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Revision: 01/03/2017 Supersedes Revision: 06/26/2016

according to Regulation (EC) No. 1907/2006 as amended by (EC) No. 1272/2008

Section 1. Identification of the Substance/Mixture and of the Company/Undertaking

1.1 Product Code: 600183

Product Name: SEAP Substrate (Luminescence)

1.2 Relevant identified uses of the substance or mixture and uses advised against:

Relevant identified uses: For research use only, not for human or veterinary use.

1.3 Details of the Supplier of the Safety Data Sheet:

Company Name: Cayman Chemical Company

1180 E. Ellsworth Rd. Ann Arbor, MI 48108

Web site address: www.caymanchem.com

Information: Cayman Chemical Company +1 (734)971-3335

1.4 Emergency telephone number:

Emergency Contact: CHEMTREC Within USA and Canada: +1 (800)424-9300

CHEMTREC Outside USA and Canada: +1 (703)527-3887

Section 2. Hazards Identification

2.1 Classification of the Substance or Mixture:

Skin Corrosion/Irritation, Category 3

Aquatic Toxicity (Acute), Category 3

Aquatic Toxicity (Chronic), Category 3

2.2 Label Elements:

GHS Signal Word: Warning

GHS Hazard Phrases:

H316: Causes mild skin irritation.

H402: Harmful to aquatic life.

H412: Harmful to aquatic life with long lasting effects.

GHS Precaution Phrases:

P273: Avoid release to the environment.

GHS Response Phrases:

P332+313: If skin irritation occurs, get medical advice/attention.

GHS Storage and Disposal Phrases:

Please refer to Section 7 for Storage and Section 13 for Disposal information.

2.3 Adverse Human Health Causes mild skin irritation.

Effects and Symptoms: Harmful to aquatic life with long lasting effects.

Material may be irritating to the mucous membranes and upper respiratory tract.

May be harmful by inhalation, ingestion, or skin absorption.

May cause eye or respiratory system irritation.

To the best of our knowledge, the toxicological properties have not been thoroughly investigated.





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Section 3. Composition/Information on Ingredients

CAS#/ RTECS#	Hazardous Components (Chemical Name)/ REACH Registration No.	Concentration	EC No./ EC Index No.	GHS Classification
26628-22-8 VY8050000	Sodium azide	< 0.1 %	247-852-1 011-004-00-7	Acute Tox.(O) 2: H300 Aquatic (C) 1: H410
NA NA	1,2-dioxetane-ene	< 1.0 %	NA NA	No data available.
NA NA	Tris Buffer	< 2.0 %	NA NA	Acute Tox.(O) 4: H302 Skin Corr. 2: H315 Eye Damage 2A: H319 STOT (SE) 3: H335 H336 Aquatic (A) 1: H400 Aquatic (C) 1: H410
NA NA	Enhancer-450 alkaline phosphatase substrate	< 1.0 %	NA NA	No data available.
7732-18-5 ZC0110000	Water	>95.0 %	231-791-2 NA	No data available.

Section 4. First Aid Measures

4.1 Description of First Aid

Measures:

In Case of Inhalation: Remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel.

Get immediate medical attention.

In Case of Skin Contact: Immediately wash skin with soap and plenty of water for at least 15 minutes. Remove contaminated

clothing. Get medical attention if symptoms occur. Wash clothing before reuse.

In Case of Eye Contact: Hold eyelids apart and flush eyes with plenty of water for at least 15 minutes. Have eyes examined

and tested by medical personnel.

In Case of Ingestion: Wash out mouth with water provided person is conscious. Never give anything by mouth to an

unconscious person. Get medical attention. Do NOT induce vomiting unless directed to do so by

medical personnel.

Section 5. Fire Fighting Measures

5.1 Suitable Extinguishing Use alcohol-resistant foam, carbon dioxide, water, or dry chemical spray.

Media: Use water spray to cool fire-exposed containers.

