

# SAFETY DATA SHEET

This SDS complies with REACH 1907/2006 and 2001/58/EC, GHS REVISION 5, OSHA 29CFR 1910.1200

## Section 1: Chemical Product and Company Identification

**MANUFACTURER'S NAME**

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DATE PREPARED:

June 1, 2015

REVISION DATE: June 16, 2015

PRODUCT NAME:

**RNAstable**  
**RNAstable LD**

FORMULA:

Preparation/Mixture

PRODUCT USE:

Stabilization of Purified RNA

This product is to be used only for Research and Development (R&D) purposes.

## Section 2: Hazards Identification

**GHS Hazard Class**

Skin Irritation – Category 2



Eye Irritation – Category 2A

Specific target organ toxicity, single exposure – Category 3, Respiratory system

Signal word:

Warning

Hazard Statement:

H315

Causes skin irritation.

H319

Causes serious eye irritation.

H335

May cause respiratory irritation.

Precautionary Statements:

Prevention

P261

Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.

P264

Wash hands thoroughly after handling.

P271

Use only outdoors or in a well-ventilated area.

P280

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

Response

P302 + P352

IF ON SKIN: wash with plenty of soap and water.

P304 + P340

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P305 + P351 + P338

IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

P312

Call a Poison Control center/doctor/physician if you feel unwell.

P321

Specific treatment (see supplemental first aid instructions on this label).

P332 + P313

If skin irritation occurs, get medical advice/attention.

P337 + P313

If eye irritation persists: Get medical advice/ attention.

P362

Take off contaminated clothing and wash before reuse.

Storage

P403 + P233

Store in a well-ventilated place. Keep container tightly closed.

P405

Store locked up.

Disposal

P501

Dispose of waste materials and container by following the waste disposal requirements of your country, state, or local authorities.

Hazards not otherwise classified (HNOC) or not covered by GHS - None

HAZARD CLASSIFICATION:

Not classified as hazardous based on IATA, IMDG, and DOT.

FIRE AND EXPLOSION:

Not considered flammable or combustible, but this product will burn if involved in a fire. Product emits toxic fumes when burned.

POTENTIAL HEALTH EFFECTS:

<0 % of mixture consists of ingredients of unknown acute toxicity

APPEARANCE:

Red solid

NFPA Rating:

Component	Health (Blue)	Flammability (Red)	Reactivity (Yellow)	Special (White)
RNAstable	2	0	0	----

## Section 3: Composition, Information on Ingredients

Biomatrica is using the product's SDS as a means of notification to the customer to comply with the TSCA regulations, R&D Exemption 40CFR 720.36 requirements:

1. This product is to be used only for Research and Development (R&D) purposes.
2. A technically qualified individual must supervise the use of this product.
3. Health and Toxicity information is provided in this SDS.

PRODUCT COMPOSITION	APPROX %	CAS NO.	EINECS/ELINCS	CANADA DSL
TS-073750	30-45%	TS	Y	Y
TS-068136	30-45%	TS	N/N	Y

Some items on this SDS may be designated as trade secrets (TS). Bonafide requests for disclosure of trade secret information to medical personnel must be made in accordance with the provisions contained in 29 CFR 1910.1200 I 1-13.

## Section 4: First Aid Measures

### Description of First Aid Measures

Inhalation	Remove to fresh air. If not breathing, provide CPR (cardio pulmonary resuscitation). Consult a physician.
Skin Contact	Immediately wash skin with plenty of soap and water. Consult a physician.
Eye Contact	Flush eyes with plenty of water for at least 15 minutes. Consult a physician.
Ingestion	Never give anything to an unconscious person. Rinse mouth with water. Consult a physician.

### Most important symptoms and effects, both acute and delayed

Symptoms/Injuries after Inhalation	May cause respiratory tract irritation.
Symptoms/Injuries after Skin Contact	May cause skin irritation. Symptoms may include redness, drying, defatting, and cracking of the skin.
Symptoms/Injuries after Eye Contact	May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling.
Symptoms/Injuries after Ingestion	May be harmful if swallowed. May cause stomach distress, nausea, or vomiting.

### Indication of any immediate medical attention and special treatment needed

Symptoms may not appear immediately. In case of accident or if you feel unwell, seek medical advice immediately.

