



# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Version 6.7

Revision Date 25.12.2023

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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 : IDH Activity Assay Kit

Product Number : MAK062

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

Uses advised against : For R&D use only. Not for pharmaceutical, household or other uses.

### 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

Skin corrosion, (Sub-category 1B) H314: Causes severe skin burns and eye damage.

Serious eye damage, (Category 1) H318: Causes serious eye damage.

Respiratory sensitization,  
(Category 1)

H334: May cause allergy or asthma  
symptoms or breathing difficulties if  
inhaled.

## 2.2 Label elements

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

Pictogram

|                                |                                                                                                                                  |
|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| Signal Word                    | Danger                                                                                                                           |
| Hazard Statements              |                                                                                                                                  |
| H314                           | Causes severe skin burns and eye damage.                                                                                         |
| H334                           | May cause allergy or asthma symptoms or breathing difficulties if inhaled.                                                       |
| Precautionary Statements       |                                                                                                                                  |
| P261                           | Avoid breathing mist or vapors.                                                                                                  |
| P280                           | Wear protective gloves/ protective clothing/ eye protection/ face protection.                                                    |
| P284                           | Wear respiratory 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. |
| 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:

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.

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.

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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 safe handling**

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

**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 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

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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**

Tunnel restriction code : (E)

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:

|                      |       |         |                                 |
|----------------------|-------|---------|---------------------------------|
| IDH Assay Buffer     | Sigma | MAK062A |                                 |
| NAD+                 | Sigma | MAK062B |                                 |
| NADP+                | Sigma | MAK062C |                                 |
| IDH Substrate        | Sigma | MAK062D |                                 |
| Developer            | Sigma | MAK062E | Skin Corr. 1B; Eye Dam. 1; H314 |
| IDH Positive Control | Sigma | MAK062F | Resp. Sens. 1; H334             |
| NADH Standard        | Sigma | MAK062G |                                 |

#### 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**

|              |      |
|--------------|------|
| Skin Corr.1B | H314 |
| Eye Dam.1    | H318 |
| Resp. Sens.1 | H334 |

**Classification procedure:**

|                    |
|--------------------|
| Calculation method |
| Calculation method |
| Calculation method |

**Further information**

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## Kit Components:

| <b>IDH Assay Buffer</b> |           |             |                   |                          |                                                                                                     |
|-------------------------|-----------|-------------|-------------------|--------------------------|-----------------------------------------------------------------------------------------------------|
| Product identifier      | Pictogram | Signal Word | Hazard Statements | Precautionary Statements | Supplemental information                                                                            |
| Sigma - MAK062A         |           |             |                   |                          | No hazard pictogram, no signal word, no hazard statement(s), no precautionary statement(s) required |

| <b>NAD+</b>        |           |             |                   |                          |                                                                                                     |
|--------------------|-----------|-------------|-------------------|--------------------------|-----------------------------------------------------------------------------------------------------|
| Product identifier | Pictogram | Signal Word | Hazard Statements | Precautionary Statements | Supplemental information                                                                            |
| Sigma - MAK062B    |           |             |                   |                          | No hazard pictogram, no signal word, no hazard statement(s), no precautionary statement(s) required |

| <b>NADP+</b>       |           |             |                   |                          |                                                                                                     |
|--------------------|-----------|-------------|-------------------|--------------------------|-----------------------------------------------------------------------------------------------------|
| Product identifier | Pictogram | Signal Word | Hazard Statements | Precautionary Statements | Supplemental information                                                                            |
| Sigma - MAK062C    |           |             |                   |                          | No hazard pictogram, no signal word, no hazard statement(s), no precautionary statement(s) required |

| <b>IDH Substrate</b> |           |             |                   |                          |                                                |
|----------------------|-----------|-------------|-------------------|--------------------------|------------------------------------------------|
| Product identifier   | Pictogram | Signal Word | Hazard Statements | Precautionary Statements | Supplemental information                       |
| Sigma - MAK062D      |           |             |                   |                          | No hazard pictogram, no signal word, no hazard |

|  |  |  |  |  |                                                      |
|--|--|--|--|--|------------------------------------------------------|
|  |  |  |  |  | statement(s), no precautionary statement(s) required |
|--|--|--|--|--|------------------------------------------------------|

| <b>Developer</b>   |           |             |                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                          |
|--------------------|-----------|-------------|------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
| Product identifier | Pictogram | Signal Word | Hazard Statements                        | Precautionary Statements                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Supplemental information |
| Sigma - MAK062E    |           | Danger      | Causes severe skin burns and eye damage. | Do not breathe dust. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. 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. |                          |

| <b>IDH Positive Control</b> |           |             |                             |                                            |                          |
|-----------------------------|-----------|-------------|-----------------------------|--------------------------------------------|--------------------------|
| Product identifier          | Pictogram | Signal Word | Hazard Statements           | Precautionary Statements                   | Supplemental information |
| Sigma - MAK062F             |           | Danger      | May cause allergy or asthma | Avoid breathing mist or vapors. Dispose of |                          |

|  |  |  |                                                |                                                                                       |  |
|--|--|--|------------------------------------------------|---------------------------------------------------------------------------------------|--|
|  |  |  | symptoms or breathing difficulties if inhaled. | contents/ container to an approved waste disposal plant. Wear respiratory protection. |  |
|--|--|--|------------------------------------------------|---------------------------------------------------------------------------------------|--|

**NADH Standard**

| Product identifier | Pictogram | Signal Word | Hazard Statements | Precautionary Statements | Supplemental information                                                                            |
|--------------------|-----------|-------------|-------------------|--------------------------|-----------------------------------------------------------------------------------------------------|
| Sigma - MAK062G    |           |             |                   |                          | No hazard pictogram, no signal word, no hazard statement(s), no precautionary statement(s) required |

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