



SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Version 7.3
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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 : Enolase Activity Assay Kit

Product Number : MAK178

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

Long-term (chronic) aquatic hazard, (Category 3) H412: Harmful to aquatic life with long lasting effects.

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008

Pictogram none

Signal Word none

Hazard Statements

H412 Harmful to aquatic life with long lasting effects.

| | |
|--------------------------------|---|
| Precautionary Statements | |
| P273 | Avoid release to the environment. |
| P501 | Dispose of contents/ container to an approved waste disposal plant. |
| Supplemental Hazard Statements | none |

Reduced Labeling (<= 125 ml)

| | |
|--------------------------------|--|
| Pictogram | none |
| Signal Word | none |
| Hazard Statements | |
| H412 | Harmful to aquatic life with long lasting effects. |
| Precautionary Statements | none |
| Supplemental Hazard Statements | none |

2.3 Other hazards - none

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 protection against fire and explosion

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

Hygiene measures

Change contaminated clothing. Wash hands 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.

Storage stability Recommended 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

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.

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:**

| | | | |
|--------------------------|-------|---------|-------------------------|
| Enolase Assay Buffer | Sigma | MAK178A | Aquatic Chronic 3; H412 |
| Peroxidase Substrate | Sigma | MAK178B | |
| Enolase Substrate Mix | Sigma | MAK178C | |
| Enolase Converter | Sigma | MAK178D | |
| Enolase Developer | Sigma | MAK178E | |
| Enolase Positive Control | Sigma | MAK178F | |
| Hydrogen Peroxide | Sigma | MAK178G | |
| Standard | | | |

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

Further information

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CHEMIKART

Kit Components:

| Enolase Assay Buffer | | | | | |
|-----------------------------|-----------|-------------|--|---|--------------------------|
| Product identifier | Pictogram | Signal Word | Hazard Statements | Precautionary Statements | Supplemental information |
| Sigma - MAK178A | | | Harmful to aquatic life with long lasting effects. | Avoid release to the environment. Dispose of contents/ container to an approved waste disposal plant. | |

| Peroxidase Substrate | | | | | |
|-----------------------------|-----------|-------------|-------------------|--------------------------|--|
| Product identifier | Pictogram | Signal Word | Hazard Statements | Precautionary Statements | Supplemental information |
| Sigma - MAK178B | | | | | No hazard pictogram, no signal word, no hazard statement(s), no precautionary statement(s) required. |

| Enolase Substrate Mix | | | | | |
|------------------------------|-----------|-------------|-------------------|--------------------------|--|
| Product identifier | Pictogram | Signal Word | Hazard Statements | Precautionary Statements | Supplemental information |
| Sigma - MAK178C | | | | | No hazard pictogram, no signal word, no hazard statement(s), no precautionary statement(s) required. |

| Enolase Converter | | | | | |
|--------------------------|-----------|-------------|-------------------|--------------------------|--|
| Product identifier | Pictogram | Signal Word | Hazard Statements | Precautionary Statements | Supplemental information |
| Sigma - MAK178D | | | | | No hazard pictogram, no signal word, no hazard statement(s), no precautionary statement(s) required. |

| Enolase Developer | | | | | |
|--------------------------|-----------|-------------|-------------------|--------------------------|--|
| Product identifier | Pictogram | Signal Word | Hazard Statements | Precautionary Statements | Supplemental information |
| Sigma - MAK178E | | | | | No hazard pictogram, no signal word, no hazard statement(s), no precautionary statement(s) required. |

| Enolase Positive Control | | | | | |
|---------------------------------|-----------|-------------|-------------------|--------------------------|--|
| Product identifier | Pictogram | Signal Word | Hazard Statements | Precautionary Statements | Supplemental information |
| Sigma - MAK178F | | | | | No hazard pictogram, no signal word, no hazard statement(s), no precautionary statement(s) required. |

| Hydrogen Peroxide Standard | | | | | |
|-----------------------------------|-----------|-------------|-------------------|--------------------------|--|
| Product identifier | Pictogram | Signal Word | Hazard Statements | Precautionary Statements | Supplemental information |
| Sigma - MAK178G | | | | | No hazard pictogram, no signal word, no hazard statement(s), no precautionary statement(s) required. |