

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Version 6.10 Revision Date 20.02.2025 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 : Fluorometric Sphingomyelin Assay Kit

Product Number : MAK154 Brand : Sigma

REACH No. :

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

Acute toxicity, (Category 4) H302: Harmful if swallowed.

Serious eye damage, (Category H318: Causes serious eye damage.

1)

Respiratory sensitization, H334: May cause allergy or asthma

(Category 1) symptoms or breathing difficulties if

inhaled.

Skin sensitization, (Category 1) H317: May cause an allergic skin reaction.

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Short-term (acute) aquatic hazard, (Category 1)

H400: Very toxic to aquatic life.

Long-term (chronic) aquatic

hazard, (Category 2)

H411: Toxic to aquatic life with long lasting

effects.

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008

Pictogram

Signal Word Danger

Hazard Statements

H302 Harmful if swallowed.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H334 May cause allergy or asthma symptoms or breathing difficulties

if inhaled.

H410 Very toxic to aquatic life with long lasting effects.

Precautionary Statements

P261 Avoid breathing mist or vapors.
P273 Avoid release to the environment.

P280 Wear protective gloves/ eye protection/ face protection.
P301 + P312 IF SWALLOWED: Call a POISON CENTER/ doctor if you feel

unwell.

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 Danger

Hazard Statements

H334 May cause allergy or asthma symptoms or breathing difficulties

if inhaled.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

Precautionary Statements

P261 Avoid breathing mist or vapors.

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

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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

Advice on safe handling

Work under hood. Do not inhale substance/mixture. Avoid generation of vapours/aerosols.

Advice on protection against fire and explosion

Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharge.

Hygiene measures

Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

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. Keep locked up or in an area accessible only to qualified or authorized persons.

Storage stabilityRecommended storage temperature

-20 °C

Storage class

Storage class (TRGS 510): 10: Combustible liquids

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

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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: - 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.

14.7 Maritime transport in bulk according to IMO instruments

Not applicable for product as supplied.

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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:			
Enzyme Mix	Sigma	MAK154A	Resp. Sens. 1; H334
Sphingomyelinase	Sigma	MAK154B	Skin Sens. 1; H317
Red Detection Reagent	Sigma	MAK154C	Acute Tox. 4; H302
SMASE Reaction Buffer	Sigma	MAK154D	
Assay Buffer	Sigma	MAK154E	
50 mM Sphingomyelin	Sigma	MAK154F	Eye Dam. 1; Aquatic Acute 1;
Standard			Aquatic Chronic 2; H318, H410
DMSO	Sigma	MAK154G	



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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	Classification procedure:	
Acute Tox.4	H302	Calculation method
Eye Dam.1	H318	Calculation method
Resp. Sens.1	H334	Calculation method
Skin Sens.1	H317	Calculation method
Aquatic Acute1	H400	Calculation method
Aquatic Chronic2	H411	Calculation method

Further information

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Kit Components:

Enzyme Mix					
Product	Pictogram	Signal	Hazard	Precautionary	Supplemental
identifier		Word	Statements	Statements	information
Sigma -		Danger	May cause	Avoid breathing	
MAK154A			allergy or	dust. Dispose of	
			asthma	contents/	
			symptoms or	container to an	
			breathing	approved waste	
			difficulties if	disposal plant.	
			inhaled.	Wear respiratory	
				protection.	

Sphingomye	linase				
Product	Pictogram	Signal	Hazard	Precautionary	Supplemental
identifier		Word	Statements	Statements	information
Sigma -		Warning	May cause an	Avoid breathing	
MAK154B			allergic skin	dust. IF ON	
			reaction.	SKIN: Wash	
				with plenty of	
				water.	
				Contaminated	
				work clothing	
				should not be	
				allowed out of	
				the workplace.	
				If skin irritation	
				or rash occurs:	
				Get medical	
				advice/	
				attention.	
				Wear protective	
				gloves. Take off	
				contaminated	
				clothing and	
				wash it before	
				reuse.	

Red Detection Reagent						
Product identifier	Pictogram	Signal Word	Hazard Statements	Precautionary Statements	Supplemental information	
Sigma - MAK154C		Warning	Harmful if swallowed.	Wash skin thoroughly after handling. IF SWALLOWED: Call a POISON CENTER/ doctor if you feel		

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unwell. Dispose
of contents/
container to an
approved waste
disposal plant.
Do not eat,
drink or smoke
when using this
product.

SMASE Reac	SMASE Reaction Buffer					
Product identifier	Pictogram	Signal Word	Hazard Statements	Precautionary Statements	Supplemental information	
		word	Statements	Statements		
Sigma -					No hazard	
MAK154D					pictogram, no	
					signal word, no	
					hazard	
					statement(s), no	
					precautionary	
					statement(s)	
					required.	

Assay Buffer					
Product identifier	Pictogram	Signal Word	Hazard Statements	Precautionary Statements	Supplemental information
Sigma - MAK154E	Н		ИIK	AR	No hazard pictogram, no signal word, no hazard statement(s), no precautionary statement(s) required.

50 mM Sphine	50 mM Sphingomyelin Standard						
Product identifier	Pictogram	Signal Word	Hazard Statements	Precautionary Statements	Supplemental information		
Sigma - MAK154F		Danger	Causes serious eye damage. Very toxic to aquatic life with long lasting effects.	Avoid release to the environment. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Dispose of contents/ container to an approved waste disposal plant. Wear eye			

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	protection/ face	
	protection.	
	Collect spillage.	

DMSO					
Product	Pictogram	Signal	Hazard	Precautionary	Supplemental
identifier		Word	Statements	Statements	information
Sigma -					No hazard
MAK154G					pictogram, no
					signal word, no
					hazard
					statement(s), no
					precautionary
					statement(s)
					required.



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