

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Version 8.4 Revision Date 25.04.2025 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 : AF Cholesterol Assay Kit

Product Number : MAK436 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

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#### 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

Flammable liquids, (Category 2) H225: Highly flammable liquid and vapor.

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

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

Specific target organ toxicity -

1)

single exposure, (Category 3),

Central nervous system

H336: May cause drowsiness or dizziness.

Short-term (acute) aquatic H400: Very toxic to aquatic life.

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hazard, (Category 1)

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        |                                                                                                                            |
| H225                     | Highly flammable liquid and vapor.                                                                                         |
| H315                     | Causes skin irritation.                                                                                                    |
| H318                     | Causes serious eye damage.                                                                                                 |
| H336                     | May cause drowsiness or dizziness.                                                                                         |
| H410                     | Very toxic to aquatic life with long lasting effects.                                                                      |
| Precautionary Statements |                                                                                                                            |
| P210                     | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.                             |
| P233                     | Keep container tightly closed.                                                                                             |
| 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.                               |
| P305 + P351 + P338       | IF IN EYES: Rinse cautiously with water for several minutes.<br>Remove contact lenses, if present and easy to do. Continue |

Supplemental Hazard

Statements

none

rinsing.

#### Reduced Labeling (<= 125 ml)

Pictogram

Signal Word Danger

**Hazard Statements** 

H318 Causes serious eye damage.

Precautionary Statements

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

#### 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:

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This substance/mixture contains components considered to have endocrine disrupting properties for environment, according to REACH Article 57(f), Commission Regulation (EU) 2018/605 or Commission Delegated Regulation (EU) 2017/2100.

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.

#### **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. Keep away from heat and sources of ignition.

**Storage stability**Recommended storage temperature

-20 °C

#### Storage class

Storage class (TRGS 510): 3: Flammable liquids

#### 7.3 Specific end use(s)

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

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#### 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: 3316 IMDG: 3316 IATA: 3316

14.2 UN proper shipping name

ADR/RID: CHEMICAL KIT IMDG: CHEMICAL KIT IATA: Chemical kit

14.3 Transport hazard class(es)

ADR/RID: 9 IMDG: 9 IATA: 9

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

Tunnel restriction code : (E)

Further information : No data available

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# 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**

| Vi+ | C0 | m | na | no | nts: |
|-----|----|---|----|----|------|
| KIT | CO | m | DO | пе | nts: |

| Sigma | MAK436A        | Aquatic Chronic 3; H412          |
|-------|----------------|----------------------------------|
| Sigma | MAK436B        |                                  |
| Sigma | MAK436C        |                                  |
| Sigma | MAK436D        | Flam. Liq. 2; Skin Irrit. 2; Eye |
|       |                | Dam. 1; STOT SE 3; Aquatic       |
|       |                | Acute 1; Aquatic Chronic 2;      |
|       |                | H225, H315, H318, H336, H410     |
|       | Sigma<br>Sigma | Sigma MAK436B<br>Sigma MAK436C   |



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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 | mixture | Classification procedure:           |
|-----------------------|---------|-------------------------------------|
| Flam. Liq.2           | H225    | Based on product data or assessment |
| Skin Irrit.2          | H315    | Calculation method                  |
| Eye Dam.1             | H318    | Calculation method                  |
| STOT SE3              | H336    | Calculation method                  |
| Aquatic Acute1        | H400    | Calculation method                  |
| Aquatic Chronic2      | H411    | Calculation method                  |

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#### **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:**

| Assay Buffer |           |        |                   |                  |              |
|--------------|-----------|--------|-------------------|------------------|--------------|
| Product      | Pictogram | Signal | Hazard            | Precautionary    | Supplemental |
| identifier   |           | Word   | Statements        | Statements       | information  |
| Sigma -      |           |        | Harmful to        | Avoid release to |              |
| MAK436A      |           |        | aquatic life with | the              |              |
|              |           |        | long lasting      | environment.     |              |
|              |           |        | effects.          | Dispose of       |              |
|              |           |        |                   | contents/        |              |
|              |           |        |                   | container to an  |              |
|              |           |        |                   | approved waste   |              |
|              |           |        |                   | disposal plant.  |              |

| <b>Enzyme Mix</b> |           |        |            |               |                  |
|-------------------|-----------|--------|------------|---------------|------------------|
| Product           | Pictogram | Signal | Hazard     | Precautionary | Supplemental     |
| identifier        |           | Word   | Statements | Statements    | information      |
| Sigma -           |           |        |            |               | No hazard        |
| MAK436B           |           |        |            |               | pictogram, no    |
|                   |           |        |            |               | signal word, no  |
|                   |           |        |            |               | hazard           |
|                   |           |        |            |               | statement(s), no |
|                   |           |        |            |               | precautionary    |
|                   |           |        |            | AR            | statement(s)     |
|                   |           |        |            |               | required.        |

| Dye Reager | nt        |        |            |               |                 |
|------------|-----------|--------|------------|---------------|-----------------|
| Product    | Pictogram | Signal | Hazard     | Precautionary | Supplemental    |
| identifier |           | Word   | Statements | Statements    | information     |
| Sigma -    |           |        |            |               | Not a hazardous |
| MAK436C    |           |        |            |               | substance or    |
|            |           |        |            |               | mixture         |
|            |           |        |            |               | according to    |
|            |           |        |            |               | Regulation (EC) |
|            |           |        |            |               | No 1272/2008.   |

| Standard (30             | Standard (300 mg/dL Cholesterol) |        |                  |                 |              |  |
|--------------------------|----------------------------------|--------|------------------|-----------------|--------------|--|
| Product Pictogram Signal |                                  | Signal | Hazard           | Precautionary   | Supplemental |  |
| identifier               |                                  | Word   | Statements       | Statements      | information  |  |
| Sigma -                  |                                  | Danger | Highly           | Keep away       |              |  |
| MAK436D                  |                                  |        | flammable liquid | from heat, hot  |              |  |
|                          |                                  |        | and vapor.       | surfaces,       |              |  |
|                          |                                  |        | Causes skin      | sparks, open    |              |  |
|                          |                                  |        | irritation.      | flames and      |              |  |
|                          |                                  |        | Causes serious   | other ignition  |              |  |
|                          |                                  |        | eye damage.      | sources. No     |              |  |
|                          |                                  |        | May cause        | smoking. IF ON  |              |  |
|                          |                                  |        | drowsiness or    | SKIN (or hair): |              |  |
|                          |                                  |        | dizziness.       | Take off        |              |  |

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|  | Very toxic to     | immediately all    |  |
|--|-------------------|--------------------|--|
|  | aquatic life with | contaminated       |  |
|  | long lasting      | clothing. Rinse    |  |
|  | effects.          | skin with water.   |  |
|  | circets.          | Keep container     |  |
|  |                   | tightly closed. IF |  |
|  |                   | IN EYES: Rinse     |  |
|  |                   |                    |  |
|  |                   | cautiously with    |  |
|  |                   | water for          |  |
|  |                   | several minutes.   |  |
|  |                   | Remove contact     |  |
|  |                   | lenses, if         |  |
|  |                   | present and        |  |
|  |                   | easy to do.        |  |
|  |                   | Continue           |  |
|  |                   | rinsing. Avoid     |  |
|  |                   | release to the     |  |
|  |                   | environment.       |  |
|  |                   | Wear protective    |  |
|  |                   | gloves/            |  |
|  |                   | protective         |  |
|  |                   | clothing/ eye      |  |
|  |                   | protection/ face   |  |
|  |                   | protection.        |  |

# CHEMIKART

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