

SAFETY DATA SHEET

according to the OSHA Hazard Communication Standard



RNeasy Mini Kit (50)

Version
4.0

Revision Date:
09/27/2025

Date of last issue: 04/17/2025
Date of first issue: 09/04/2021

Safety Data Sheet (SDS) cover letter for product:

RNeasy Mini Kit (50)

Catalog number: 74104
Document ID: 800000000208
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:

- Water Version: 7.0
- Buffer RPE Version: 5.0
- Buffer RW1 Version: 5.0
- Buffer RLT Version: 5.0

Kind regards,
Your QIAGEN Team

Email cpc@qiagen.com | Website www.qiagen.com/safety

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09/27/2025

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Date of first issue: 09/04/2021

SECTION 1. IDENTIFICATION

Product name : Water

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 address : cpc@qiagen.com
Responsible/issuing person

Emergency telephone : CHEMTREC
USA & Canada 1-800-424-9300
CHEMTREC: 1-800-424-9300

Recommended use of the chemical and restrictions on use

Recommended use : Laboratory chemicals

Restrictions on use : This product is either (1) provided under the research & development exemption to the Toxic Substances Control Act (TSCA) and intended exclusively for research and development use (40 CFR 720.36), or (2) a material regulated under the Federal Food, Drugs, and Cosmetics Act (FFDCA). Refer to the specific product handbook or instructions for use to confirm the intended use of the product. If the product does not bear an "IVD" label, it is for research and development use only.

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

No hazard pictogram, no signal word, no hazard statement(s), no precautionary statement(s) required.

Other hazards

None known.

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SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Substance
Substance name : Water

CAS-No. : 7732-18-5

Components

No hazardous ingredients

SECTION 4. FIRST AID MEASURES

General advice : Show this material safety data sheet to the doctor in attendance.
If inhaled : Not applicable
Move to fresh air.
If symptoms persist, call a physician.
In case of skin contact : Not applicable
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 : Not applicable
Remove contact lenses.
Protect unharmed eye.
Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
If swallowed : Not applicable
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 : None known.
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 : No hazardous combustion products are known

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

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- | | | |
|---|---|---|
| Personal precautions,
protective equipment and
emergency procedures | : | Use personal protective equipment.
Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray. |
| Environmental precautions | : | Do not allow uncontrolled discharge of product into the
environment. |
| Methods and materials for
containment and cleaning up | : | Keep in suitable, closed containers for disposal. |

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. |

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

Contains no substances with occupational exposure limit values.

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 | : | colorless |
| Odor | : | odorless |
| Odor Threshold | : | No data available |

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pH	:	6 - 8
Melting point/ range	:	32 °F / 0 °C
Boiling point/boiling range	:	212 °F / 100 °C (1,013 hPa)
Flash point	:	does not flash
Evaporation rate	:	No data available
Burning rate	:	No data available
Upper explosion limit / Upper flammability limit	:	Not applicable
Lower explosion limit / Lower flammability limit	:	Not applicable
Vapor pressure	:	23 hPa (68 °F / 20 °C)
Relative vapor density	:	No data available
Relative density	:	1 (39.16 °F / 3.98 °C)
Density	:	ca. 1.00 g/cm ³
Solubility(ies)		
Water solubility	:	completely miscible
Solubility in other solvents	:	No data available
Partition coefficient: n-octanol/water	:	No data available
Autoignition temperature	:	does not ignite
Decomposition temperature	:	No data available
Viscosity		
Viscosity, dynamic	:	No data available
Viscosity, kinematic	:	No data available
Explosive properties	:	Not applicable
Oxidizing properties	:	No data available
Molecular weight	:	18.02 g/mol

SECTION 10. STABILITY AND REACTIVITY

Reactivity	:	No decomposition if stored and applied as directed.
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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.
No hazardous decomposition products are known.		

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

Not classified due to lack of data.

Product:

Acute oral toxicity : Remarks: No data available

Acute inhalation toxicity : Remarks: No data available

Acute dermal toxicity : Remarks: No data available

Skin corrosion/irritation

Not classified due to lack of data.

