: -

14.5 Environmental hazards

ADR/RID: no IMDG Marine pollutant: no IATA: no

14.6 Special precautions for user

No data available

Further information

Not classified as dangerous in the meaning of transport regulations.

SECTION 15: Regulatory information

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

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.

Refer to component SDS

15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out

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SECTION 16: Other information

Kit Components:			
D-Xylulose-5-phosphate lithium salt	Sigma	15732	
D-sedoheptulose 7-	Sigma	78832	
phosphate Lithium Salt 2-Deoxyribose 5-	Sigma	D3126	
phosphate sodium salt Dihydroxyacetone phosphate dilithium salt	Sigma	D7137	
D-Erythrose 4-phosphate sodium salt	Sigma	E0377	
D-Fructose 6-phosphate disodium salt hydrate	Sigma	F3627	Skin Irrit. 2; Eye Irrit. 2; H315, H319
D-Fructose 1,6- bisphosphate trisodium salt hydrate	Sigma	F6803	
Gluconolactone	Sigma-Aldrich	G2164	
D-Glucose 6-phosphate sodium salt	Sigma	G7879	
6-Phosphogluconic acid trisodium salt	Sigma	P7877	
D-(-)-Ribose	Sigma	R7500	
D-Ribose 5-phosphate disodium salt hydrate	Sigma	R7750	
D-Ribulose 5-phosphate sodium salt	Sigma	R9875	Skin Irrit. 2; Eye Irrit. 2; STOT SE 3; H315, H319, H335

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Full text of other abbreviations

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inventory of Industrial Chemicals; ASTM -American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS -Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx -Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. -Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS -Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

Classification of the	he mixture	Classification procedure:
Skin Irrit.2	H315	Calculation method
Eye Irrit.2	H319	Calculation method
STOT SE3	H335	Calculation method

Further information

The information is believed to be correct but is not exhaustive and will be used solely as a guideline, which is based on current knowledge of the chemical substance or mixture and is applicable to appropriate safety precautions for the product. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

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Kit Components:

D-Xylulose-5	D-Xylulose-5-phosphate lithium salt								
Product	Pictogram	Signal	Hazard	Precautionary	Supplemental				
identifier		Word	Statements	Statements	information				
Sigma -					Not a hazardous				
15732					substance or				
					mixture				
					according to				
					Regulation (EC)				
					No 1272/2008.				

D-sedoheptulose 7-phosphate Lithium Salt							
Product	Pictogram	Signal	Hazard	Precautionary	Supplemental		
identifier		Word	Statements	Statements	information		
Sigma -					Not a hazardous		
78832					substance or		
					mixture.		

2-Deoxyribo	2-Deoxyribose 5-phosphate sodium salt							
Product	Pictogram	Signal	Hazard	Precautionary	Supplemental			
identifier		Word	Statements	Statements	information			
Sigma -					No hazard			
D3126					pictogram, no			
					signal word, no			
					hazard			
					statement(s), no			
					precautionary			
					statement(s)			
					required			

Dihydroxya	Dihydroxyacetone phosphate dilithium salt							
Product	Pictogram	Signal	Hazard	Precautionary	Supplemental			
identifier		Word	Statements	Statements	information			
Sigma -					No hazard			
D7137					pictogram, no			
					signal word, no			
					hazard			
					statement(s), no			
					precautionary			
					statement(s)			
					required			

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D-Erythrose 4	D-Erythrose 4-phosphate sodium salt						
Product	Pictogram	Signal	Hazard	Precautionary	Supplemental		
identifier		Word	Statements	Statements	information		
Sigma -					Not a hazardous		
E0377					substance or		
					mixture		
					according to		
					Regulation (EC)		
					No 1272/2008.		

D-Fructose 6-phosphate disodium salt hydrate						
Product	Pictogram	Signal	Hazard	Precautionary	Supplemental	
identifier		Word	Statements	Statements	information	
Sigma -		Warning	Causes skin	Wash skin		
F3627			irritation.	thoroughly after		
			Causes serious	handling. IF ON		
			eye irritation.	SKIN: Wash		
				with plenty of		
				water. Wear		
				protective		
				gloves/ eye		
				protection/ face		
				protection. IF IN		
				EYES: Rinse		
				cautiously with		
				water for		
				several minutes.		
				Remove contact		
				lenses, if		
	7			present and		
				easy to do. Continue		
				rinsing. If skin		
				irritation occurs:		
				Get medical		
				advice/		
				attention. If		
				eye irritation		
				persists: Get		
				medical advice/		
				attention.		

D-Fructose 1,6-bisphosphate trisodium salt hydrate							
Product	Pictogram	Signal	Hazard	Precautionary	Supplemental		
identifier		Word	Statements	Statements	information		
Sigma -					Not a hazardous		
F6803					substance or		
					mixture		
					according to		
					Regulation (EC)		
					No 1272/2008.		

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Gluconolactor	ne				
Product identifier	Pictogram	Signal Word	Hazard Statements	Precautionary Statements	Supplemental information
Sigma-Aldrich - G2164					No hazard pictogram, no signal word, no hazard statement(s), no precautionary statement(s) required

D-Glucose 6-phosphate sodium salt							
Product	Pictogram	Signal	Hazard	Precautionary	Supplemental		
identifier		Word	Statements	Statements	information		
Sigma -					Not a hazardous		
G7879					substance or		
					mixture		
					according to		
					Regulation (EC)		
					No 1272/2008.		

6-Phosphoglu	6-Phosphogluconic acid trisodium salt							
Product	Pictogram	Signal	Hazard	Precautionary	Supplemental			
identifier		Word	Statements	Statements	information			
Sigma - P7877			AIK	AR	No hazard pictogram, no signal word, no hazard statement(s), no precautionary statement(s) required			

D-(-)-Ribose					
Product identifier	Pictogram	Signal Word	Hazard Statements	Precautionary Statements	Supplemental information
Sigma - R7500					No hazard pictogram, no signal word, no hazard statement(s), no precautionary statement(s) required

D-Ribose 5-phosphate disodium salt hydrate						
Product	Pictogram	Signal	Hazard	Precautionary	Supplemental	
identifier		Word	Statements	Statements	information	
Sigma -					No hazard	

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R7750			pictogram, no
			signal word, no
			hazard
			statement(s), no
			precautionary
			statement(s)
			required

D-Ribulose 5-pl Product	Pictogram	Signal	Hazard	Precautionary	Supplemental
identifier	riccogram	Word	Statements	Statements	information
Sigma -		Warning	Causes skin	Avoid breathing	mormacion
R9875		Warning	irritation.	dust/ fume/	
13073			Causes serious	gas/ mist/	
			eye irritation.	vapors/ spray.	
			May cause	IF ON SKIN:	
			respiratory	Wash with	
			irritation.	plenty of water.	
			i i i i ca ci o i i i	Wash skin	
				thoroughly after	
				handling. IF IN	
				EYES: Rinse	
				cautiously with	
				water for	
				several minutes.	
				Remove contact	
				lenses, if	
				present and	
				easy to do.	
				Continue	
				rinsing. Use	
				only outdoors or	
				in a well-	
				ventilated area.	
				Wear protective	
				gloves/ eye	
				protection/ face	
				protection.	

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