

ReadyDry™ PCR Kit SDS Cover Sheet

Product Information

PRODUCT NAME: **ReadyDry™ PCR**
CATALOG NUMBER: 63301-013

Components

DESCRIPTION:

RDP-A	2
RDP-B	7
RDP-C	12
RDP-D	17
RDP-E	22
RDP-F	27
RDP-G	32
RDP-H	37

SAFETY DATA SHEET

This SDS complies with GHS REVISION 5, OSHA 29CFR 1910.1200

Section 1: Chemical Product and Company Identification

MANUFACTURER'S NAME

Biomatrica
5627 Oberlin Drive, Suite 120
San Diego, California, USA 92121

EMERGENCY TELEPHONE

Information: 1-858-550-0308
Fax: 1-858-678-0597
Hours: M-F 8:30 a.m.-5:30 p.m. PT

EFFECTIVE DATE: October 21, 2016

REVISION DATE: October 21, 2016

PRODUCT NAME:**RDP-A****CATALOG NUMBER:**

Component of 63301-013

FORMULA:

Preparation/Mixture

PRODUCT USE:

Stabilization of PCR assay components

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

Section 2: Hazards Identification

GHS Hazard Class

Not a hazardous substance or mixture.

Signal word:

None

Hazard Statement:

None

Precautionary Statements:

Prevention
Response
Storage
Disposal

No precautionary statement.
No precautionary statement.
No precautionary statement.
No precautionary statement.

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

HAZARD CLASSIFICATION:

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

POTENTIAL HEALTH EFFECTS:

0 % of mixture consists of ingredients of unknown acute toxicity

APPEARANCE:

Colorless liquid

Section 3: Composition, Information on Ingredients

No ingredients are hazardous according to OSHA criteria.

No components need to be disclosed according to applicable regulations.

Section 4: First Aid Measures

Description of First Aid Measures**Inhalation**

Remove to fresh air. If not breathing, seek medical attention and provide CPR (cardio pulmonary resuscitation) if trained.

Skin Contact

Wash skin with soap and water.

Eye Contact

Flush eyes with water for 15 minutes as a precaution.

Ingestion

Never give anything to an unconscious person. Rinse mouth with water.

Most important symptoms and effects, both acute and delayed

No data available.

Indication of any immediate medical attention and special treatment needed

No data available.

Section 5: Fire-fighting Measures

Suitable extinguishing media
 Special hazards arising from the substance or mixture
 Protective actions fire-fighters

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
 No data available.
 Wear standard protective equipment and self-contained breathing apparatus for firefighting if necessary.
 No data available.

Further information

Section 6: Accidental Release Measures

Personal precautions, protective equipment, and emergency procedures

Wear proper personal protective equipment. Avoid breathing vapors or mist.

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

Wear proper protective equipment when handling this material.
 Avoid contact with skin, eyes, or clothing.
 Appropriate container should be used for disposal.
 For precautions, see Section 2.

Conditions for safe storage, including any incompatibilities

Store at 2-8 °C.
 Keep container closed when not in use.
 Follow all applicable local regulations for handling and storage.

Specific uses

This product is intended for use in the stabilization of PCR assay components.

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.
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).
PROTECTIVE GLOVES:	Handle with impervious 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.
EYE PROTECTION:	Recommend eye protection using safety glasses.
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	Colorless
PHYSICAL STATE	Liquid
ODOR	Odorless
ODOR THRESHOLD	No data available
PH	7.9 to 8.1
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	No data available
VAPOR PRESSURE	No data available
VAPOR DENSITY (AIR = 1)	No data available
RELATIVE DENSITY (@25 °C)	No data available
SOLUBILITY(IES)	No data available
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:	No data available.
Chemical Stability:	Stable at recommended storage conditions. See Section 7.
Possibility of Hazardous Reactions:	No data available.
Conditions to Avoid:	No data available.
Incompatibility (Materials to Avoid):	No data available.
Hazardous Decomposition Products:	In the event of fire, see Section 5.

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		Data not available		
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		Data not available		
STOT -- Repeated Exposure		Data not available		
Aspiration Hazard		Data not available		

STOT = Specific Target Organ Systemic Toxicity

Section 12: Ecological Information

Criteria	Toxicity Information	Chemical Constituent
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 storm water drainage system.

Section 14: Transport Information

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

Section 16: Other Information

Initial issue date:	October 21, 2016
Final revision date:	October 21, 2016
Revision Number:	1
Revision explanation	Initial version
Information Sources:	OSHA 29CFR 1910.1200

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regarding its correctness. Some of the information presented and conclusions drawn are from sources other than direct test data of the substance. The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may also be beyond our knowledge. It is the user's responsibility to determine the suitability of any material for a specific purpose and to adopt such safety precautions as may be necessary. If the product is used as a component in another product, this SDS information may not be applicable. For these reasons, we do not assume any responsibility and expressly disclaim liability for any loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of this product.”