Product:

Remarks : No data available

Remarks : No data available

Serious eye damage/eye irritation

Not classified due to lack of data.

Product:

Remarks : No data available

Remarks : No data available

Respiratory or skin sensitization

Skin sensitization

Not classified due to lack of data.

Respiratory sensitization

Not classified due to lack of data.

Product:

Remarks : No data available

Germ cell mutagenicity

Not classified due to lack of data.

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Carcinogenicity

Not classified due to lack of data.

IARC No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

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

NTP No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

Reproductive toxicity

Not classified due to lack of data.

STOT-single exposure

Not classified due to lack of data.

STOT-repeated exposure

Aspiration toxicity

Not classified due to lack of data.

Further information

Product:

Remarks : No data available

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Product:

Toxicity to fish : Remarks: No data available

Toxicity to algae/aquatic plants : Remarks: No data available

Toxicity to microorganisms : Remarks: No data available

Persistence and degradability

No data available

Bioaccumulative potential

Product:

Bioaccumulation : Remarks: No data available

Mobility in soil

No data available

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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 : No data available
information

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : Dispose of contents/container in accordance with local
regulation.
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

Special precautions for user

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

SECTION 15. REGULATORY INFORMATION

CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

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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 : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

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

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 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; 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

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SDS Number : 600000001178

Revision Date : 09/27/2025

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 / EN

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SECTION 1. IDENTIFICATION

Product name : Buffer RPE

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 address : cpc@qiagen.com
Responsible/issuing person

Emergency telephone : CHEMTREC
USA & Canada 1-800-424-9300
CHEMTREC: 1-800-424-9300

Recommended use of the chemical and restrictions on use

Recommended use : Laboratory chemicals

Restrictions on use : This product is either (1) provided under the research & development exemption to the Toxic Substances Control Act (TSCA) and intended exclusively for research and development use (40 CFR 720.36), or (2) a material regulated under the Federal Food, Drugs, and Cosmetics Act (FFDCA). Refer to the specific product handbook or instructions for use to confirm the intended use of the product. If the product does not bear an "IVD" label, it is for research and development use only.

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

No hazard pictogram, no signal word, no hazard statement(s), no precautionary statement(s) required.

Other hazards

None known.

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SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Components

No hazardous ingredients

SECTION 4. FIRST AID MEASURES

General advice : Show this material safety data sheet to the doctor in attendance.

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 : None known.

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 : No hazardous combustion products are known

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.

Environmental precautions : Do not allow uncontrolled discharge of product into the environment.

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Methods and materials for containment and cleaning up : Keep in suitable, closed containers for disposal.

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.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

Contains no substances with occupational exposure limit values.

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 : colorless

Odor : characteristic

Odor Threshold : No data available

pH : 7.5

Melting point/ range : No data available

Boiling point/boiling range : ca. 212 °F / 100 °C

Flash point : No data available

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Evaporation rate	:	No data available
Burning rate	:	No data available
Upper explosion limit / Upper flammability limit	:	No data available
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 g/cm ³
Solubility(ies)		
Water solubility	:	soluble
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. No hazardous decomposition products are known.

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SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

Not classified due to lack of data.

Product:

Acute oral toxicity : Remarks: No data available

Acute inhalation toxicity : Remarks: No data available

Acute dermal toxicity : Remarks: No data available

Skin corrosion/irritation

Not classified due to lack of data.

Product:

Remarks : No data available

Serious eye damage/eye irritation

Not classified due to lack of data.

Product:

Remarks : No data available

Respiratory or skin sensitization

Skin sensitization

Not classified due to lack of data.

Respiratory sensitization

Not classified due to lack of data.

Product:

Remarks : No data available

Germ cell mutagenicity

Not classified due to lack of data.

Carcinogenicity

Not classified due to lack of data.

IARC No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

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

NTP No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

Reproductive toxicity

Not classified due to lack of data.

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STOT-single exposure

Not classified due to lack of data.

STOT-repeated exposure

Aspiration toxicity

Not classified due to lack of data.

