



SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Version 6.15

Revision Date 20.02.2025

Print Date 05.05.2025

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 : GenElute™ Mammalian Total RNA Miniprep Kit

Product Number : RTN70

Brand : Sigma

REACH No. :

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

Identified uses : Laboratory chemicals, Manufacture of substances

1.3

CHEMIKART

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

Acute toxicity, (Category 3) H301: Toxic if swallowed.

Acute toxicity, (Category 3) H331: Toxic if inhaled.

Acute toxicity, (Category 2) H310: Fatal in contact with skin.

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

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

Skin sensitization, (Category 1)	H317: May cause an allergic skin reaction.
Reproductive toxicity, (Category 2)	H361f: Suspected of damaging fertility.
Specific target organ toxicity - repeated exposure, (Category 2), Liver, Heart	H373: May cause damage to organs through prolonged or repeated exposure if swallowed.
Short-term (acute) aquatic hazard, (Category 1)	H400: Very toxic to aquatic life.
Long-term (chronic) aquatic hazard, (Category 2)	H411: Toxic to aquatic life with long lasting effects.

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008

Pictogram

Signal Word	Danger
Hazard Statements	
H301 + H331	Toxic if swallowed or if inhaled.
H310	Fatal in contact with skin.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H361f	Suspected of damaging fertility.
H373	May cause damage to organs (Liver, Heart) through prolonged or repeated exposure if swallowed.
H410	Very toxic to aquatic life with long lasting effects.
Precautionary Statements	
P202	Do not handle until all safety precautions have been read and understood.
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.
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 information (EU)	
EUH032	Contact with acids liberates very toxic gas.

Reduced Labeling (<= 125 ml)

Pictogram

Signal Word	Danger
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Hazard Statements	
H310	Fatal in contact with skin.
H317	May cause an allergic skin reaction.
H314	Causes severe skin burns and eye damage.
H361f	Suspected of damaging fertility.
H301 + H331	Toxic if swallowed or if inhaled.
Precautionary Statements	
P202	Do not handle until all safety precautions have been read and understood.
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.
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 information (EU)	
EUH032	Contact with acids liberates very toxic gas.

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

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

Tightly closed. Keep in a well-ventilated place. Keep locked up or in an area accessible only to qualified or authorized persons.

Do not store near acids.

Storage stability Recommended storage temperature

15 - 25 °C

Storage class

Storage class (TRGS 510): 6.1A: Combustible, acute toxic Cat. 1 and 2 / very toxic hazardous materials

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

SECTION 13: Disposal considerations

Refer to component SDS

SECTION 14: Transport information

14.1 UN number

ADR/RID: 3316

IMDG: 3316

IATA: 3316

ADR/RID: CHEMICAL KIT
IMDG: CHEMICAL KIT
IATA: Chemical kit

ADR/RID: 9 IMDG: 9 IATA: 9

ADR/RID: II IMDG: II IATA: II

ADR/RID: no IMDG Marine pollutant: no IATA: no

Tunnel restriction code : (E)

Further information : No data available

Not applicable for product as supplied.

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.
Refer to component SDS

For this product a chemical safety assessment was not carried out

Lysis solution for total RNA kit	Sigma	L8285	Acute Tox. 4; Skin Corr. 1C; Eye Dam. 1; Aquatic Chronic 3; H302 + H332, H314, H412, EUH032
2-Mercaptoethanol	Sigma	M3148	Acute Tox. 3; Acute Tox. 2; Skin Irrit. 2; Eye Dam. 1; Skin Sens. 1A; Repr. 2; STOT RE 2; Aquatic Acute 1; Aquatic Chronic 2; H301 + H331, H310, H315, H317, H318, H361f, H373, H410
wash solution 1	Sigma	W3136	Skin Corr. 1C; Eye Dam. 1; H314
Wash solution 2 Concentrate for Total RNA	Sigma	W3261	
Elution solution	Sigma	E8024	
DNA Filtration column	Sigma	C9346	
Nucleic acid binding column	Sigma	C9471	

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

Acute Tox.3	H301
Acute Tox.3	H331
Acute Tox.2	H310
Skin Corr.1C	H314
Eye Dam.1	H318
Skin Sens.1	H317
Repr.2	H361f
STOT RE2	H373
Aquatic Acute1	H400
Aquatic Chronic2	H411

Classification procedure:

Calculation method
Calculation method
Calculation method
Calculation method
Calculation method
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Calculation method
Calculation method
Calculation method
Calculation method

Further information

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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 and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

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Kit Components:

Lysis solution for total RNA kit					
Product identifier	Pictogram	Signal Word	Hazard Statements	Precautionary Statements	Supplemental information
Sigma - L8285		Danger	Harmful if swallowed or if inhaled. Causes severe skin burns and eye damage. Harmful to aquatic life with long lasting effects.	Avoid release to the environment. IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. Wear protective gloves/ protective clothing/ eye protection/ face protection. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. 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.	Contact with acids liberates very toxic gas.

2-Mercaptoethanol					
Product identifier	Pictogram	Signal Word	Hazard Statements	Precautionary Statements	Supplemental information
Sigma - M3148		Danger	<p>Toxic if swallowed or if inhaled.</p> <p>Fatal in contact with skin.</p> <p>Causes skin irritation.</p> <p>May cause an allergic skin reaction.</p> <p>Causes serious eye damage.</p> <p>Suspected of damaging fertility.</p> <p>May cause damage to organs (Liver, Heart) through prolonged or repeated exposure if swallowed.</p> <p>Very toxic to aquatic life with long lasting effects.</p>	<p>Avoid release to the environment. IF SWALLOWED: Immediately call a POISON CENTER/ doctor. Wear protective gloves/ protective clothing/ eye protection/ face protection. IF ON SKIN: Wash with plenty of water. Immediately call a POISON CENTER/ doctor. IF INHALED: Remove person to fresh air and keep comfortable for breathing. 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.</p>	

wash solution 1					
Product identifier	Pictogram	Signal Word	Hazard Statements	Precautionary Statements	Supplemental information
Sigma - W3136		Danger	<p>Causes severe skin burns and eye damage.</p>	<p>Wear protective gloves/ protective clothing/ eye protection/ face protection. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse</p>	

				skin with water. Store locked up. 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.	
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Wash solution 2 Concentrate for Total RNA

Product identifier	Pictogram	Signal Word	Hazard Statements	Precautionary Statements	Supplemental information
Sigma - W3261					No hazard pictogram, no signal word, no hazard statement(s), no precautionary statement(s) required.

Elution solution

Product identifier	Pictogram	Signal Word	Hazard Statements	Precautionary Statements	Supplemental information
Sigma - E8024					No hazard pictogram, no signal word, no hazard statement(s), no precautionary statement(s) required.

DNA Filtration column

Product identifier	Pictogram	Signal Word	Hazard Statements	Precautionary Statements	Supplemental information
Sigma -					No hazard pictogram, no

C9346					signal word, no hazard statement(s), no precautionary statement(s) required.
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Nucleic acid binding column

Product identifier	Pictogram	Signal Word	Hazard Statements	Precautionary Statements	Supplemental information
Sigma - C9471					No hazard pictogram, no signal word, no hazard statement(s), no precautionary statement(s) required.

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