SAFETY DATA SHEET

This SDS complies with GHS REVISION 5, OSHA 29CFR 1910.1200

Section 1: Chemical Product and Company Identification

MANUFACTURER'S NAME

Biomatrica
5627 Oberlin Drive, Suite 120
San Diego, California, USA 92121

EMERGENCY TELEPHONE

Information: 1-858-550-0308
Fax: 1-858-678-0597
Hours: M-F 8:30 a.m.-5:30 p.m. PT

EFFECTIVE DATE:

October 21, 2016

REVISION DATE:

October 21, 2016

PRODUCT NAME:

RDP-B

CATALOG NUMBER:

Component of 63301-013

FORMULA:

Preparation/Mixture

PRODUCT USE:

Stabilization of PCR assay components

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

Section 2: Hazards Identification

GHS Hazard Class

Signal word:

Hazard Statement:

Precautionary Statements:

Prevention

Response

Storage

Disposal

Reproductive Toxicity (Category 2).

Warning

Suspected of damaging fertility or the unborn child.

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P281 Use personal protective equipment as required.

P308 + P313 IF exposed or concerned: Get medical advice/attention.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local regulations.



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

HAZARD CLASSIFICATION:

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

POTENTIAL HEALTH EFFECTS:

0 % of mixture consists of ingredients of unknown acute toxicity

APPEARANCE:

Colorless liquid

Section 3: Composition, Information on Ingredients

PRODUCT COMPOSITION	APPROX %	CAS NO.	EINECS/ELINCS	CANADA DSL
TS-846010	0.1-0.5%	TS	Y	Y
TS-623458	0.1-0.5%	TS	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, seek medical attention and provide CPR (cardio pulmonary resuscitation) if trained.

Skin Contact

Immediately wash skin with soap and water for at least 15 minutes.

Eye Contact

Immediately flush eyes with water for at least 15 minutes.

Ingestion

If swallowed, do not induce vomiting. Never give anything to an unconscious person. Rinse mouth with water.

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

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

Section 6: Accidental Release Measures

Personal precautions, protective equipment, and emergency procedures

Wear proper personal protective equipment. Avoid breathing vapors or mist.

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

- Wear proper protective equipment when handling this material.
- Avoid contact with skin, eyes, or clothing.
- Appropriate container should be used for disposal.
- For precautions, see Section 2.

Conditions for safe storage, including any incompatibilities

- Store at 2-8 °C.
- Keep container closed when not in use.
- Follow all applicable local regulations for handling and storage.

Specific uses

This product is intended for use in the stabilization of PCR assay components.

Section 8: Exposure Controls/Personal Protection

Control Parameters

PRODUCT COMPOSITION	ACGIH (TLV)	OSHA PEL	NIOSH REL	Remarks
TS-846010	TWA: 2 mg/m ³ STEL: 6 mg/m ³	-----	-----	Not classifiable as a human carcinogen. Irritation-Eyes, Nose, Throat, Skin---Mild (HE16); Acute toxicity (CNS, kidney) (HE4); Potential developmental and reproductive hazards (HE5)
TS-623458	TWA: 5 mg/m ³	-----	TWA: 5 mg/m ³	Irritation – Eye, Nose, Throat, Skin (Moderate; HE15)

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. Use a NIOSH/MSHA approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.
PROTECTIVE GLOVES:	Neoprene, butyl, or nitrile rubber gloves are recommended with minimum layer thickness of 0.11 mm and break through time of 480 min. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices.
EYE PROTECTION:	Recommend eye protection using safety glasses or goggles.
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	Colorless
PHYSICAL STATE	Liquid
ODOR	Odorless
ODOR THRESHOLD	No data available
PH	7.9 to 8.1
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	No data available
VAPOR PRESSURE	No data available
VAPOR DENSITY (AIR = 1)	No data available
RELATIVE DENSITY (@25 °C)	No data available
SOLUBILITY (IES)	No data available
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:	No data available.
Chemical Stability:	Stable at recommended storage conditions. See Section 7.
Possibility of Hazardous Reactions:	No data available.
Conditions to Avoid:	No data available.
Incompatibility (Materials to Avoid):	No data available.
Hazardous Decomposition Products:	In the event of fire, see Section 5.

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	2,660 mg/kg		TS-846010
	LD50 Oral – Rat	4,500-5,000 mg/kg		TS-623458
	LC50 Inhalation – Rat – 4h	>2.04 mg/l		TS-623458
	LD50 Dermal – Rabbit	10,000 mg/kg		TS-623458
	Skin Corrosion/Irritation	Skin – Rabbit	Result: No skin irritation	
Serious Eye Damage / Eye Irritation	Eyes – Rabbit	Result: Mild eye irritation		TS-623458
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	impaired fertility		In animal testing, risk of impaired fertility was shown only after administration of very high doses of this substance. TS-846010
	fetotoxicity	Suspected human reproductive toxicant.	TS-623458
STOT -- Single Exposure		Data not available	
STOT -- Repeated Exposure		Data not available	
Aspiration Hazard		Data not available	

STOT = Specific Target Organ Systemic Toxicity

Additional Information: Toxicity reported for TS-846010 and TS-623458 in humans: ingestion or absorption may cause nausea, vomiting, diarrhea, abdominal cramps, and erythematous lesions on the skin and mucous membranes. Other symptoms include: circulatory collapse, tachycardia, cyanosis, delirium, convulsions, and coma. Death has been reported to occur in infants from less than 5 grams and in adults from 5 to 20 grams. The doses administered were many times in excess of those to which humans would normally be exposed.
Liver - Irregularities - Based on Human Evidence