Further information

Product:

Remarks : No data available

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Product:

Toxicity to fish : Remarks: No data available

Toxicity to algae/aquatic plants : Remarks: No data available

Toxicity to microorganisms : Remarks: No data available

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

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SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : Dispose of contents/container in accordance with local regulation.
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

Special precautions for user

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

SECTION 15. REGULATORY INFORMATION

CERCLA Reportable Quantity

Listed substances in the product are at low enough levels to not be expected to exceed the RQ

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

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 : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

TSCA list

No substances are subject to a Significant New Use Rule.

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

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SECTION 16. OTHER INFORMATION

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 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; 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

SDS Number : 600000001288

Revision Date : 09/27/2025

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.

SAFETY DATA SHEET

according to the OSHA Hazard Communication Standard



RNeasy Mini Kit (50)

Version
4.0

Revision Date:
09/27/2025

Date of last issue: 04/17/2025
Date of first issue: 09/04/2021

US / EN

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09/27/2025

Date of last issue: 04/17/2025
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SECTION 1. IDENTIFICATION

Product name : Buffer RW1

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 address : cpc@qiagen.com
Responsible/issuing person

Emergency telephone : CHEMTREC
USA & Canada 1-800-424-9300
CHEMTREC: 1-800-424-9300

Recommended use of the chemical and restrictions on use

Recommended use : Laboratory chemicals

Restrictions on use : This product is either (1) provided under the research & development exemption to the Toxic Substances Control Act (TSCA) and intended exclusively for research and development use (40 CFR 720.36), or (2) a material regulated under the Federal Food, Drugs, and Cosmetics Act (FFDCA). Refer to the specific product handbook or instructions for use to confirm the intended use of the product. If the product does not bear an "IVD" label, it is for research and development use only.

SECTION 2. HAZARDS IDENTIFICATION

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

Flammable liquids : Category 3

Serious eye damage : Category 1

GHS label elements

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Hazard pictograms

:



Signal Word

:

Danger

Hazard Statements

:

H226 Flammable liquid and vapor.
H318 Causes serious eye damage.

Precautionary Statements

:

Prevention:

P210 Keep away from heat/ sparks/ open flames/ hot surfaces.
No smoking.

P280 Wear protective gloves/ protective clothing/ eye protection/
face protection.

Response:

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.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture

:

Mixture

Components

Chemical name	CAS-No.	Concentration (% w/w)
guanidinium thiocyanate	593-84-0	≥ 10 - < 20
ethanol	64-17-5	≥ 1 - < 10

Actual concentration is withheld as a trade secret

SECTION 4. FIRST AID MEASURES

General advice

:

Move out of dangerous area.
Show this material safety data sheet to the doctor in
attendance.

If inhaled

:

If unconscious, place in recovery position and seek medical
advice.
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

:

Small amounts splashed into eyes can cause irreversible
tissue damage and blindness.
In the case of contact with eyes, rinse immediately with plenty
of water and seek medical advice.
Remove contact lenses.
Protect unharmed eye.

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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	:	Causes serious eye damage.
Notes to physician	:	No information available.

SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media	:	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Specific hazards during fire fighting	:	Do not allow run-off from fire fighting to enter drains or water courses. Exposure to decomposition products may be a hazard to health.
Hazardous combustion products	:	Carbon oxides Sulfur oxides Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke).
Further information	:	In the event of fire and/or explosion do not breathe fumes. Use a water spray to cool fully closed containers.
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. Remove all sources of ignition. Evacuate personnel to safe areas. Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.
Environmental precautions	:	Prevent product from entering drains. Prevent further leakage or spillage if safe to do so.
Methods and materials for containment and cleaning up	:	Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Unsuitable cleaning agents sodium hypochlorite

SECTION 7. HANDLING AND STORAGE

Advice on protection against fire and explosion	:	Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors).
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Keep away from open flames, hot surfaces and sources of ignition.

