DeNovix, Inc.

Safety Data Sheet DeNovix RNA Assay Buffer

1.1 GHS Product identifier

Product name DeNovix RNA Assay Buffer

1.2 Other means of identification Component 1 of 4 of RNA EVAL (12.5 mL), RNA-1 (62.5 mL) and RNA-2 (250 mL)

1.3 Recommended use of the chemical and restrictions on use For research use only

1.4 Supplier's details

Name Address	DeNovix, Inc. 3411 Silverside Road Hanby Building 101 Wilmington DE 19810 USA
Telephone	302-442-6911

1.5 Emergency phone number

302-442-6911

SECTION 2: Hazard identification

2.1 Classification of the substance or mixture

GHS classification in accordance with: OSHA (29 CFR 1910.1200)

Not a hazardous substance or mixture.

2.2 GHS label elements, including precautionary statements

Not a hazardous substance or mixture.

2.3 Other hazards which do not result in classification

Not a hazardous substance or mixture.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

No ingredients present at concentrations classified as hazardous to health or the environment

SECTION 4: First-aid measures

4.1 Description of necessary first-aid measures

General advice	Consult a physician. Show this safety data sheet to the doctor in attendance.
If inhaled	If breathed in, move person into fresh air. If not breathing, give artificial respiration.
In case of skin contact	Rinse with plenty of water. Get medical attention if irritation develops and persists.
In case of eye contact	Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention/advice.
If swallowed	Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.
Porsonal protoctive equipment for first aid responders	

Personal protective equipment for first-aid responders

Handle in accordance with good industrial hygiene and safety practice.

4.2 Most important symptoms/effects, acute and delayed The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of immediate medical attention and special treatment needed, if necessary No data available

SECTION 5: Fire-fighting measures

- **5.1** Suitable extinguishing media Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
- 5.2 Specific hazards arising from the chemical Carbon oxides
- **5.3** Special protective actions for fire-fighters Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition.

6.3 Methods and materials for containment and cleaning up

Soak up with inert absorbent material (e.g. sand, silica gel). Keep in suitable, closed containers for disposal.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Keep away from sources of ignition - No smoking. For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities Keep container tightly closed in a dry and well-ventilated place. Light sensitive.

SECTION 8: Exposure controls/personal protection

8.2 Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

8.3 Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Respiratory protection

Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

SECTION 9: Physical and chemical properties

- Appearance (physical state, color, etc.) Odor Odor threshold pH Melting point/freezing point Initial boiling point and boiling range Flash point Evaporation rate Flammability (solid, gas) Upper/lower flammability or explosive limits
- Pale Blue Liquid No information available No information available

Vapor pressure Vapor density Relative density Solubility(ies) Partition coefficient: n-octanol/water Auto-ignition temperature Decomposition temperature Viscosity

Additional properties

Physical state Color No information available No information available No information available Soluble No information available No information available No information available No information available

Liquid Pale Blue

Particle characteristics

Not Applicable

Supplemental information regarding physical hazard classes No information available

Further safety characteristics (supplemental) No information available

SECTION 10: Stability and reactivity

10.1 Reactivity

None under normal use conditions.

- **10.2 Chemical stability** Stable under recommended storage conditions.
- **10.3 Possibility of hazardous reactions** None under normal use conditions.
- **10.4 Conditions to avoid** None under normal use conditions.
- **10.5** Incompatible materials Strong oxidizing agents
- **10.6 Hazardous decomposition products** Other decomposition products - No data available In the event of fire: see section 5

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity No information available

Skin corrosion/irritation No information available Serious eye damage/irritation

No information available

Respiratory or skin sensitization No information available

no information available

Germ cell mutagenicity

No information available

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

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

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity

No information available

Specific target organ toxicity (STOT) - single exposure No information available

Specific target organ toxicity (STOT) - repeated exposure No information available

Aspiration hazard

No information available

SECTION 12: Ecological information

Toxicity No information available

Persistence and degradability No information available

Bioaccumulative potential

No information available

Mobility in soil No information available

Results of PBT and vPvB assessment No information available

Endocrine disrupting properties

No information available

Other adverse effects

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

SECTION 13: Disposal considerations

Disposal methods

Product disposal

Products covered by this SDS, in their original form, when disposed as waste, are considered non hazardous waste according to Federal RCRA regulations (40 CFR 261). Disposal should be in accordance with local, state and federal regulations. Dispose of empty container in the trash or recycle where facilities exist.