Section 12: Ecological Information

Criteria	Toxicity Information	Chemical Constituent
Toxicity:	LC50 - Ptychocheilus lucius - 279 mg/l - 96 h	TS-846010
	LC50 - Lepomis macrochirus (Bluegill) - > 1,021 mg/l - 96 h	
	LC50 - Carassius auratus (goldfish) - 178 mg/l - 72 h	TS-623458
Toxicity to daphnia and other aquatic invertebrates	LC50 - Daphnia magna (Water flea) - 53.2 mg/l - 21 d	TS-846010
	EC50 - Daphnia magna (Water flea) - 133 mg/l - 48 h	
	EC50 - Daphnia magna (Water flea) - 1,085 - 1,402 mg/l - 48 h	TS-623458
Toxicity to algae	IC50 - Desmodesmus subspicatus (green algae) - 158 mg/l - 96 h	TS-623458
Persistence and degradability:	No information is available.	
Bioaccumulative potential	No bioaccumulation is to be expected (log Pow <= 4).	TS-623458
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 storm water drainage system.

Section 14: Transport Information

DOT TRANSPORT:		Not Regulated
ADR = International Carriage of Dangerous Goods by Road		Not Regulated
RAIL TRANSPORT:		Not Regulated
SEA TRANSPORT:	IMDG	Not Regulated
AIR TRANSPORT:	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.

Section 16: Other Information

Initial issue date:	October 21, 2016
Final revision date:	October 21, 2016
Revision Number:	1
Revision explanation:	Initial version
Information Sources:	OSHA 29CFR 1910.1200

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SAFETY DATA SHEET

This SDS complies with GHS REVISION 5, OSHA 29CFR 1910.1200

Section 1: Chemical Product and Company Identification

MANUFACTURER'S NAME Biomatrica 5627 Oberlin Drive, Suite 120 San Diego, California, USA 92121	EMERGENCY TELEPHONE Information: 1-858-550-0308 Fax: 1-858-678-0597 Hours: M-F 8:30 a.m.-5:30 p.m. PT
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EFFECTIVE DATE: October 21, 2016 REVISION DATE: October 21, 2016

PRODUCT NAME: **RDP-C**
 CATALOG NUMBER: Component of 63301-013
 FORMULA: Preparation/Mixture
 PRODUCT USE: Stabilization of PCR assay components
 This product is to be used only for Research and Development (R&D) purposes.

Section 2: Hazards Identification

GHS Hazard Class

Signal word:

Hazard Statement:

Precautionary Statements: Prevention

Response
Storage
Disposal

Reproductive Toxicity (Category 2).



Warning

Suspected of damaging fertility or the unborn child.

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P281 Use personal protective equipment as required.

P308 + P313 IF exposed or concerned: Get medical advice/attention.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local regulations.

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

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

POTENTIAL HEALTH EFFECTS: 0 % of mixture consists of ingredients of unknown acute toxicity

APPEARANCE: Colorless liquid

Section 3: Composition, Information on Ingredients

PRODUCT COMPOSITION	APPROX %	CAS NO.	EINECS/ELINCS	CANADA DSL
TS-623458	0.1-0.5%	TS	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, seek medical attention and provide CPR (cardio pulmonary resuscitation) if trained.
Skin Contact	Immediately wash skin with soap and water for at least 15 minutes.
Eye Contact	Immediately flush eyes with water for at least 15 minutes.
Ingestion	If swallowed do not induce vomiting. Never give anything to an unconscious person. Rinse mouth with water.

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

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

Section 6: Accidental Release Measures

Personal precautions, protective equipment, and emergency procedures

Wear proper personal protective equipment. Avoid breathing vapors or mist.

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

- Wear proper protective equipment when handling this material.
- Avoid contact with skin, eyes, or clothing.
- Appropriate container should be used for disposal.
- For precautions, see Section 2.

Conditions for safe storage, including any incompatibilities

- Store at 2-8 °C.
- Keep container closed when not in use.
- Follow all applicable local regulations for handling and storage.

Specific uses

This product is intended for use in the stabilization of PCR assay components.

Section 8: Exposure Controls/Personal Protection

Control Parameters

PRODUCT COMPOSITION	ACGIH (TLV)	OSHA PEL	NIOSH REL	Remarks
TS-623458	TWA: 5 mg/m ³	-----	TWA: 5 mg/m ³	Irritation – Eye, Nose, Throat, Skin (Moderate; HE15)

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. Use a NIOSH/MSHA approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.
PROTECTIVE GLOVES:	Neoprene, butyl, or nitrile rubber gloves are recommended with minimum layer thickness of 0.11 mm and break through time of 480 min. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices.
EYE PROTECTION:	Recommend eye protection using safety glasses or goggles.
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	Colorless
PHYSICAL STATE	Liquid
ODOR	Odorless
ODOR THRESHOLD	No data available
PH	7.9 to 8.1
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	No data available
VAPOR PRESSURE	No data available
VAPOR DENSITY (AIR = 1)	No data available
RELATIVE DENSITY (@25 °C)	No data available
SOLUBILITY(IES)	No data available
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:	No data available.
Chemical Stability:	Stable at recommended storage conditions. See Section 7.
Possibility of Hazardous Reactions:	No data available.
Conditions to Avoid:	No data available.
Incompatibility (Materials to Avoid):	No data available.
Hazardous Decomposition Products:	In the event of fire, see Section 5.

