

## RNAprotect Tissue Reagent (50 ml)

Version  
1.0

Revision Date:  
09/05/2021

Date of last issue: -  
Date of first issue: 09/05/2021

---

### Safety Data Sheet (SDS) cover letter for product:

#### RNAprotect Tissue Reagent (50 ml)

Catalog number: 76104  
Document ID: 800000009992  
Country / Language: US / EN

This product contains one or more components with related SDS, listed below. You can find the SDS for each component on the following pages.

#### Components with SDS:

- RNAprotect Tissue Reagent

Kind regards,,  
Your QIAGEN Team

Email [cpc@qiagen.com](mailto:cpc@qiagen.com) | Website [www.qiagen.com/safety](http://www.qiagen.com/safety)

**RNAprotect Tissue Reagent (50 ml)**Version  
1.0Revision Date:  
09/05/2021Date of last issue: -  
Date of first issue: 09/05/2021**SECTION 1. IDENTIFICATION**

Product name : RNAprotect Tissue Reagent

**Manufacturer or supplier's details**Company : QIAGEN GmbH  
QIAGEN Str. 1  
D-40724 Hilden

Telephone : +49-(0)2103-29-0

Responsible Department : QIAGEN Inc.  
19300 Germantown Road  
Germantown, MD 20874, USA  
Tel.: 800-426-8157  
<http://support.qiagen.com>E-mail : [cpc@qiagen.com](mailto:cpc@qiagen.com)  
addressResponsible/issuing  
personEmergency telephone : CHEMTREC  
USA & Canada 1-800-424-9300**Recommended use of the chemical and restrictions on use**

Recommended use : Laboratory chemicals

**SECTION 2. HAZARDS IDENTIFICATION****GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200)**

Not a hazardous substance or mixture.

**GHS label elements**

Not a hazardous substance or mixture.

**Other hazards**

None known.

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

Substance / Mixture : Mixture

**Components**

Chemical name	CAS-No.	Concentration (% w/w)
sulfuric acid	7664-93-9	$\geq 0.1 - < 1$

Actual concentration is withheld as a trade secret

**SECTION 4. FIRST AID MEASURES**General advice : Show this material safety data sheet to the doctor in  
attendance.

**RNAprotect Tissue Reagent (50 ml)**
Version  
1.0Revision Date:  
09/05/2021Date of last issue: -  
Date of first issue: 09/05/2021

If inhaled	:	Move to fresh air. If symptoms persist, call a physician.
In case of skin contact	:	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If symptoms persist, call a physician.
In case of eye contact	:	Remove contact lenses. Protect unharmed eye. Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
If swallowed	:	If accidentally swallowed obtain immediate medical attention. Rinse mouth with water. Never give anything by mouth to an unconscious person.
Most important symptoms and effects, both acute and delayed	:	May cause cancer. No information available.
Notes to physician	:	No information available.

**SECTION 5. FIRE-FIGHTING MEASURES**

Suitable extinguishing media	:	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Specific hazards during fire fighting	:	Exposure to decomposition products may be a hazard to health.
Hazardous combustion products	:	Nitrogen oxides (NO <sub>x</sub> ) Sulfur oxides Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke).
Further information	:	In the event of fire and/or explosion do not breathe fumes.
Special protective equipment for fire-fighters	:	Wear self-contained breathing apparatus for firefighting if necessary.

**SECTION 6. ACCIDENTAL RELEASE MEASURES**

Personal precautions, protective equipment and emergency procedures	:	Use personal protective equipment. Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.
Methods and materials for containment and cleaning up	:	Unsuitable cleaning agents: sodium hypochlorite Keep in suitable, closed containers for disposal.  Keep in suitable, closed containers for disposal. sodium hypochlorite

**SECTION 7. HANDLING AND STORAGE**

Advice on protection against fire and explosion	:	Normal measures for preventive fire protection.
Advice on safe handling	:	For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area.
Further information on storage stability	:	No decomposition if stored and applied as directed.