- Advice on safe handling : Avoid formation of aerosol.
Do not breathe vapors/dust.
Avoid contact with skin and eyes.
For personal protection see section 8.
Smoking, eating and drinking should be prohibited in the application area.
Provide sufficient air exchange and/or exhaust in work rooms.
Open drum carefully as content may be under pressure.
Dispose of rinse water in accordance with local and national regulations.
- Conditions for safe storage : Keep container tightly closed in a dry and well-ventilated place.
- Materials to avoid : Do not store together with oxidizing and self-igniting products.
- Further information on storage stability : No decomposition if stored and applied as directed.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
ethanol	64-17-5	STEL	1,000 ppm	ACGIH
		TWA	1,000 ppm 1,900 mg/m3	OSHA Z-1
		TWA	1,000 ppm 1,900 mg/m3	OSHA P0

Personal protective equipment

Hand protection

- Material : Protective gloves

- 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 : Tightly fitting safety goggles
Wear face-shield and protective suit for abnormal processing problems.
Do not wear contact lenses.
Ensure that eyewash stations and safety showers are close to the workstation location.

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

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Hygiene measures : Workers should wear antistatic footwear.
: Keep away from food and drink.
Wash hands before breaks and at the end of workday.
Ensure adequate ventilation, especially in confined areas.
Avoid contact with the skin and the eyes.
When using do not eat, drink or smoke.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : liquid

Color : colorless

Odor : characteristic

Odor Threshold : No data available

pH : ca. 7.4 - 7.6

Melting point/ range : No data available

Boiling point/boiling range : ca. 212 °F / 100 °C

Flash point : 122 °F / 50 °C

Evaporation rate : No data available

Burning rate : No data available

Upper explosion limit / Upper flammability limit : No data available

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 : 1.01 g/cm³

Solubility(ies)
Water solubility : soluble

Solubility in other solvents : No data available

Partition coefficient: n-octanol/water : No data available

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Autoignition temperature	: 214 °F / 101 °C
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
Metal corrosion rate	: 0.78 mm/a

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. Vapors may form explosive mixture with air. Thiocyanates can develop poisonous gas in contact with strong acids. Keep away from oxidizing agents, and acidic or alkaline products.
Conditions to avoid	: Heat, flames and sparks.
Incompatible materials	: No data available
Hazardous decomposition products	: No decomposition if stored and applied as directed. No hazardous decomposition products are known.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

Not classified due to lack of data.

Product:

Acute oral toxicity : Remarks: No data available

Components:

guanidinium thiocyanate:

Acute oral toxicity : LD50 Oral (Rat, female): 593 mg/kg
Method: OECD Test Guideline 401

Acute toxicity (other routes of administration) : LD50 (Mouse): 300 mg/kg

ethanol:

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Acute oral toxicity	: LD50 Oral (Rat): 10,470 mg/kg
Acute inhalation toxicity	: LC50 (Rat): 20000 ppm Exposure time: 10 h

Skin corrosion/irritation

Based on available data, the classification criteria are not met.

Product:

Assessment	: No skin irritation
Method	: Bridging principles

Remarks	: No data available
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Serious eye damage/eye irritation

Causes serious eye damage.

Product:

Remarks	: May cause irreversible eye damage.
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Components:

ethanol:

Result	: Eye irritation
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Respiratory or skin sensitization

Skin sensitization

Not classified due to lack of data.

Respiratory sensitization

Not classified due to lack of data.

Product:

Remarks	: No data available
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Germ cell mutagenicity

Not classified due to lack of data.

Carcinogenicity

Not classified due to lack of data.

IARC No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

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

NTP No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

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Reproductive toxicity

Not classified due to lack of data.

STOT-single exposure

Not classified due to lack of data.

STOT-repeated exposure

Aspiration toxicity

Not classified due to lack of data.

Further information

Product:

Remarks : Solvents may degrease the skin.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Product:

Toxicity to fish : Remarks: No data available

Toxicity to algae/aquatic plants : Remarks: No data available

Toxicity to microorganisms : Remarks: No data available

Components:

guanidinium thiocyanate:

Toxicity to fish : LC50 (Poecilia reticulata (guppy)): 89.1 mg/l
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia): 42.4 mg/l
Exposure time: 48 h

Toxicity to fish (Chronic toxicity) : NOEC (Poecilia reticulata (guppy)): 25 mg/l
Exposure time: 96 d

Persistence and degradability

Components:

ethanol:

Biodegradability : Result: Readily biodegradable.