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	4,500-5,000 mg/kg		TS-623458
	LC50 Inhalation – Rat – 4h	>2.04 mg/l		TS-623458
	LD50 Dermal – Rabbit	10,000 mg/kg		TS-623458
Skin Corrosion/Irritation	Skin – Rabbit	Result: No skin irritation		TS-623458
Serious Eye Damage / Eye Irritation	Eyes – Rabbit	Result: Mild eye irritation		TS-623458
Respiratory or Skin Sensitization		Data not available		
Germ Cell Mutagenicity		Data not available		
Carcinogenicity	NTP	Not listed		
	IARC	Not listed		
	OSHA	Not listed		
	fetotoxicity	Suspected human reproductive toxicant.		TS-623458
STOT -- Single Exposure		Data not available		
STOT – Repeated Exposure		Data not available		
Aspiration Hazard		Data not available		

STOT = Specific Target Organ Systemic Toxicity

Additional Information: Toxicity reported for TS-623458 in humans: ingestion or absorption may cause nausea, vomiting, diarrhea, abdominal cramps, and erythematous lesions on the skin and mucous membranes. Other symptoms include: circulatory collapse, tachycardia, cyanosis, delirium, convulsions, and coma. Death has been reported to occur in infants from less than 5 grams and in adults from 5 to 20 grams. The doses administered were many times in excess of those to which humans would normally be exposed.

Liver - Irregularities - Based on Human Evidence

Section 12: Ecological Information

Criteria	Toxicity Information	Chemical Constituent
Toxicity:	LC50 - Carassius auratus (goldfish) - 178 mg/l - 72 h	TS-623458
Toxicity to daphnia and other aquatic invertebrates	EC50 - Daphnia magna (Water flea) - 1,085 - 1,402 mg/l - 48 h	TS-623458
Toxicity to algae	IC50 - Desmodesmus subspicatus (green algae) - 158 mg/l - 96 h	TS-623458
Persistence and degradability:	No information is available.	
Bioaccumulative potential	No bioaccumulation is to be expected (log Pow <= 4).	TS-623458
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 storm water drainage system.

Section 14: Transport Information

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

Section 16: Other Information

Initial issue date:	October 21, 2016
Final revision date:	October 21, 2016
Revision Number:	1
Revision explanation:	Initial version
Information Sources:	OSHA 29CFR 1910.1200

“Disclaimer: This document is generated to distribute health, safety and environmental data. It is not a specification sheet and none of the displayed data should be construed as a specification. Information on this SDS sheet was obtained from sources which we believe are reliable, and we believe that the information is complete and accurate. However, the information is provided without any warranty, express or implied, regarding its correctness. Some of the information presented and conclusions drawn are from sources other than direct test data of the substance. The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may also be beyond our knowledge. It is the user’s responsibility to determine the suitability of any material for a specific purpose and to adopt such safety precautions as may be necessary. If the product is used as a component in another product, this SDS information may not be applicable. For these reasons, we do not assume any responsibility and expressly disclaim liability for any loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of this product.”

SAFETY DATA SHEET

This SDS complies with GHS REVISION 5, OSHA 29CFR 1910.1200

Section 1: Chemical Product and Company Identification


MANUFACTURER'S NAME Biomatrica 5627 Oberlin Drive, Suite 120 San Diego, California, USA 92121	EMERGENCY TELEPHONE Information: 1-858-550-0308 Fax: 1-858-678-0597 Hours: M-F 8:30 a.m.-5:30 p.m. PT
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EFFECTIVE DATE: October 21, 2016 REVISION DATE: October 21, 2016

PRODUCT NAME: **RDP-D**
 CATALOG NUMBER: Component of 63301-013
 FORMULA: Preparation/Mixture
 PRODUCT USE: Stabilization of PCR assay components
 This product is to be used only for Research and Development (R&D) purposes.

Section 2: Hazards Identification

GHS Hazard Class

Signal word:		Reproductive Toxicity (Category 2).	
Hazard Statement:		Warning	
Precautionary Statements:	Prevention	Suspected of damaging fertility or the unborn child.	
		P201 Obtain special instructions before use.	
		P202 Do not handle until all safety precautions have been read and understood.	
		P281 Use personal protective equipment as required.	
	Response	P308 + P313 IF exposed or concerned: Get medical advice/attention.	
	Storage	P405 Store locked up.	
	Disposal	P501 Dispose of contents/container in accordance with local regulations.	

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

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

POTENTIAL HEALTH EFFECTS: 0 % of mixture consists of ingredients of unknown acute toxicity

APPEARANCE: Colorless liquid

Section 3: Composition, Information on Ingredients

PRODUCT COMPOSITION	APPROX %	CAS NO.	EINECS/ELINCS	CANADA DSL
TS-846010	0.1-0.5%	TS	Y	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, seek medical attention and provide CPR (cardio pulmonary resuscitation) if trained.
Skin Contact	Immediately wash skin with soap and water for at least 15 minutes.
Eye Contact	Immediately flush eyes with water for at least 15 minutes.
Ingestion	If swallowed do not induce vomiting. Never give anything to an unconscious person. Rinse mouth with water.

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

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

Section 6: Accidental Release Measures

Personal precautions, protective equipment, and emergency procedures

Wear proper personal protective equipment. Avoid breathing vapors or mist.

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

- Wear proper protective equipment when handling this material.
- Avoid contact with skin, eyes, or clothing.
- Appropriate container should be used for disposal.
- For precautions, see Section 2.