**RNAProtect Tissue Reagent (50 ml)**
Version  
1.0Revision Date:  
09/05/2021Date of last issue: -  
Date of first issue: 09/05/2021
**SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**
**Ingredients with workplace control parameters**

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
sulfuric acid	7664-93-9	TWA (Thoracic particulate matter)	0.2 mg/m <sup>3</sup>	ACGIH
		TWA	1 mg/m <sup>3</sup>	NIOSH REL
		TWA	1 mg/m <sup>3</sup>	OSHA Z-1
		TWA	1 mg/m <sup>3</sup>	OSHA P0

**Personal protective equipment**

## Hand protection

Remarks : The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other. Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact).

Eye protection : Safety glasses

Skin and body protection : Choose body protection according to the amount and concentration of the dangerous substance at the work place.  
Footwear protecting against chemicals

Hygiene measures : Keep away from food and drink.  
When using do not eat, drink or smoke.

**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

Appearance : liquid

Color : No data available

Odor : characteristic

Odor Threshold : No data available

pH : 5

Melting point/range : No data available

Boiling point/boiling range : No data available

Flash point : No data available

Evaporation rate : No data available

Burning rate : No data available

Upper explosion limit / Upper flammability limit : No data available

**RNAprotect Tissue Reagent (50 ml)**Version  
1.0Revision Date:  
09/05/2021Date of last issue: -  
Date of first issue: 09/05/2021

---

Lower explosion limit / Lower flammability limit	:	No data available
Vapor pressure	:	No data available
Relative vapor density	:	No data available
Relative density	:	No data available
Density	:	1.25 g/cm <sup>3</sup>
Solubility(ies)		
Water solubility	:	No data available
Solubility in other solvents	:	No data available
Partition coefficient: n-octanol/water	:	No data available
Autoignition temperature	:	not determined
Decomposition temperature	:	No data available
Viscosity		
Viscosity, dynamic	:	No data available
Viscosity, kinematic	:	No data available
Explosive properties	:	No data available
Oxidizing properties	:	No data available

---

**SECTION 10. STABILITY AND REACTIVITY**

Reactivity	:	No decomposition if stored and applied as directed.
Chemical stability	:	No decomposition if stored and applied as directed.
Possibility of hazardous reactions	:	Stable under recommended storage conditions. Hazardous decomposition products formed under fire conditions.
Conditions to avoid	:	No data available
Incompatible materials	:	No data available
Hazardous decomposition products	:	No decomposition if stored and applied as directed.

---

**SECTION 11. TOXICOLOGICAL INFORMATION****Acute toxicity**

Not classified based on available information.

**Product:**

Acute oral toxicity	:	Remarks: No data available
Acute inhalation toxicity	:	Remarks: No data available

**RNAprotect Tissue Reagent (50 ml)**
Version  
1.0Revision Date:  
09/05/2021Date of last issue: -  
Date of first issue: 09/05/2021

Acute dermal toxicity : Remarks: No data available

**Components:****sulfuric acid:**

Acute oral toxicity : LD50 Oral (Rat): 2,140 mg/kg

**Skin corrosion/irritation**

Not classified based on available information.

**Product:**

Remarks : May cause skin irritation in susceptible persons.

**Serious eye damage/eye irritation**

Not classified based on available information.

**Product:**

Remarks : May irritate eyes.

**Respiratory or skin sensitization****Skin sensitization**

Not classified based on available information.

**Respiratory sensitization**

Not classified based on available information.

**Product:**

Remarks : No data available

**Germ cell mutagenicity**

Not classified based on available information.

**Carcinogenicity**

May cause cancer.

<b>IARC</b>	Group 1: Carcinogenic to humans sulfuric acid (Acid mists, strong inorganic)	7664-93-9
-------------	--	-----------

<b>OSHA</b>	No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.
-------------	--

<b>NTP</b>	Known to be human carcinogen sulfuric acid	7664-93-9
------------	---	-----------

**Reproductive toxicity**

Not classified based on available information.

**STOT-single exposure**

Not classified based on available information.

**STOT-repeated exposure**

Not classified based on available information.

**RNAprotect Tissue Reagent (50 ml)**Version  
1.0Revision Date:  
09/05/2021Date of last issue: -  
Date of first issue: 09/05/2021**Aspiration toxicity**

Not classified based on available information.