## Section 5: Fire-fighting Measures

<b>Suitable extinguishing media</b>	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
<b>Special hazards arising from the substance or mixture</b>	Carbon oxides, Sulphur oxides.
<b>Protective actions fire-fighters</b>	Wear standard protective equipment and self-contained breathing apparatus for firefighting if necessary.
<b>Further information</b>	No data available.

## Section 6: Accidental Release Measures

### Personal precautions, protective equipment, and emergency procedures

Wear proper personal protective equipment. Avoid breathing vapors, mist, or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

### Environmental precautions

Prevent further leakage or spillage if safe to do so. Prevent spills or contaminated rinse water from entering sewers or watercourses.

### Methods and materials for containment and cleaning up

In case of small spills, absorb with inert materials. Place in a chemical waste container.

### Reference to other Sections

For personal protection reference section 8. For disposal reference section 13.

## Section 7: Handling and Storage

### Precautions for safe handling

- Use only with adequate ventilation.
- Do not inhale vapors.
- Wear proper protective equipment when handling this material.
- Avoid contact with skin and eyes.
- Appropriate container should be used for disposal.
- For precautions see section 2.

### Conditions for safe storage, including any incompatibilities

- Store upright in a cool, dry, well-ventilated place.
- Keep container closed when not in use.
- Utilize chemical segregation.
- Follow all applicable local regulations for handling and storage.

### Specific uses

- This product is intended for use in dry stabilization of purified RNA.

## Section 8: Exposure Controls/Personal Protection

### Control Parameters

PRODUCT COMPOSITION	ACGIH TLV	OSHA PEL	NIOSH REL
Not applicable	-----	-----	-----

### Exposure controls

#### VENTILATION:

Always provide good general, mechanical room ventilation where this chemical/material is used.

#### SPECIAL VENTILATION CONTROLS:

Use this material inside totally enclosed equipment, or use it with local exhaust ventilation at points where vapors can be released into the workspace air.

#### RESPIRATORY PROTECTION:

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or the CEN European Standards (EU). Use a NIOSH/MSHA or European Standard (EN) approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

#### PROTECTIVE GLOVES:

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. Neoprene, butyl, or nitrile rubber gloves are recommended.

#### EYE PROTECTION:

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

#### SKIN PROTECTION:

Suitable protective clothing to prevent skin contact.

#### WORK/HYGIENE PRACTICES:

Avoid breathing vapor. Avoid contact with eyes. Wash hands after handling.

#### OTHER EQUIPMENT:

Make safety shower, eyewash stations, and hand washing equipment available in the work area.

## Section 9: Physical and Chemical Properties

	PRODUCT CRITERIA
APPEARANCE - COLOR	Red
PHYSICAL STATE	Solid (RNAstable) or Liquid (RNAstableLD)
ODOR	Odorless
ODOR THRESHOLD	No data available
PH	3.6-3.8 (RNAstableLD)
MELTING POINT/FREEZING POINT	No data available
INITIAL BOILING POINT AND BOILING RANGE	No data available
FLASH POINT	No data available
EVAPORATION RATE	No data available
FLAMMABILITY (Solid, gas)	No data available
UPPER/LOWER FLAMMABILITY OR EXPLOSIVE LIMITS	Not Measured

VAPOR PRESSURE	No data available
VAPOR DENSITY (AIR = 1)	No data available
RELATIVE DENSITY (@25 °C)	1.001-1.007 (RNastableLD)
SOLUBILITY(IES)	Fully soluble in water.
OXIDIZING PROPERTIES	No data available
PARTITION COEFFICIENT: n-octanol/water	No data available
AUTO IGNITION TEMPERATURE	No data available
DECOMPOSITION TEMPERATURE	No data available
VISCOSITY	No data available

## Section 10: Stability and Reactivity

Reactivity:	Not reactive.
Chemical Stability:	Stable under recommended storage conditions.
Possibility of Hazardous Reactions:	Will not occur.
Conditions to Avoid:	Exposure to light may affect product quality. Strong oxidizing agents.
Incompatibility (Materials to Avoid):	Strong oxidizing agents.
Hazardous Decomposition Products:	None