Conditions for safe storage, including any incompatibilities

- Store at 2-8 °C.
- Keep container closed when not in use.
- Follow all applicable local regulations for handling and storage.

Specific uses

This product is intended for use in Stabilization of PCR assay components.

Section 8: Exposure Controls/Personal Protection

Control Parameters

PRODUCT COMPOSITION	ACGIH (TLV)	OSHA PEL	NIOSH REL	Remarks
TS-846010	TWA: 2 mg/m ³ STEL: 6 mg/m ³	----	----	Not classifiable as a human carcinogen. Irritation-Eyes, Nose, Throat, Skin---Mild (HE16); Acute toxicity (CNS, kidney) (HE4); Potential developmental and reproductive hazards (HE5)

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. Use a NIOSH/MSHA approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.
PROTECTIVE GLOVES:	Neoprene, butyl, or nitrile rubber gloves are recommended with minimum layer thickness of 0.11 mm and break through time of 480 min. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices.
EYE PROTECTION:	Recommend eye protection using safety glasses or goggles.
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	Colorless
PHYSICAL STATE	Liquid
ODOR	Odorless
ODOR THRESHOLD	No data available
PH	7.9 to 8.1
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	No data available
VAPOR PRESSURE	No data available
VAPOR DENSITY (AIR = 1)	No data available
RELATIVE DENSITY (@25 °C)	No data available
SOLUBILITY (IES)	No data available
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:	No data available.
Chemical Stability:	Stable at recommended storage conditions. See Section 7.
Possibility of Hazardous Reactions:	No data available.
Conditions to Avoid:	No data available.
Incompatibility (Materials to Avoid):	No data available.
Hazardous Decomposition Products:	In the event of fire, see Section 5.

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	2,660 mg/kg		TS-846010
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 IARC OSHA	Not listed Not listed Not listed		
Reproductive Toxicity	impaired fertility		In animal testing, risk of impaired fertility was	TS-846010

shown only after administration of very high doses of this substance.

STOT -- Single Exposure Data not available
 STOT -- Repeated Exposure Data not available
 Aspiration Hazard Data not available

STOT = Specific Target Organ Systemic Toxicity

Additional Information: Toxicity reported for TS-846010 and TS-623458 in humans: ingestion or absorption may cause nausea, vomiting, diarrhea, abdominal cramps, and erythematous lesions on the skin and mucous membranes. Other symptoms include: circulatory collapse, tachycardia, cyanosis, delirium, convulsions, and coma. Death has been reported to occur in infants from less than 5 grams and in adults from 5 to 20 grams. The doses administered were many times in excess of those to which humans would normally be exposed.

Liver - Irregularities - Based on Human Evidence

Section 12: Ecological Information

Criteria	Toxicity Information	Chemical Constituent
Toxicity:	LC50 - Ptychocheilus lucius - 279 mg/l - 96 h LC50 - Lepomis macrochirus (Bluegill) - > 1,021 mg/l - 96 h	TS-846010
Toxicity to daphnia and other aquatic invertebrates	LC50 - Daphnia magna (Water flea) - 53.2 mg/l - 21 d EC50 - Daphnia magna (Water flea) - 133 mg/l - 48 h	TS-846010
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 storm water drainage system.

Section 14: Transport Information

DOT TRANSPORT: Not Regulated

ADR = International Carriage of Dangerous Goods by Road Not Regulated

RAIL TRANSPORT: Not Regulated

SEA TRANSPORT: IMDG Not Regulated

AIR TRANSPORT: 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.

Section 16: Other Information

Initial issue date:	October 21, 2016
Final revision date:	October 21, 2016
Revision Number:	1
Revision explanation	Initial version
Information Sources:	OSHA 29CFR 1910.1200

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SAFETY DATA SHEET

This SDS complies with GHS REVISION 5, OSHA 29CFR 1910.1200

Section 1: Chemical Product and Company Identification

MANUFACTURER'S NAME

Biomatrica
5627 Oberlin Drive, Suite 120
San Diego, California, USA 92121

EMERGENCY TELEPHONE

Information: 1-858-550-0308
Fax: 1-858-678-0597
Hours: M-F 8:30 a.m.-5:30 p.m. PT

EFFECTIVE DATE: October 21, 2016

REVISION DATE: October 21, 2016

PRODUCT NAME:

RDP-E

CATALOG NUMBER:

Component of 63301-013

FORMULA:

Preparation/Mixture

PRODUCT USE:

Stabilization of PCR assay components

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

Section 2: Hazards Identification

GHS Hazard Class

Not a hazardous substance or mixture.

Signal word:

None

Hazard Statement:

None

Precautionary Statements:

Prevention
Response
Storage
Disposal

No precautionary statement.
No precautionary statement.
No precautionary statement.
No precautionary statement.

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

HAZARD CLASSIFICATION:

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

POTENTIAL HEALTH EFFECTS:

0 % of mixture consists of ingredients of unknown acute toxicity

APPEARANCE:

Colorless liquid

Section 3: Composition, Information on Ingredients

No ingredients are hazardous according to OSHA criteria.

No components need to be disclosed according to applicable regulations.

Section 4: First Aid Measures

Description of First Aid Measures

Inhalation

Remove to fresh air. If not breathing, seek medical attention and provide CPR (cardio pulmonary resuscitation) if trained.

Skin Contact

Wash skin with soap and water.