Packaging disposal

Dispose of as unused product.

SECTION 14: Transport information

DOT (US) Not dangerous goods

IMDG Not dangerous goods

IATA Not dangerous goods

SECTION 15: Regulatory information

California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

SECTION 16: Other information

16.2 Preparation information

DISCLAIMER:

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. DeNovix Inc. shall not be held liable for any damage resulting from handling or from contact with the above product.

DeNovix, Inc.

Safety Data Sheet DeNovix RNA Quantitation Dye (200X in DMSO)

SEC	CTION 1: Identification	
1.1	GHS Product identifier	
	Product name	DeNovix RNA Quantitation Dye (200X in DMSO)
1.2	Other means of identification Component 2 of 4 of RNA EVAL (50	uL), RNA-1 (250 uL) and RNA-2 (1.0 mL)
1.3	Recommended use of the chemical and restrictions on use For research use only	
1.4	Supplier's details	
	Name Address	DeNovix, Inc. 3411 Silverside Road Hanby Building 101 Wilmington DE 19810 USA
	Telephone	302-442-6911

1.5 Emergency phone number

302-442-6911

SECTION 2: Hazard identification

2.1 Classification of the substance or mixture

GHS classification in accordance with: OSHA (29 CFR 1910.1200)

Not a hazardous substance or mixture.

2.2 GHS label elements, including precautionary statements

Not a hazardous substance or mixture.

2.3 Other hazards which do not result in classification

Not a hazardous substance or mixture.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Hazardous components

1. Dimethyl sulfoxide	
Concentration	90 - 100 % (weight)
EC no.	200-664-3
CAS no.	67-68-5

- Flammable liquids, Cat. 4

SECTION 4: First-aid measures

4.1 Description of necessary first-aid measures

General advice	Consult a physician. Show this safety data sheet to the doctor in attendance.
If inhaled	If breathed in, move person into fresh air. If not breathing, give artificial respiration.
In case of skin contact	Rinse with plenty of water. Get medical attention if irritation develops and persists.
In case of eye contact	Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention/advice.
If swallowed	Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.
Personal protective equipment for first-aid responders Handle in accordance with good industrial hygiene and safety practice.	

4.2 Most important symptoms/effects, acute and delayed The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of immediate medical attention and special treatment needed, if necessary No data available

SECTION 5: Fire-fighting measures

- **5.1** Suitable extinguishing media Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
- 5.2 Specific hazards arising from the chemical Carbon oxides

Dimethyl sulfoxide: Carbon oxides, Sulphur oxides

5.3 Special protective actions for fire-fighters

Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6: Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition.
- **6.3** Methods and materials for containment and cleaning up Soak up with inert absorbent material (e.g. sand, silica gel). Keep in suitable, closed containers for disposal.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Keep away from sources of ignition - No smoking. For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place. Light sensitive.

SECTION 8: Exposure controls/personal protection

8.2 Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

8.3 Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Respiratory protection

Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

SECTION 9: Physical and chemical properties

Appearance (physical state, color, etc.)

