

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Version 8.0 Revision Date 16.12.2022 Print Date 30.03.2025

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 : NADP/NADPH ASSAY KIT

Product Number : MAK479
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

## Classification according to Regulation (EC) No 1272/2008

Flammable liquids (Category 2), H225 Corrosive to Metals (Category 1), H290 Skin irritation (Category 2), H315 Eye irritation (Category 2), H319

Specific target organ toxicity - single exposure (Category 3), Respiratory system, H336

For the full text of the H-Statements mentioned in this Section, see Section 16.

#### 2.2 Label elements

Labelling according Regulation (EC) No 1272/2008

Pictogram

Signal Word Danger

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Hazard statement(s)

H225 Highly flammable liquid and vapor.

H290 May be corrosive to metals.
H315 Causes skin irritation.
H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

Precautionary statement(s)

P210 Keep away from heat, hot surfaces, sparks, open flames and

other ignition sources. No smoking.

P233 Keep container tightly closed. P234 Keep only in original packaging.

P240 Ground and bond container and receiving equipment.

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 statement(s) none
Precautionary none

statement(s)

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

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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.

## 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

No metal containers.

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

## **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

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## **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

Further information : No data available

## **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:	K	(it	Co	m	po	ne	nts	:
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ASSAY BUFFER	Sigma	MAK479A	
ENZYME A	Sigma	MAK479B	
ENZYME B	Sigma	MAK479C	
MTT SOLUTION	Sigma	MAK479D	Flam. Liq. 2; Met. Corr. 1; Skin
			Irrit. 2; Eye Irrit. 2; STOT SE 3;
			H225, H290, H315, H319, H336
G6P	Sigma	MAK479E	
NADP EXTRACTION	Sigma	MAK479F	Met. Corr. 1; H290
BUFFER			
NADPH EXTRACTION	Sigma	MAK479G	
BUFFER			
NADP STANDARD (1 MM)	Sigma	MAK479H	

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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	ne mixture	Classification procedure:
Flam. Liq.2	H225	Calculation method
Met. Corr.1	H290	Calculation method
Skin Irrit.2	H315	Calculation method
Eye Irrit.2	H319	Calculation method
STOT SE3	H336	Calculation method

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#### **Further information**

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. 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:**

<b>ASSAY BUFF</b>	ASSAY BUFFER							
Product	Pictogram	Signal	Hazard	Precautionary	Supplemental			
identifier		Word	Statements	Statements	information			
Sigma -					Not a hazardous			
MAK479A					substance or			
					mixture			
					according to			
					Regulation (EC)			
					No 1272/2008.			

ENZYME A					
Product	Pictogram	Signal	Hazard	Precautionary	Supplemental
identifier		Word	Statements	Statements	information
Sigma -					Not a hazardous
MAK479B					substance or
					mixture
					according to
					Regulation (EC)
					No 1272/2008.

ENZYME B					
Product identifier	Pictogram	Signal Word	Hazard Statements	Precautionary Statements	Supplemental information
Sigma - MAK479C					Not a hazardous substance or mixture according to
					Regulation (EC) No 1272/2008.

MTT SOLUTIO	MTT SOLUTION							
Product	Pictogram	Signal	Hazard	Precautionary	Supplemental			
identifier		Word	Statements	Statements	information			
Sigma -	<b>**</b>	Danger	Highly	Keep away				
MAK479D	<b>63</b>		flammable liquid	from heat, hot				
			and vapor.	surfaces,				
			May be	sparks, open				
	X		corrosive to	flames and				
	<b>(!)</b>		metals.	other ignition				
			Causes skin	sources. No				
			irritation.	smoking. IF ON				
			Causes serious	SKIN (or hair):				
			eye irritation.	Take off				
			May cause	immediately all				
			drowsiness or	contaminated				
			dizziness.	clothing. Rinse				

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skin with water.
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. Keep
only in original
packaging.
Ground and
bond container
and receiving
equipment.

G6P	_				
Product	Pictogram	Signal	Hazard	Precautionary	Supplemental
identifier		Word	Statements	Statements	information
Sigma -					Not a hazardous
MAK479E					substance or
					mixture
					according to
					Regulation (EC)
					No 1272/2008.

NADP EXTRACTION BUFFER							
Product identifier	Pictogram	Signal Word	Hazard Statements	Precautionary Statements	Supplemental information		
Sigma - MAK479F		Warning	May be corrosive to metals.	Keep only in original packaging. Absorb spillage to prevent material damage.			

NADPH EXTRACTION BUFFER							
Product identifier	Pictogram	Signal Word	Hazard Statements	Precautionary Statements	Supplemental information		
Sigma - MAK479G					Not a hazardous substance or mixture according to Regulation (EC) No 1272/2008.		

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NADP STAN	NADP STANDARD (1 MM)							
Product	Pictogram	Signal	Hazard	Precautionary	Supplemental			
identifier		Word	Statements	Statements	information			
Sigma - MAK479H					Not a hazardous substance or			
					mixture			
					according to			
					Regulation (EC)			
					No 1272/2008.			

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