

# Hazard Overview

Version 8.14  
Revision Date 05/20/2026  
Print Date 05/21/2026

## SECTION 1. IDENTIFICATION

### 1.1 Product identifiers

Product name : Mammalian Cell Lysis Kit

Product Number : MCL1

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
Serious eye damage	: Category 1
Short-term (acute) aquatic hazard	: Category 1
Long-term (chronic) aquatic hazard	: Category 2

#### Other hazards

None known.

#### GHS label elements

Hazard pictograms	:	
Signal word	:	Danger
Hazard statements	:	H315 Causes skin irritation. H318 Causes serious eye damage. H400 Very toxic to aquatic life. H411 Toxic to aquatic life with long lasting effects.
Supplemental Hazard Statements	:	Corrosive to the respiratory tract.
Precautionary statements	:	<b>Prevention:</b> P264 Wash skin thoroughly after handling. P273 Avoid release to the environment. P280 Wear protective gloves/ eye protection/ face protection. <b>Response:</b> P302 + P352 IF ON SKIN: Wash with plenty of water. P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/ doctor. P332 + P313 If skin irritation occurs: Get medical advice/ attention. P362 + P364 Take off contaminated clothing and wash it before reuse.

P391 Collect spillage.

**Disposal:**

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

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**SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Please refer to component Safety Data Sheet and/or to Section 16 Kit components

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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.

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**

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**

**SARA 311/312 Hazards** : Acute Health Hazard  
Chronic Health Hazard

**Clean Air Act**

Warning: Manufactured with 5X TRIS-EDTA BUFFER, 5X Sodium Chloride Solution for Mammalia, 5X LAURYL SULFATE, SODIUM SOLUTION, 5X Deoxycholic acid sodium salt solution for ripa buffer kit, 5X IGEPAL® ca 630 solution for ripa buffer kit, Protease Inhibitor Cocktail, a substance which harms public health and environment by destroying ozone in the upper atmosphere.

40 CFR Protection of :  
Environment; Part 82  
Protection of  
Stratospheric Ozone -  
CAA Section 602 Class I  
SubstancesOzone-  
Depletion Potential

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This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

The following chemical(s) are listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F):

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The life science business of Merck KGaA, Darmstadt, Germany operates as MilliporeSigma in the US and Canada

**Millipore  
Sigma**

Protease Inhibitor Cocktail	Not Assigned	>= 90 - <= 100 %
5X Deoxycholic acid sodium salt solution for ripa buffer kit	Not Assigned	>= 90 - <= 100 %
5X IGEPAL® ca 630 solution for ripa buffer kit	Not Assigned	>= 90 - <= 100 %
5X Sodium Chloride Solution for Mammalia	Not Assigned	>= 90 - <= 100 %
5X LAURYL SULFATE,SODIUM SOLUTION	Not Assigned	>= 90 - <= 100 %
5X TRIS-EDTA BUFFER	Not Assigned	>= 90 - <= 100 %

The following chemical(s) are listed under the U.S. Clean Air Act Section 111 SOCM I Intermediate or Final VOC's (40 CFR 60.489):

Protease Inhibitor Cocktail	Not Assigned	>= 90 - <= 100 %
5X Deoxycholic acid sodium salt solution for ripa buffer kit	Not Assigned	>= 90 - <= 100 %
5X IGEPAL® ca 630 solution for ripa buffer kit	Not Assigned	>= 90 - <= 100 %
5X Sodium Chloride Solution for Mammalia	Not Assigned	>= 90 - <= 100 %
5X LAURYL SULFATE,SODIUM SOLUTION	Not Assigned	>= 90 - <= 100 %
5X TRIS-EDTA BUFFER	Not Assigned	>= 90 - <= 100 %

### Clean Water Act

The following Hazardous Substances are listed under the U.S. CleanWater Act, Section 311, Table 116.4A:

Protease Inhibitor Cocktail	Not Assigned	>= 90 - <= 100 %
5X Deoxycholic acid sodium salt solution for ripa buffer kit	Not Assigned	>= 90 - <= 100 %
5X IGEPAL® ca 630 solution for ripa buffer kit	Not Assigned	>= 90 - <= 100 %
5X Sodium Chloride Solution for Mammalia	Not Assigned	>= 90 - <= 100 %
5X LAURYL SULFATE,SODIUM SOLUTION	Not Assigned	>= 90 - <= 100 %
5X TRIS-EDTA BUFFER	Not Assigned	>= 90 - <= 100 %

The following Hazardous Chemicals are listed under the U.S. CleanWater Act, Section 311, Table 117.3:

Protease Inhibitor Cocktail	Not Assigned	>= 90 - <= 100 %
5X Deoxycholic acid sodium salt solution for ripa buffer kit	Not Assigned	>= 90 - <= 100 %
5X IGEPAL® ca 630 solution for ripa buffer kit	Not Assigned	>= 90 - <= 100 %
5X Sodium Chloride Solution for Mammalia	Not Assigned	>= 90 - <= 100 %
5X LAURYL SULFATE,SODIUM SOLUTION	Not Assigned	>= 90 - <= 100 %
5X TRIS-EDTA BUFFER	Not Assigned	>= 90 - <= 100 %

This product contains the following toxic pollutants listed under the U.S. Clean Water Act Section 307

Protease Inhibitor Cocktail	Not Assigned	>= 90 - <= 100 %
5X Deoxycholic acid sodium salt solution for ripa buffer kit	Not Assigned	>= 90 - <= 100 %
5X IGEPAL® ca 630 solution for ripa buffer kit	Not Assigned	>= 90 - <= 100 %
5X Sodium Chloride Solution for Mammalia	Not Assigned	>= 90 - <= 100 %
5X LAURYL SULFATE,SODIUM SOLUTION	Not Assigned	>= 90 - <= 100 %
5X TRIS-EDTA BUFFER	Not Assigned	>= 90 - <= 100 %

This product contains the following priority pollutants related to the U.S. Clean Water Act:

Protease Inhibitor Cocktail	Not Assigned	>= 90 - <= 100 %
5X Deoxycholic acid sodium salt solution for ripa buffer kit	Not Assigned	>= 90 - <= 100 %
5X IGEPAL® ca 630 solution for ripa buffer kit	Not Assigned	>= 90 - <= 100 %
5X Sodium Chloride Solution for Mammalia	Not Assigned	>= 90 - <= 100 %
5X LAURYL SULFATE,SODIUM SOLUTION	Not Assigned	>= 90 - <= 100 %
5X TRIS-EDTA BUFFER	Not Assigned	>= 90 - <= 100 %

## SECTION 16. OTHER INFORMATION

### Kit Components:

5X TRIS-EDTA BUFFER	Sigma	T8815
5X Sodium Chloride Solution for Mammalia	Sigma	S4684
5X LAURYL SULFATE,SODIUM SOLUTION	Sigma	L1787
5X Deoxycholic acid sodium salt solution for ripa buffer kit	Sigma	D4437
5X IGEPAL® ca 630 solution for ripa buffer kit	Sigma	I2653
Protease Inhibitor Cocktail	Sigma	P8340

### 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

Sigma - MCL1

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States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

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Revision Date : 05/20/2026

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US / EN

**Kit Components:**

<b>5X TRIS-EDTA BUFFER</b>					
Product identifier	Pictogram	Signal word	Hazard statements	Precautionary statements	Supplemental information
Sigma - T8815					No hazard pictogram, no signal word, no hazard statement(s), no precautionary statement(s) required.


<b>5X Sodium Chloride Solution for Mammalia</b>					
Product identifier	Pictogram	Signal word	Hazard statements	Precautionary statements	Supplemental information
Sigma - S4684					No hazard pictogram, no signal word, no hazard statement(s), no precautionary statement(s) required.

<b>5X LAURYL SULFATE, SODIUM SOLUTION</b>					
Product identifier	Pictogram	Signal word	Hazard statements	Precautionary statements	Supplemental information
Sigma - L1787					No hazard pictogram, no signal word, no hazard statement(s), no precautionary statement(s) required.


<b>5X Deoxycholic acid sodium salt solution for ripa buffer kit</b>					
Product identifier	Pictogram	Signal word	Hazard statements	Precautionary statements	Supplemental information
Sigma - D4437					No hazard pictogram, no signal word, no hazard

					statement(s), no precautionary statement(s) required.
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**5X IGEPAL® ca 630 solution for ripa buffer kit**

Product identifier	Pictogram	Signal word	Hazard statements	Precautionary statements	Supplemental information
Sigma - I2653		Danger	Causes serious eye damage. Very toxic to aquatic life. Toxic to aquatic life with long lasting effects.	Avoid release to the environment. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/ doctor. Dispose of contents/ container to an approved waste disposal plant. Wear eye protection/ face protection. Collect spillage.	

**Protease Inhibitor Cocktail**

Product identifier	Pictogram	Signal word	Hazard statements	Precautionary statements	Supplemental information
Sigma - P8340		Warning	Combustible liquid. Causes skin irritation. Causes serious eye irritation.	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. IF ON SKIN: Wash with plenty of water. Store in a well-ventilated place. Dispose of contents/	

				<p>container to an approved waste disposal plant. 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. Wear protective gloves/ protective clothing/ eye protection/ face protection. If skin irritation occurs: Get medical advice/ attention. If eye irritation persists: Get medical advice/ attention. In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.</p>	
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