

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Version 8.1

Revision Date 17.01.2024

Print Date 23.11.2024

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 : Lipid Peroxidation (MDA) Assay Kit

Product Number : MAK568

Brand : Sigma

REACH No. : A registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.

### 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 :

### 1.4 Emergency telephone

Emergency Phone # : +(44)-870-8200418 (CHEMTREC (GB))  
+(353)-19014670 (CHEMTREC Ireland)  
001-803-017-9114 (CHEMTREC India)

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 corrosion, (Sub-category 1C) | H314: Causes severe skin burns and eye damage. |
| Serious eye damage, (Category 1)  | H318: Causes serious eye damage.               |
| Long-term (chronic) aquatic       | H411: Toxic to aquatic life with long lasting  |



hazard, (Category 2)

effects.

## 2.2 Label elements

### Labelling according Regulation (EC) No 1272/2008

Pictogram



Signal Word

Danger

Hazard Statements

H225

Highly flammable liquid and vapor.

H314

Causes severe skin burns and eye damage.

H411

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. 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

H314

Causes severe skin burns and eye damage.

Precautionary Statements

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

Supplemental Hazard Statements

none

## 2.3 Other hazards - none

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### **SECTION 3: Composition/information on ingredients**

Refer to component SDS

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### **SECTION 4: First aid measures**

Refer to component SDS

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### **SECTION 5: Firefighting measures**

Refer to component SDS

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### **SECTION 6: Accidental release measures**

Refer to component SDS

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### **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**

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  
-25 - -10 °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



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**SECTION 9: Physical and chemical properties**

Refer to component SDS

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**SECTION 10: Stability and reactivity**

Refer to component SDS

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**SECTION 11: Toxicological information**

Refer to component SDS

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**SECTION 12: Ecological information**

Refer to component SDS

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**SECTION 13: Disposal considerations**

Refer to component SDS

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**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**

Further information : No data available



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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

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**SECTION 16: Other information****Kit Components:**

|                               |       |         |   |
|-------------------------------|-------|---------|---|
| Lysis buffer                  | Sigma | MAK568A | Eye Irrit. 2; Aquatic Chronic 3; H319, H412                     |
| Phosphotungstic Acid Solution | Sigma | MAK568B | Skin Corr. 1C; Eye Dam. 1; Aquatic Chronic 3; H314, H412        |
| BHT Stock/BHT (X100)          | Sigma | MAK568C | Flam. Liq. 2; Eye Irrit. 2; Aquatic Chronic 2; H225, H319, H411 |
| TBA                           | Sigma | MAK568D |   |
| MDA standard                  | Sigma | MAK568E | Flam. Liq. 3; H226  |



## 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

|                  |      |
|------------------|------|
| Flam. Liq.2      | H225 |
| Skin Corr.1C     | H314 |
| Eye Dam.1        | H318 |
| Aquatic Chronic2 | H411 |

### Classification procedure:

|                                     |
|-------------------------------------|
| Based on product data or assessment |
| Calculation method                  |
| Calculation method                  |
| 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



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**Kit Components:**

| <b>Lysis buffer</b> |   |             |   |  |                          |
|---------------------|---|-------------|---|--|--------------------------|
| Product identifier  | Pictogram   | Signal Word | Hazard Statements   | Precautionary Statements   | Supplemental information |
| Sigma - MAK568A     |  | Warning     | Causes serious eye irritation. Harmful to aquatic life with long lasting effects. | 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. Dispose of contents/ container to an approved waste disposal plant. Avoid release to the environment. If eye irritation persists: Get medical advice/ attention. Wear eye protection/ face protection. |                          |

| <b>Phosphotungstic Acid Solution</b> |   |             |   |  |                          |
|--------------------------------------|---|-------------|---|--|--------------------------|
| Product identifier                   | Pictogram   | Signal Word | Hazard Statements   | Precautionary Statements   | Supplemental information |
| Sigma - MAK568B                      |  | Danger      | Causes severe skin burns and eye damage. Harmful to aquatic life with long lasting effects. | Avoid release to the environment. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. |                          |



|  |  |  |  |   |  |
|--|--|--|--|---|--|
|  |  |  |  | <p>Wear protective gloves/ protective clothing/ eye protection/ face protection. 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. Wash contaminated clothing before reuse.</p> |  |
|--|--|--|--|---|--|

| <b>BHT Stock/BHT (X100)</b> |   |             |   |   |                          |
|-----------------------------|---|-------------|---|---|--------------------------|
| Product identifier          | Pictogram   | Signal Word | Hazard Statements   | Precautionary Statements  | Supplemental information |
| Sigma - MAK568C             |  | Danger      | <p>Highly flammable liquid and vapor.<br/>           Causes serious eye irritation.<br/>           Toxic to aquatic life with long lasting effects.</p> | <p>Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Keep container tightly</p> |                          |



|  |  |  |  |  |  |
|--|--|--|--|--|--|
|  |  |  |  | closed.<br>Ground and bond container and receiving equipment.<br>Use explosion-proof electrical/ventilating/lighting/equipment.<br>Avoid release to the environment. |  |
|--|--|--|--|--|--|

| <b>TBA</b>         |           |             |                   |                          |   |
|--------------------|-----------|-------------|-------------------|--------------------------|---|
| Product identifier | Pictogram | Signal Word | Hazard Statements | Precautionary Statements | Supplemental information  |
| Sigma - MAK568D    |           |             |                   |                          | No hazard pictogram, no signal word, no hazard statement(s), no precautionary statement(s) required |

| <b>MDA standard</b> |   |             |                             |  |                          |
|---------------------|---|-------------|-----------------------------|--|--------------------------|
| Product identifier  | Pictogram   | Signal Word | Hazard Statements           | Precautionary Statements   | Supplemental information |
| Sigma - MAK568E     |  | Warning     | Flammable liquid and vapor. | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container tightly closed.<br>Ground and bond container and receiving equipment.<br>Use explosion-proof electrical/ventilating/lighting/equipment.<br>Use non-sparking tools.<br>Take action to |                          |



|  |  |  |  |                            |  |
|--|--|--|--|----------------------------|--|
|  |  |  |  | prevent static discharges. |  |
|--|--|--|--|----------------------------|--|

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