

# • SAFETY DATA SHEET

Version 6.15  
Revision Date 11/27/2025  
Print Date 11/28/2025

## SECTION 1. IDENTIFICATION

### 1.1 Product identifiers

Product name : Citrate Synthase Assay Kit

Product Number : CS0720

Brand : Sigma

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Synthesis of substances

Uses advised against : The product is being supplied under the TSCA R&D Exemption (40 CFR Section 720.36). It is the recipient's responsibility to comply with the requirements of the R&D exemption. The product may not be used for a non-exempt commercial purpose under TSCA unless appropriate consent is granted in writing by MilliporeSigma.

### 1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich Inc.  
3050 SPRUCE ST  
ST. LOUIS MO 63103  
UNITED STATES

Telephone : +1 314 771-5765

Fax : +1 800 325-5052

### 1.4 Emergency telephone number

Emergency Phone # : 800-424-9300 CHEMTREC (USA) +1-703-527-3887 CHEMTREC (International) 24 Hours/day; 7 Days/week

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.

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## SECTION 2. HAZARDS IDENTIFICATION

### GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200)


#### Hazards for the product as supplied

- Skin irritation : Category 2
- Eye irritation : Category 2A
- Respiratory sensitisation : Category 1
- Specific target organ toxicity - single exposure : Category 3 (Respiratory system)
- Short-term (acute) aquatic hazard : Category 3

#### Other hazards

None known.

#### GHS label elements

Hazard pictograms : 

Signal word : Danger

Hazard statements : H315 Causes skin irritation.  
H319 Causes serious eye irritation.  
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
H335 May cause respiratory irritation.  
H402 Harmful to aquatic life.

Precautionary statements : **Prevention:**  
P261 Avoid breathing mist or vapours.  
P264 Wash skin thoroughly after handling.  
P271 Use only outdoors or in a well-ventilated area.  
P273 Avoid release to the environment.  
P280 Wear protective gloves/ eye protection/ face protection.  
P285 In case of inadequate ventilation wear respiratory protection.

#### **Response:**

P302 + P352 IF ON SKIN: Wash with plenty of water.  
P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P332 + P313 If skin irritation occurs: Get medical advice/ attention.  
P337 + P313 If eye irritation persists: Get medical advice/ attention.  
P342 + P311 If experiencing respiratory symptoms: Call a POISON CENTER/ doctor.

**Storage:**

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.  
P405 Store locked up.

**Disposal:**

P501 Dispose of contents/ container to an approved waste disposal plant.

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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**

For precautions see section 2.2.

Advice on safe handling : Work under hood. Do not inhale substance/mixture.  
Avoid generation of vapours/aerosols.

Further information on storage conditions : Tightly closed.  
Keep locked up or in an area accessible only to qualified or authorised persons.

Storage class : 10, Combustible liquids

Recommended storage temperature : -4 °F / -20 °C

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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****International Regulations****IATA-DGR**

Not regulated as a dangerous good

**IMDG-Code**

Not regulated as a dangerous good

**Transport in bulk according to IMO instruments**

Not applicable for product as supplied.

**National Regulations****49 CFR Road**

Not regulated as a dangerous good

Poison Inhalation Hazard : No

**Special precautions for user**

Remarks : Not classified as dangerous in the meaning of transport regulations.

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**SECTION 15. REGULATORY INFORMATION**

Sigma - CS0720

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**SECTION 16. OTHER INFORMATION****Kit Components:**

CellLytic™ M	Sigma	C2978
bicine buffer solution	Sigma	B7060
Assay buffer for citrate synthase	Sigma	B6935
Citrate synthase	Sigma	C4741
Acetyl coenzyme A lithium salt	Sigma	A2181
5,5'-Dithiobis(2-nitrobenzoic acid)	Sigma	D8130
Oxaloacetic acid	Sigma	O4126

**Full text of other abbreviations**

AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; 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; ERG - Emergency Response Guide; GHS - Globally Harmonised System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; 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 Organisation; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardisation; 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; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organisation 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; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; 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

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](http://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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US / EN

## Kit Components:

<b>CellLytic™ M</b>					
Product identifier	Pictogram	Signal word	Hazard statements	Precautionary statements	Supplemental information
Sigma - C2978					No hazard pictogram, no signal word, no hazard statement(s), no precautionary statement(s) required.


<b>bicine buffer solution</b>					
Product identifier	Pictogram	Signal word	Hazard statements	Precautionary statements	Supplemental information
Sigma - B7060					No hazard pictogram, no signal word, no hazard statement(s), no precautionary statement(s) required.

<b>Assay buffer for citrate synthase</b>					
Product identifier	Pictogram	Signal word	Hazard statements	Precautionary statements	Supplemental information
Sigma - B6935					No hazard pictogram, no signal word, no hazard statement(s), no precautionary statement(s) required.

<b>Citrate synthase</b>					
Product identifier	Pictogram	Signal word	Hazard statements	Precautionary statements	Supplemental information
Sigma - C4741		Danger	May cause allergy or asthma symptoms or	Avoid breathing mist or vapours. IF INHALED: Remove person	

			breathing difficulties if inhaled.	to fresh air and keep comfortable for breathing. Dispose of contents/ container to an approved waste disposal plant. In case of inadequate ventilation wear respiratory protection. If experiencing respiratory symptoms: Call a POISON CENTER/ doctor.	
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**Acetyl coenzyme A lithium salt**


Product identifier	Pictogram	Signal word	Hazard statements	Precautionary statements	Supplemental information
Sigma - A2181		Warning	Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation.	Avoid breathing dust. IF ON SKIN: Wash with plenty of water. Store in a well-ventilated place. Keep container tightly closed. Dispose of contents/ container to an approved waste disposal plant. Wash skin thoroughly after handling. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell. Store locked up. Use only outdoors or in a well-	

				ventilated area. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Wear protective gloves/ eye protection/ face protection. If skin irritation occurs: Get medical advice/ attention. If eye irritation persists: Get medical advice/ attention.	
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#### 5,5'-Dithiobis(2-nitrobenzoic acid)

Product identifier	Pictogram	Signal word	Hazard statements	Precautionary statements	Supplemental information
Sigma - D8130					No hazard pictogram, no signal word, no hazard statement(s), no precautionary statement(s) required.

#### Oxaloacetic acid

Product identifier	Pictogram	Signal word	Hazard statements	Precautionary statements	Supplemental information
Sigma - O4126		Warning	Causes serious eye irritation. Harmful to aquatic life.	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.	
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