Bioaccumulative potential

Product:

Bioaccumulation : Remarks: No data available

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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 : No data available
information

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : Send to a licensed waste management company.
Dispose of as hazardous waste in compliance with local and
national regulations.
Contaminated packaging : Dispose of as unused product.
Do not re-use empty containers.

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

Special precautions for user

Not applicable

SECTION 15. REGULATORY INFORMATION

CERCLA Reportable Quantity

Listed substances in the product are at low enough levels to not be expected to exceed the RQ

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SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

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 : Flammable (gases, aerosols, liquids, or solids)
Serious eye damage or eye irritation

SARA 313 : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

California List of Hazardous Substances

ethanol 64-17-5

California Permissible Exposure Limits for Chemical Contaminants

ethanol 64-17-5

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)
OSHA P0 : USA. Table Z-1-A Limits for Air Contaminants (1989 vacated values)
OSHA Z-1 : USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
ACGIH / STEL : Short-term exposure limit
OSHA P0 / TWA : 8-hour time weighted average
OSHA Z-1 / TWA : 8-hour time weighted average

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 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 -

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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; 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

SDS Number : 600000001289

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SECTION 1. IDENTIFICATION

Product name : Buffer RLT

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 address : cpc@qiagen.com
Responsible/issuing person

Emergency telephone : CHEMTREC
USA & Canada 1-800-424-9300
CHEMTREC: 1-800-424-9300

Recommended use of the chemical and restrictions on use

Recommended use : Laboratory chemicals

Restrictions on use : This product is either (1) provided under the research & development exemption to the Toxic Substances Control Act (TSCA) and intended exclusively for research and development use (40 CFR 720.36), or (2) a material regulated under the Federal Food, Drugs, and Cosmetics Act (FFDCA). Refer to the specific product handbook or instructions for use to confirm the intended use of the product. If the product does not bear an "IVD" label, it is for research and development use only.

SECTION 2. HAZARDS IDENTIFICATION

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

Acute toxicity (Oral) : Category 4

Serious eye damage : Category 1

GHS label elements

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Hazard pictograms

:



Signal Word

:

Danger

Hazard Statements

:

H302 Harmful if swallowed.
H318 Causes serious eye damage.

Precautionary Statements

:

Prevention:

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response:

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.

Disposal:

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

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture

:

Mixture

Components

Chemical name	CAS-No.	Concentration (% w/w)
guanidinium thiocyanate	593-84-0	>= 30 - < 50

Actual concentration is withheld as a trade secret

SECTION 4. FIRST AID MEASURES

General advice

:

Move out of dangerous area.
Show this material safety data sheet to the doctor in attendance.

If inhaled

:

If unconscious, place in recovery position and seek medical advice.

In case of skin contact

:

If symptoms persist, call a physician.
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

:

Small amounts splashed into eyes can cause irreversible tissue damage and blindness.
In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
Remove contact lenses.

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If swallowed	: Protect unharmed eye. 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	: Harmful if swallowed. Causes serious eye damage.
Notes to physician	: No information available.

SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media	: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Specific hazards during fire fighting	: Do not allow run-off from fire fighting to enter drains or water courses. Exposure to decomposition products may be a hazard to health.
Hazardous combustion products	: Carbon oxides Sulfur oxides
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.
Environmental precautions	: Prevent product from entering drains. Prevent further leakage or spillage if safe to do so.
Methods and materials for containment and cleaning up	: Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal. Unsuitable cleaning agents sodium hypochlorite

SECTION 7. HANDLING AND STORAGE

Advice on protection against fire and explosion	: Normal measures for preventive fire protection.
Advice on safe handling	: Do not breathe vapors/dust. Avoid contact with skin and eyes. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area.