## Section 11: Toxicological Information

**There is no toxicological information available for the product.**

GHS Required Criteria	Toxicity Criteria	Toxicity Information	Comments	Chemical Constituent
Acute Toxicity	LD50 (Oral/Rat):	>20,000 mg/kg	Behavioral:Altered sleep time (including change in righting reflex). Behavioral:Somnolence (general depressed activity). Behavioral:Muscle weakness.	TS-068136
Skin Corrosion/Irritation		Data not available		
Serious Eye Damage / Eye Irritation		Data not available		
Respiratory or Skin Sensitization		Data not available		
Germ Cell Mutagenicity		Data not available		
Carcinogenicity	NTP	Not listed		
	IARC	Not listed		
	OSHA	Not listed		
Reproductive Toxicity		Data not available		
STOT -- Single Exposure	Inhalation	May cause respiratory irritation		
STOT -- Repeated Exposure		Data not available		
Aspiration Hazard		Data not available		

STOT = Specific Target Organ Systemic Toxicity

## Section 12: Ecological Information

Toxicity:	No information is available.	
Persistence and degradability:	No information is available.	
Bioaccumulative potential:	No information is available.	
Mobility in soil:	No information is available.	
PBT and vPvB assessment:	PBT/vPvB assessment not available as chemical assessment not required/not conducted	
Other adverse effects:	No information is available.	

## Section 13: Disposal Considerations

**Waste from residues/unused products:** Follow the waste disposal requirements of your country, state, or local authorities.

**Contaminated packaging:** Contaminated packaging material should be disposed of as stated above for residues and unused product.

**Rinsate:** Do not dispose of rinse water containing product in a sanitary sewer system or stormwater drainage system.

## Section 14: Transport Information

<b><u>DOT TRANSPORT:</u></b>		Not Regulated
<b><u>ADR = International Carriage of Dangerous Goods by Road</u></b>		Not Regulated
<b><u>RAIL TRANSPORT:</u></b>		Not Regulated
<b><u>SEA TRANSPORT:</u></b>	IMDG	Not Regulated
<b><u>AIR TRANSPORT:</u></b>	IATA/ICAO	Not Regulated

## Section 15: Regulatory Information

### TOXIC SUBSTANCES CONTROL ACT (TSCA) STATUS:

This product is in compliance with rules, regulations, and/or orders of TSCA and should be used in accordance with the Research and Development (R&D) exemption regulations of TSCA.

### SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 (SARA) TITLE III SECTION 313 SUPPLIER NOTIFICATION:

This regulation requires submission of annual reports of toxic chemical(s) that appear in section 313 of the Emergency Planning and Community Right To Know Act of 1986 and 40 CFR 372. This information must be included in all SDS's that are copied and distributed for the material.

The Section 313 toxic chemicals contained in this product are: None

### CALIFORNIA PROPOSITION 65:

This regulation requires a warning for California Proposition 65 chemical(s) under the statute.

The California proposition 65 chemical(s) contained in this product are: None

### STATE RIGHT-TO-KNOW TOXIC SUBSTANCE OR HAZARDOUS SUBSTANCE LIST:

Florida Toxic Substance(s):	Not listed
Massachusetts's hazardous substance(s):	Not listed
Pennsylvania hazardous substance code(s):	Not listed
New Jersey	Not listed
Illinois	Not listed
Michigan	Not listed
Minnesota	Not listed

### CANADA:

This SDS contains all of the information required by the Controlled Products Regulations (CPR).

### WHMIS-INFORMATION:

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR), SOR/88-66, Current to February 20, 2012. The classes of controlled products listed in the CPR, Section 32, Part IV, have been reviewed and based on Professional Judgment this product has been determined to not be WHMIS controlled.

### EUROPEAN UNION:

This product has been reviewed for compliance with the following European Community Directives: REACH 1907/2006; Regulation (EC) No 1272/2008 on classification, labeling, and packaging (CLP) of substances and mixtures.

## Section 16: Other Information

Initial issue date: June 1, 2015  
Final revision date: June 16, 2015  
Revision Number: 0  
Revision explanation: Initial version  
Information Sources: RTECS, ECHA, REACH, OSHA 29CFR 1910.1200

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