Blue Liquid

Odor Odor threshold pН Melting point/freezing point Initial boiling point and boiling range Flash point Evaporation rate Flammability (solid, gas) Upper/lower flammability or explosive limits Vapor pressure Vapor density Relative density Solubility(ies) Partition coefficient: n-octanol/water Auto-ignition temperature Decomposition temperature Viscosity

No information available Soluble No information available No information available No information available No information available

Additional properties

Physical state Color Liquid Blue

Particle characteristics

Not Applicable

Supplemental information regarding physical hazard classes No information available

Further safety characteristics (supplemental) No information available

SECTION 10: Stability and reactivity

10.1 Reactivity

None under normal use conditions.

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions None under normal use conditions.

10.4 Conditions to avoid None under normal use conditions.

10.5 Incompatible materials Strong oxidizing agents

Dimethyl sulfoxide: Acid chlorides, Phosphorus halides, Strong acids, Strong oxidizing agents, Strong reducing agents

10.6 Hazardous decomposition products

Other decomposition products - No data available In the event of fire: see section 5

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity ORAL LD50 rat 14,500 mg/kg

INHALATION LC50 rat 4 h - 40250 ppm

DERMAL LD50 rabbit > 5,000 mg/kg

Skin corrosion/irritation

No information available

Serious eye damage/irritation

No information available

Respiratory or skin sensitization

No information available

Germ cell mutagenicity

Salmonella typhimurium assay (Ames test): negative (+/- activation) DMSO is used as a neutral solvent in the Ames mutagen test

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

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

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity

No information available

Specific target organ toxicity (STOT) - single exposure No information available

Specific target organ toxicity (STOT) - repeated exposure No information available

Aspiration hazard No information available

SECTION 12: Ecological information

Toxicity No information available

Persistence and degradability

No information available

Bioaccumulative potential

No information available

Mobility in soil No information available

Results of PBT and vPvB assessment No information available

Endocrine disrupting properties No information available

Other adverse effects

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

SECTION 13: Disposal considerations

Disposal methods

Product disposal

Products covered by this SDS, in their original form, when disposed as waste, are considered non hazardous waste according to Federal RCRA regulations (40 CFR 261). Disposal should be in accordance with local, state and federal regulations. Dispose of empty container in the trash or recycle where facilities exist.

Packaging disposal

Dispose of as unused product.

SECTION 14: Transport information

DOT (US) Not dangerous goods

IMDG Not dangerous goods

IATA Not dangerous goods

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations specific for the product in question

California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

Massachusetts Right To Know Components

No components are subject to the Massachusetts Right to Know Act.

New Jersey Right To Know Components

Common name: Dimethyl sulfoxide CAS number: 67-68-5

Pennsylvania Right To Know Components

Common name: Dimethyl sulfoxide CAS number: 67-68-5

SARA 302 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 311/312 Hazards

Fire Hazard, Chronic Health Hazard

SARA 313 Components

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.

SECTION 16: Other information

16.2 Preparation information

DISCLAIMER:

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. DeNovix Inc. shall not be held liable for any damage resulting from handling or from contact with the above product.

DeNovix, Inc.

Safety Data Sheet DeNovix RNA Standard 100 ng/uL and 0 ng/uL

SECTION 1	: Identification
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1.1 GHS Product identifier

Product name DeNovix RNA Standard 100 ng/uL and 0 ng/uL

1.2 Other means of identification

Components 3 and 4 of 4 100 ng/uL - RNA EVAL (100 uL), RNA-1 (400 uL) and RNA-2 (4x400 uL) 0 ng/uL - RNA EVAL (0.5 mL), RNA-1 (0.5 mL) and RNA-2 (2.0 mL)

1.3 Recommended use of the chemical and restrictions on use For research use only

1.4 Supplier's details

Name Address	DeNovix, Inc. 3411 Silverside Road Hanby Building 101 Wilmington DE 19810 USA
Telephone	302-442-6911
Emorgoncy phono number	

1.5 Emergency phone number

302-442-6911

SECTION 2: Hazard identification

2.1 Classification of the substance or mixture

GHS classification in accordance with: OSHA (29 CFR 1910.1200)

Not a hazardous substance or mixture.