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Conditions for safe storage	: Dispose of rinse water in accordance with local and national regulations. Keep container tightly closed in a dry and well-ventilated place.
Further information on storage stability	: No decomposition if stored and applied as directed.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

Contains no substances with occupational exposure limit values.

Personal protective equipment

Hand protection

Material : Protective gloves

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 : Tightly fitting safety goggles
Wear face-shield and protective suit for abnormal processing problems.
Do not wear contact lenses.
Ensure that eyewash stations and safety showers are close to the workstation location.

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

Hygiene measures : Keep away from food and drink.
Wash hands before breaks and at the end of workday.
Ensure adequate ventilation, especially in confined areas.
Avoid contact with the skin and the eyes.
When using do not eat, drink or smoke.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: liquid
Color	: colorless
Odor	: characteristic
Odor Threshold	: No data available
pH	: ca. 7
Melting point/ range	: No data available
Boiling point/boiling range	: No data available

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Flash point	:	No data available
Evaporation rate	:	No data available
Burning rate	:	No data available
Upper explosion limit / Upper flammability limit	:	No data available
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	:	1.09 g/cm ³
Solubility(ies)		
Water solubility	:	soluble
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
Metal corrosion rate	:	5.72 mm/a Not corrosive to metals.

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. Thiocyanates can develop poisonous gas in contact with

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strong acids.
Keep away from oxidizing agents, and acidic or alkaline products.

Conditions to avoid : No data available
Incompatible materials : No data available
Hazardous decomposition products : No decomposition if stored and applied as directed.

No hazardous decomposition products are known.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

Harmful if swallowed.

Product:

Acute oral toxicity : Remarks: No data available

Components:

guanidinium thiocyanate:

Acute oral toxicity : LD50 Oral (Rat, female): 593 mg/kg
Method: OECD Test Guideline 401

Acute toxicity (other routes of administration) : LD50 (Mouse): 300 mg/kg

Skin corrosion/irritation

Based on available data, the classification criteria are not met.

Product:

Assessment : No skin irritation
Method : Bridging principles
Result : No skin irritation
Remarks : Based on available data, the classification criteria are not met.

Remarks : May cause skin irritation in susceptible persons.

Remarks : No data available

Serious eye damage/eye irritation

Causes serious eye damage.

Product:

Remarks : May cause irreversible eye damage.

Respiratory or skin sensitization

Skin sensitization

Not classified due to lack of data.

Respiratory sensitization

Not classified due to lack of data.

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Product:

Remarks : No data available

Germ cell mutagenicity

Not classified due to lack of data.

Carcinogenicity

Not classified due to lack of data.

IARC No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

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

NTP No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

Reproductive toxicity

Not classified due to lack of data.

STOT-single exposure

Not classified due to lack of data.

STOT-repeated exposure

Aspiration toxicity

Not classified due to lack of data.

Further information

Product:

Remarks : No data available

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Product:

Toxicity to fish : Remarks: No data available

Toxicity to algae/aquatic plants : Remarks: No data available

Toxicity to microorganisms : Remarks: No data available

Components:

guanidinium thiocyanate:

Toxicity to fish : LC50 (Poecilia reticulata (guppy)): 89.1 mg/l
Exposure time: 96 h

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Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia): 42.4 mg/l Exposure time: 48 h
Toxicity to fish (Chronic toxicity)	:	NOEC (Poecilia reticulata (guppy)): 25 mg/l Exposure time: 96 d

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 : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Harmful to aquatic life with long lasting effects.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues	:	The product should not be allowed to enter drains, water courses or the soil. Send to a licensed waste management company. Dispose of as hazardous waste in compliance with local and national regulations.
Contaminated packaging	:	Dispose of as unused product. Do not re-use empty containers.

SECTION 14. TRANSPORT INFORMATION

International Regulations

UNRTDG

Not regulated as a dangerous good

IATA-DGR

Not regulated as a dangerous good

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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

Special precautions for user

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

SECTION 15. REGULATORY INFORMATION

CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

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 : Acute toxicity (any route of exposure)
Serious eye damage or eye irritation

SARA 313 : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

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

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 Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous

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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; 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

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