

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Version 8.2 Revision Date 05.10.2022 Print Date 14.06.2023

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 : Aldolase Activity Colorimetric Assay Kit

Product Number : MAK223 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

1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich Pte Ltd

(Co. Registration No. 199403788W)

2 Science Park Drive #05-01/12 Ascent Building

SINGAPORE 118222

SINGAPORE

Telephone : +65 6890 6633 Fax : +65 6890 6639

E-mail address : TechnicalService@merckgroup.com

1.4 Emergency telephone

Emergency Phone # : 1-800-262-8200

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

Classification according to Regulation (EC) No 1272/2008

Skin corrosion (Sub-category 1B), H314 Serious eye damage (Category 1), H318

Long-term (chronic) aquatic hazard (Category 3), H412

For the full text of the H-Statements mentioned in this Section, see Section 16.

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008

A

Pictogram



Signal Word Danger

Hazard statement(s)

H314 Causes severe skin burns and eye damage. H412 Harmful to aquatic life with long lasting effects.

Precautionary statement(s)

P273 Avoid release to the environment.

P280 Wear protective gloves/ protective clothing/ eye protection/ face

protection.

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated

clothing. Rinse skin with water.

P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable

for breathing. Immediately call a POISON CENTER/ doctor.

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

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

rinsing.

P363 Wash contaminated clothing before reuse.

Supplemental Hazard

Statements

none

Reduced Labeling (<= 125 ml)

Pictogram

TE

Signal Word Danger

Hazard statement(s)

H314 Causes severe skin burns and eye damage. H412 Harmful to aquatic life with long lasting effects.

Precautionary statement(s)

P280 Wear protective gloves/ protective clothing/ eye protection/ face

protection.

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated

clothing. Rinse skin with water.

P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable

for breathing. Immediately call a POISON CENTER/ doctor. IF IN EYES: Rinse cautiously with water for several minutes.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue

. .

rinsing.

P363 Wash contaminated clothing before reuse.

Supplemental Hazard

Statements

none

2.3 Other hazards - none

SECTION 3: Composition/information on ingredients

Refer to component SDS

A

Sigma- MAK223 Page 2 of 8

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

Keep container tightly closed in a dry and well-ventilated place. Store in cool place. Tightly closed.

Storage stability

Recommended storage temperature -20 °C

Storage class

Storage class (TRGS 510): 8A: Combustible, corrosive hazardous materials

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

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: 1759 IMDG: 1759 IATA: 1759

14.2 UN proper shipping name

ADR/RID: CORROSIVE SOLID, N.O.S. (2-(2-Methoxy-4-nitrophenyl)-3-(4-nitrophenyl)-5-

phenyl-2H-tetrazolium-2',4'-disulfonatesodium salt)

IMDG: CORROSIVE SOLID, N.O.S. (2-(2-Methoxy-4-nitrophenyl)-3-(4-nitrophenyl)-5-

phenyl-2H-tetrazolium-2',4'-disulfonatesodium salt)

IATA: Corrosive solid, n.o.s. (2-(2-Methoxy-4-nitrophenyl)-3-(4-nitrophenyl)-5-

phenyl-2H-tetrazolium-2',4'-disulfonatesodium salt)

14.3 Transport hazard class(es)

ADR/RID: 8 IMDG: 8 IATA: 8

14.4 Packaging group

ADR/RID: II IMDG: II IATA: II

14.5 Environmental hazards

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

14.6 Special precautions for user

No data available

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

SECTION 16: Other information

Kit Components:

Aldolase Assay Buffer Aldolase Substrate	Sigma	MAK223A	Aquatic Chronic 3; H412
Aldolase Enzyme Mix	Sigma	MAK223C	
Aldolase Developer	Sigma	MAK223D	Skin Corr. 1B; Eye Dam. 1; H314
Nadh Standard	Sigma	MAK223E	
Aldolase Positive Control	Sigma	MAK223F	

Sigma- MAK223 Page 4 of 8



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	e mixture	Classification procedure:
Skin Corr.1B	H314	Calculation method
Eye Dam.1	H318	Calculation method
Aquatic Chronic3	H412	Calculation method

Further information

Copyright 2020 Sigma-Aldrich Co. LLC. License granted to make unlimited paper copies for internal use only.

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. 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.

Sigma- MAK223 Page 5 of 8



The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. 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.

Copyright 2020 Sigma-Aldrich Co. LLC. License granted to make unlimited paper copies for internal use only.

The branding on the header and/or footer of this document may temporarily not visually match the product purchased as we transition our branding. However, all of the information in the document regarding the product remains unchanged and matches the product ordered. For further information please contact mlsbranding@sial.com.

Sigma- MAK223 Page 6 of 8



The life science business of Merck operates as MilliporeSigma in the US and Canada



Kit Components:

Aldolase Assay Buffer				
Pictogram	Signal	Hazard	Precautionary	Supplemental
	Word	Statements	Statements	information
		Harmful to aquatic life with long lasting effects.	Avoid release to the environment. Dispose of contents/ container to an approved waste	
_		Pictogram Signal	Pictogram Signal Hazard Word Statements Harmful to aquatic life with long lasting	Pictogram Signal Hazard Statements Statements Harmful to aquatic life with long lasting effects. Precautionary Statements Avoid release to the environment. Dispose of contents/

Aldolase Su	ıbstrate				
Product	Pictogram	Signal	Hazard	Precautionary	Supplemental
identifier		Word	Statements	Statements	information
					Not a hazardous
					substance or
					mixture
					according to
					Regulation (EC)
					No 1272/2008.

Aldolase Enzyme Mix					
Product	Pictogram	Signal	Hazard	Precautionary	Supplemental
identifier		Word	Statements	Statements	information
Sigma -					Not a hazardous
MAK223C					substance or
					mixture
					according to
					Regulation (EC)
					No 1272/2008.

Aldolase Developer						
Product identifier	Pictogram	Signal Word	Hazard Statements	Precautionary Statements	Supplemental information	
Sigma - MAK223D		Danger	Causes severe skin burns and eye damage.	Do not breathe dusts or mists. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Wear protective gloves/ protective clothing/ eye protection/ face		

Sigma- MAK223 Page 7 of 8



	protection. IF	
	ON SKIN (or	
	hair): Take off	
	immediately all	
	contaminated	
	clothing. Rinse	
	skin with water.	
	IF INHALED:	
	Remove person	
	to fresh air and	
	keep	
	comfortable for	
	breathing.	
	Immediately call	
	a POISON	
	CENTER/ doctor.	
	IF IN EYES:	
	Rinse cautiously	
	with water for	
	several minutes.	
	Remove contact	
	lenses, if	
	present and	
	easy to do.	
	Continue	
	rinsing.	
	i inising.	

Nadh Stand	ard				
Product identifier	Pictogram	Signal Word	Hazard Statements	Precautionary Statements	Supplemental information
Sigma - MAK223E					Not a hazardous substance or mixture according to Regulation (EC) No 1272/2008.

Aldolase Positive Control					
Product identifier	Pictogram	Signal Word	Hazard Statements	Precautionary Statements	Supplemental information
Sigma - MAK223F					Not a hazardous substance or mixture according to Regulation (EC) No 1272/2008.

Sigma- MAK223 Page 8 of 8