**Further information****Product:**

Remarks : No data available

**SECTION 12. ECOLOGICAL INFORMATION****Ecotoxicity****Product:**Toxicity to fish :  
Remarks: No data availableToxicity to algae/aquatic plants :  
Remarks: No data available

Toxicity to microorganisms : Remarks: No data available

**Components:****sulfuric acid:**Toxicity to fish : LC50 (Gambusia affinis (Mosquito fish)): 42 mg/l  
Exposure time: 96 h**Persistence and degradability**

No data available

**Bioaccumulative potential****Product:**

Bioaccumulation : Remarks: No data available

**Mobility in soil**

No data available

**Other adverse effects****Product:**Ozone-Depletion Potential : Regulation: 40 CFR Protection of Environment; Part 82  
Protection of Stratospheric Ozone - CAA Section 602 Class I  
Substances  
Remarks: This product neither contains, nor was  
manufactured with a Class I or Class II ODS as defined by the  
U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A +  
B).

Additional ecological information : No data available

**RNAsprotect Tissue Reagent (50 ml)**
Version  
1.0Revision Date:  
09/05/2021Date of last issue: -  
Date of first issue: 09/05/2021
**SECTION 13. DISPOSAL CONSIDERATIONS**
**Disposal methods**

Contaminated packaging : Empty containers should be taken to an approved waste handling site for recycling or disposal.

**SECTION 14. TRANSPORT INFORMATION**
**International Regulations**
**UNRTDG**

Not regulated as a dangerous good

**IATA-DGR**

Not regulated as a dangerous good

**IMDG-Code**

Not regulated as a dangerous good

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

Not applicable for product as supplied.

**Domestic regulation**
**49 CFR**

Not regulated as a dangerous good

**SECTION 15. REGULATORY INFORMATION**
**CERCLA Reportable Quantity**

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
sulfuric acid	7664-93-9	1000	*

\*: Calculated RQ exceeds reasonably attainable upper limit.

**SARA 304 Extremely Hazardous Substances Reportable Quantity**

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
sulfuric acid	7664-93-9	1000	*

\*: Calculated RQ exceeds reasonably attainable upper limit.

**SARA 302 Extremely Hazardous Substances Threshold Planning Quantity**

This material does not contain any components with a section 302 EHS TPQ.

**SARA 311/312 Hazards** : No SARA Hazards

**SARA 313** : The following components are subject to reporting levels established by SARA Title III, Section 313:

ammonium sulphate	7783-20-2	>= 30 - < 50 %
-------------------	-----------	----------------

**Clean Air Act**

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).



**RNAProtect Tissue Reagent (50 ml)**
Version  
1.0Revision Date:  
09/05/2021Date of last issue: -  
Date of first issue: 09/05/2021

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

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCM I Intermediate or Final VOC's (40 CFR 60.489).

**Clean Water Act**

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

sulfuric acid	7664-93-9	>= 0.1 - < 1 %
---------------	-----------	----------------

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

sulfuric acid	7664-93-9	>= 0.1 - < 1 %
---------------	-----------	----------------

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

This product does not contain any priority pollutants related to the U.S. Clean Water Act

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

sulfuric acid	7664-93-9
---------------	-----------

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

sulfuric acid	7664-93-9
---------------	-----------

**Maine Chemicals of High Concern**

sulfuric acid	7664-93-9
---------------	-----------

The following chemicals are listed as Maine Chemicals of High Concern:

**Maine Chemicals of High Concern**

Product does not contain any listed chemicals

**TSCA list**

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

**SECTION 16. OTHER INFORMATION**
**Full text of other abbreviations**

ACGIH	:	USA. ACGIH Threshold Limit Values (TLV)
NIOSH REL	:	USA. NIOSH Recommended Exposure Limits
OSHA P0	:	USA. OSHA - TABLE Z-1 Limits for Air Contaminants - 1910.1000
OSHA Z-1	:	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
ACGIH / TWA	:	8-hour, time-weighted average
NIOSH REL / TWA	:	Time-weighted average concentration for up to a 10-hour workday during a 40-hour workweek
OSHA P0 / TWA	:	8-hour time weighted average
OSHA Z-1 / TWA	:	8-hour time weighted average

AICS - Australian Inventory of Chemical Substances; 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,

**RNAprotect Tissue Reagent (50 ml)**Version  
1.0Revision Date:  
09/05/2021Date of last issue: -  
Date of first issue: 09/05/2021

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 Harmonized 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 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; 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 - 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; 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; 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

SDS Number : 600000001317

Revision Date : 09/05/2021

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

US / Z8