Eye Contact

Flush eyes with water for 15 minutes as a precaution.

Ingestion

Never give anything to an unconscious person. Rinse mouth with water.

Most important symptoms and effects, both acute and delayed

No data available.

Indication of any immediate medical attention and special treatment needed

No data available.

Section 5: Fire-fighting Measures

Suitable extinguishing media
 Special hazards arising from the substance or mixture
 Protective actions fire-fighters

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
 No data available.
 Wear standard protective equipment and self-contained breathing apparatus for firefighting if necessary.
 No data available.

Further information

Section 6: Accidental Release Measures

Personal precautions, protective equipment, and emergency procedures

Wear proper personal protective equipment. Avoid breathing vapors or mist.

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

Wear proper protective equipment when handling this material.
 Avoid contact with skin, eyes, or clothing.
 Appropriate container should be used for disposal.
 For precautions, see Section 2.

Conditions for safe storage, including any incompatibilities

Store at 2-8 °C.
 Keep container closed when not in use.
 Follow all applicable local regulations for handling and storage.

Specific uses

This product is intended for use in the stabilization of PCR assay components.

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.
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).
PROTECTIVE GLOVES:	Handle with impervious 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.
EYE PROTECTION:	Recommend eye protection using safety glasses.
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	Colorless
PHYSICAL STATE	Liquid
ODOR	Odorless
ODOR THRESHOLD	No data available
PH	7.9 to 8.1
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	No data available
VAPOR PRESSURE	No data available
VAPOR DENSITY (AIR = 1)	No data available
RELATIVE DENSITY (@25 °C)	No data available
SOLUBILITY(IES)	No data available
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:	No data available.
Chemical Stability:	Stable at recommended storage conditions. See Section 7.
Possibility of Hazardous Reactions:	No data available.
Conditions to Avoid:	No data available.
Incompatibility (Materials to Avoid):	No data available.
Hazardous Decomposition Products:	In the event of fire, see Section 5.

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		Data not available		
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		Data not available		
STOT -- Repeated Exposure		Data not available		
Aspiration Hazard		Data not available		

STOT = Specific Target Organ Systemic Toxicity

Section 12: Ecological Information

Criteria	Toxicity Information	Chemical Constituent
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 storm water drainage system.

Section 14: Transport Information

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

Section 16: Other Information

Initial issue date:	October 21, 2016
Final revision date:	October 21, 2016
Revision Number:	1
Revision explanation	Initial version
Information Sources:	OSHA 29CFR 1910.1200

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regarding its correctness. Some of the information presented and conclusions drawn are from sources other than direct test data of the substance. The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may also be beyond our knowledge. It is the user's responsibility to determine the suitability of any material for a specific purpose and to adopt such safety precautions as may be necessary. If the product is used as a component in another product, this SDS information may not be applicable. For these reasons, we do not assume any responsibility and expressly disclaim liability for any loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of this product.”

SAFETY DATA SHEET

This SDS complies with GHS REVISION 5, OSHA 29CFR 1910.1200

Section 1: Chemical Product and Company Identification

MANUFACTURER'S NAME

Biomatrica
5627 Oberlin Drive, Suite 120
San Diego, California, USA 92121

EMERGENCY TELEPHONE

Information: 1-858-550-0308
Fax: 1-858-678-0597
Hours: M-F 8:30 a.m.-5:30 p.m. PT

EFFECTIVE DATE: October 21, 2016

REVISION DATE: October 21, 2016

PRODUCT NAME:

RDP-F

CATALOG NUMBER:

Component of 63301-013

FORMULA:

Preparation/Mixture

PRODUCT USE:

Stabilization of PCR assay components

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

Section 2: Hazards Identification

GHS Hazard Class

Not a hazardous substance or mixture.

Signal word:

None

Hazard Statement:

None

Precautionary Statements:

Prevention
Response
Storage
Disposal

No precautionary statement.
No precautionary statement.
No precautionary statement.
No precautionary statement.

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

HAZARD CLASSIFICATION:

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

POTENTIAL HEALTH EFFECTS:

0 % of mixture consists of ingredients of unknown acute toxicity

APPEARANCE:

Colorless liquid

Section 3: Composition, Information on Ingredients

No ingredients are hazardous according to OSHA criteria.

No components need to be disclosed according to applicable regulations.

Section 4: First Aid Measures

Description of First Aid Measures

Inhalation

Remove to fresh air. If not breathing, seek medical attention and provide CPR (cardio pulmonary resuscitation) if trained.

Skin Contact

Wash skin with soap and water.

Eye Contact

Flush eyes with water for 15 minutes as a precaution.

Ingestion

Never give anything to an unconscious person. Rinse mouth with water.

Most important symptoms and effects, both acute and delayed

No data available.

Indication of any immediate medical attention and special treatment needed

No data available.

Section 5: Fire-fighting Measures

Suitable extinguishing media
 Special hazards arising from the substance or mixture
 Protective actions fire-fighters

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
 No data available.
 Wear standard protective equipment and self-contained breathing apparatus for firefighting if necessary.
 No data available.

Further information

Section 6: Accidental Release Measures

Personal precautions, protective equipment, and emergency procedures

Wear proper personal protective equipment. Avoid breathing vapors or mist.

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

Wear proper protective equipment when handling this material.
 Avoid contact with skin, eyes, or clothing.
 Appropriate container should be used for disposal.
 For precautions, see Section 2.