2.2 GHS label elements, including precautionary statements

Not a hazardous substance or mixture.

2.3 Other hazards which do not result in classification

Not a hazardous substance or mixture.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

No ingredients present at concentrations classified as hazardous to health or the environment.

SECTION 4: First-aid measures

4.1 Description of necessary first-aid measures

General advice	Consult a physician. Show this safety data sheet to the doctor in attendance.
If inhaled	If breathed in, move person into fresh air. If not breathing, give artificial respiration.
In case of skin contact	Rinse with plenty of water. Get medical attention if irritation develops and persists.
In case of eye contact	Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention/advice.
If swallowed	Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.
Personal protective equipment for first aid responders	

Personal protective equipment for first-aid responders

Handle in accordance with good industrial hygiene and safety practice.

4.2 Most important symptoms/effects, acute and delayed The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of immediate medical attention and special treatment needed, if necessary No data available

SECTION 5: Fire-fighting measures

- **5.1** Suitable extinguishing media Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
- 5.2 Specific hazards arising from the chemical Carbon oxides
- **5.3** Special protective actions for fire-fighters Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition.

6.3 Methods and materials for containment and cleaning up

Soak up with inert absorbent material (e.g. sand, silica gel). Keep in suitable, closed containers for disposal.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Keep away from sources of ignition - No smoking. For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities Keep container tightly closed in a dry and well-ventilated place. Light sensitive.

SECTION 8: Exposure controls/personal protection

8.2 Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

8.3 Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Respiratory protection

Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

SECTION 9: Physical and chemical properties

Appearance (physical state, color, etc.) Odor Odor threshold pH Melting point/freezing point Initial boiling point and boiling range Flash point Evaporation rate Flammability (solid, gas) Upper/lower flammability or explosive limits Vapor pressure Clear Liquid No information available No information available

Vapor density Relative density Solubility(ies) Partition coefficient: n-octanol/water Auto-ignition temperature Decomposition temperature Viscosity No information available No information available Soluble No information available No information available No information available

Additional properties Physical state

Color

Liquid Clear

Particle characteristics Not Applicable

Supplemental information regarding physical hazard classes No information available

Further safety characteristics (supplemental) No information available

SECTION 10: Stability and reactivity

10.1 Reactivity

None under normal use conditions.

- **10.2 Chemical stability** Stable under recommended storage conditions.
- **10.3 Possibility of hazardous reactions** None under normal use conditions.
- **10.4 Conditions to avoid** None under normal use conditions.
- **10.5** Incompatible materials Strong oxidizing agents
- **10.6 Hazardous decomposition products** Other decomposition products - No data available In the event of fire: see section 5

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity No information available

Skin corrosion/irritation No information available Serious eye damage/irritation

No information available

Respiratory or skin sensitization No information available

no information available

Germ cell mutagenicity

No information available

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

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

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity

No information available

Specific target organ toxicity (STOT) - single exposure No information available

Specific target organ toxicity (STOT) - repeated exposure No information available

Aspiration hazard

No information available

SECTION 12: Ecological information

Toxicity No information available

Persistence and degradability No information available

Bioaccumulative potential

No information available

Mobility in soil No information available

Results of PBT and vPvB assessment No information available

Endocrine disrupting properties

No information available

Other adverse effects

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

SECTION 13: Disposal considerations

Disposal methods

Product disposal

Products covered by this SDS, in their original form, when disposed as waste, are considered non hazardous waste according to Federal RCRA regulations (40 CFR 261). Disposal should be in accordance with local, state and federal regulations. Dispose of empty container in the trash or recycle where facilities exist.

Packaging disposal

Dispose of as unused product.

SECTION 14: Transport information

DOT (US) Not dangerous goods

IMDG Not dangerous goods

IATA Not dangerous goods

SECTION 15: Regulatory information

California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

SECTION 16: Other information

16.2 Preparation information

DISCLAIMER:

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