Conditions for safe storage, including any incompatibilities

Store at 2-8 °C.
 Keep container closed when not in use.
 Follow all applicable local regulations for handling and storage.

Specific uses

This product is intended for use in the stabilization of PCR assay components.

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.
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).
PROTECTIVE GLOVES:	Handle with impervious 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.
EYE PROTECTION:	Recommend eye protection using safety glasses.
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	Colorless
PHYSICAL STATE	Liquid
ODOR	Odorless
ODOR THRESHOLD	No data available
PH	7.9 to 8.1
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	No data available
VAPOR PRESSURE	No data available
VAPOR DENSITY (AIR = 1)	No data available
RELATIVE DENSITY (@25 °C)	No data available
SOLUBILITY(IES)	No data available
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:	No data available.
Chemical Stability:	Stable at recommended storage conditions. See Section 7.
Possibility of Hazardous Reactions:	No data available.
Conditions to Avoid:	No data available.
Incompatibility (Materials to Avoid):	No data available.
Hazardous Decomposition Products:	In the event of fire, see Section 5.

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		Data not available		
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		Data not available		
STOT -- Repeated Exposure		Data not available		
Aspiration Hazard		Data not available		

STOT = Specific Target Organ Systemic Toxicity

Section 12: Ecological Information

Criteria	Toxicity Information	Chemical Constituent
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 storm water drainage system.

Section 14: Transport Information

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

Section 16: Other Information

Initial issue date:	October 21, 2016
Final revision date:	October 21, 2016
Revision Number:	1
Revision explanation	Initial version
Information Sources:	OSHA 29CFR 1910.1200

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regarding its correctness. Some of the information presented and conclusions drawn are from sources other than direct test data of the substance. The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may also be beyond our knowledge. It is the user's responsibility to determine the suitability of any material for a specific purpose and to adopt such safety precautions as may be necessary. If the product is used as a component in another product, this SDS information may not be applicable. For these reasons, we do not assume any responsibility and expressly disclaim liability for any loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of this product.”

SAFETY DATA SHEET

This SDS complies with GHS REVISION 5, OSHA 29CFR 1910.1200

Section 1: Chemical Product and Company Identification

MANUFACTURER'S NAME

Biomatrica
5627 Oberlin Drive, Suite 120
San Diego, California, USA 92121

EMERGENCY TELEPHONE

Information: 1-858-550-0308
Fax: 1-858-678-0597
Hours: M-F 8:30 a.m.-5:30 p.m. PT

EFFECTIVE DATE: October 21, 2016

REVISION DATE: October 21, 2016

PRODUCT NAME:

RDP-G

CATALOG NUMBER:

Component of 63301-013

FORMULA:

Preparation/Mixture

PRODUCT USE:

Stabilization of PCR assay components

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

Section 2: Hazards Identification

GHS Hazard Class

Not a hazardous substance or mixture.

Signal word:

None

Hazard Statement:

None

Precautionary Statements:

Prevention
Response
Storage
Disposal

No precautionary statement.
No precautionary statement.
No precautionary statement.
No precautionary statement.

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

HAZARD CLASSIFICATION:

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

POTENTIAL HEALTH EFFECTS:

0 % of mixture consists of ingredients of unknown acute toxicity

APPEARANCE:

Colorless liquid

Section 3: Composition, Information on Ingredients

No ingredients are hazardous according to OSHA criteria.

No components need to be disclosed according to applicable regulations.

Section 4: First Aid Measures

Description of First Aid Measures

Inhalation

Remove to fresh air. If not breathing, seek medical attention and provide CPR (cardio pulmonary resuscitation) if trained.

Skin Contact

Wash skin with soap and water.

Eye Contact

Flush eyes with water for 15 minutes as a precaution.

Ingestion

Never give anything to an unconscious person. Rinse mouth with water.

Most important symptoms and effects, both acute and delayed

No data available.

Indication of any immediate medical attention and special treatment needed

No data available.

Section 5: Fire-fighting Measures

Suitable extinguishing media
 Special hazards arising from the substance or mixture
 Protective actions fire-fighters

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
 No data available.

Wear standard protective equipment and self-contained breathing apparatus for firefighting if necessary.

Further information

No data available.

Section 6: Accidental Release Measures

Personal precautions, protective equipment, and emergency procedures

Wear proper personal protective equipment. Avoid breathing vapors or mist.

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

Wear proper protective equipment when handling this material.

Avoid contact with skin, eyes, or clothing.

Appropriate container should be used for disposal.

For precautions, see Section 2.

Conditions for safe storage, including any incompatibilities

Store at 2-8 °C.

Keep container closed when not in use.

Follow all applicable local regulations for handling and storage.

Specific uses

This product is intended for use in the stabilization of PCR assay components.

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.

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).

PROTECTIVE GLOVES:

Handle with impervious 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.

EYE PROTECTION:

Recommend eye protection using safety glasses.

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	Colorless
PHYSICAL STATE	Liquid
ODOR	Odorless
ODOR THRESHOLD	No data available
PH	7.9 to 8.1
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	No data available
VAPOR PRESSURE	No data available
VAPOR DENSITY (AIR = 1)	No data available
RELATIVE DENSITY (@25 °C)	No data available
SOLUBILITY(IES)	No data available
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:	No data available.
Chemical Stability:	Stable at recommended storage conditions. See Section 7.
Possibility of Hazardous Reactions:	No data available.
Conditions to Avoid:	No data available.
Incompatibility (Materials to Avoid):	No data available.
Hazardous Decomposition Products:	In the event of fire, see Section 5.

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		Data not available		
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		Data not available		
STOT -- Repeated Exposure		Data not available		
Aspiration Hazard		Data not available		

STOT = Specific Target Organ Systemic Toxicity

Section 12: Ecological Information

Criteria	Toxicity Information	Chemical Constituent
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 storm water drainage system.

Section 14: Transport Information

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

Section 16: Other Information

Initial issue date:	October 21, 2016
Final revision date:	October 21, 2016
Revision Number:	1
Revision explanation	Initial version
Information Sources:	OSHA 29CFR 1910.1200

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regarding its correctness. Some of the information presented and conclusions drawn are from sources other than direct test data of the substance. The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may also be beyond our knowledge. It is the user's responsibility to determine the suitability of any material for a specific purpose and to adopt such safety precautions as may be necessary. If the product is used as a component in another product, this SDS information may not be applicable. For these reasons, we do not assume any responsibility and expressly disclaim liability for any loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of this product.”

SAFETY DATA SHEET

This SDS complies with GHS REVISION 5, OSHA 29CFR 1910.1200

Section 1: Chemical Product and Company Identification

MANUFACTURER'S NAME

Biomatrica
5627 Oberlin Drive, Suite 120
San Diego, California, USA 92121

EMERGENCY TELEPHONE

Information: 1-858-550-0308
Fax: 1-858-678-0597
Hours: M-F 8:30 a.m.-5:30 p.m. PT

EFFECTIVE DATE: October 21, 2016

REVISION DATE: October 21, 2016

PRODUCT NAME:**RDP-H****CATALOG NUMBER:**

Component of 63301-013

FORMULA:

Preparation/Mixture

PRODUCT USE:

Stabilization of PCR assay components

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

Section 2: Hazards Identification

GHS Hazard Class

Not a hazardous substance or mixture.

Signal word:

None

Hazard Statement:

None

Precautionary Statements:

Prevention
Response
Storage
Disposal

No precautionary statement.
No precautionary statement.
No precautionary statement.
No precautionary statement.

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

HAZARD CLASSIFICATION:

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

POTENTIAL HEALTH EFFECTS:

0 % of mixture consists of ingredients of unknown acute toxicity

APPEARANCE:

Colorless liquid

Section 3: Composition, Information on Ingredients

No ingredients are hazardous according to OSHA criteria.

No components need to be disclosed according to applicable regulations.

Section 4: First Aid Measures

Description of First Aid Measures**Inhalation**

Remove to fresh air. If not breathing, seek medical attention and provide CPR (cardio pulmonary resuscitation) if trained.

Skin Contact

Wash skin with soap and water.

Eye Contact

Flush eyes with water for 15 minutes as a precaution.

Ingestion

Never give anything to an unconscious person. Rinse mouth with water.

Most important symptoms and effects, both acute and delayed

No data available.

Indication of any immediate medical attention and special treatment needed

No data available.

Section 5: Fire-fighting Measures

Suitable extinguishing media
 Special hazards arising from the substance or mixture
 Protective actions fire-fighters

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
 No data available.
 Wear standard protective equipment and self-contained breathing apparatus for firefighting if necessary.
 No data available.

Further information

Section 6: Accidental Release Measures

Personal precautions, protective equipment, and emergency procedures

Wear proper personal protective equipment. Avoid breathing vapors or mist.

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

Wear proper protective equipment when handling this material.
 Avoid contact with skin, eyes, or clothing.
 Appropriate container should be used for disposal.
 For precautions see Section 2.

Conditions for safe storage, including any incompatibilities

Store at 2-8 °C.
 Keep container closed when not in use.
 Follow all applicable local regulations for handling and storage.

Specific uses

This product is intended for use in the stabilization of PCR assay components.

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.

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).

PROTECTIVE GLOVES: Handle with impervious 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.

EYE PROTECTION: Recommend eye protection using safety glasses.

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	Colorless
PHYSICAL STATE	Liquid
ODOR	Odorless
ODOR THRESHOLD	No data available
PH	7.9 to 8.1
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	No data available
VAPOR PRESSURE	No data available
VAPOR DENSITY (AIR = 1)	No data available
RELATIVE DENSITY (@25 °C)	No data available
SOLUBILITY(IES)	No data available
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:	No data available.
Chemical Stability:	Stable at recommended storage conditions. See Section 7.
Possibility of Hazardous Reactions:	No data available.
Conditions to Avoid:	No data available.
Incompatibility (Materials to Avoid):	No data available.
Hazardous Decomposition Products:	In the event of fire, see Section 5.

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		Data not available		
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		Data not available		
STOT -- Repeated Exposure		Data not available		
Aspiration Hazard		Data not available		

STOT = Specific Target Organ Systemic Toxicity

Section 12: Ecological Information

Criteria	Toxicity Information	Chemical Constituent
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 storm water drainage system.

Section 14: Transport Information

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

Section 16: Other Information

Initial issue date:	October 21, 2016
Final revision date:	October 21, 2016
Revision Number:	1
Revision explanation	Initial version
Information Sources:	OSHA 29CFR 1910.1200

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