Unsuitable Extinguishing A solid water stream may be inefficient.

Media:

5.2 Flammable Properties and No data available.

Hazards:

No data available.

Flash Pt: No data.

Explosive Limits: LEL: No data. UEL: No data.

Autoignition Pt: No data.

5.3 Fire Fighting Instructions: As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or

equivalent), and full protective gear to prevent contact with skin and eyes.



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Section 6. Accidental Release Measures

6.1 Protective Precautions, Avoid breathing vapors and provide adequate ventilation.

Protective Equipment and As conditions warrant, wear a NIOSH approved self-contained breathing apparatus, or respirator,

Emergency Procedures: and appropriate personal protection (rubber boots, safety goggles, and heavy rubber gloves).

6.2 Environmental Take steps to avoid release into the environment, if safe to do so.

Precautions:

6.3 Methods and Material For Contain spill and collect, as appropriate.

Containment and Cleaning Transfer to a chemical waste container for disposal in accordance with local regulations.

Up:

Section 7. Handling and Storage

7.1 Precautions To Be Taken Avoid breathing dust/fume/gas/mist/vapours/spray.

in Handling: Avoid prolonged or repeated exposure.

7.2 Precautions To Be Taken Keep container tightly closed.

in Storing: Store in accordance with information listed on the product insert.

Other Precautions: Light sensitive.

Section 8. Exposure Controls/Personal Protection

8.1 Exposure Parameters:

CAS#	Chemical Name	Jurisdiction	Recommended Exposure Limits	Notations
26628-22-8	Sodium azide	ACGIH TLV	CEIL: 0.29 mg/m3	Ì
		Europe	TWA: 0.1 mg/m3	Skin Absorption
			STEL: 0.3 mg/m3	
		France VL	TWA: 0.1 mg/m3	
			STEL: 0.3 mg/m3	
		Britain EH40	TWA: 0.1 mg/m3 ()	Skin Absorption
			STEL: 0.3 mg/m3 ()	

8.2 Exposure Controls:

8.2.1 Engineering Controls Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne

(Ventilation etc.): levels below recommended exposure limits.

8.2.2 Personal protection equipment:

Eye Protection: Safety glasses

Protective Gloves: Compatible chemical-resistant gloves

Other Protective Clothing: Lab coat

Respiratory Equipment NIOSH approved respirator, as conditions warrant.

(Specify Type):

Work/Hygienic/Maintenan Do not take internally.

ce Practices: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety

shower.

Wash thoroughly after handling.

No data available.



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Section 9. Physical and Chemical Properties

9.1 Information on Basic Physical and Chemical Properties

Physical States: [] Gas [X] Liquid [] Solid

Appearance and Odor: A solution pH: No data.

Melting Point: No data.

Boiling Point: No data.

Flash Pt: No data.

Evaporation Rate: No data.

Flammability (solid, gas): No data available.

Explosive Limits: LEL: No data. UEL: No data.

No data.

Vapor Pressure (vs. Air or mm

Ha):

Vapor Density (vs. Air = 1):No data.Specific Gravity (Water = 1):No data.Solubility in Water:No data.Octanol/Water PartitionNo data.

Coefficient:

Autoignition Pt: No data.

Decomposition Temperature: No data.

Viscosity: No data.

9.2 Other Information

Percent Volatile: No data.

Section 10. Stability and Reactivity

10.1 Reactivity: No data available.

10.2 Stability: Unstable [] Stable [X]

10.3 Stability Note(s): Stable if stored in accordance with information listed on the product insert.

Polymerization: Will occur [] Will not occur [X]

10.4 Conditions To Avoid: No data available.

10.5 Incompatibility - Materials acids

To Avoid: bases

strong reducing agents strong oxidizing agents

10.6 Hazardous carbon dioxide

Decomposition or carbon monoxide **Byproducts:** hydrogen chloride

> nitrogen oxides phosphorus oxides



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Section 11. Toxicological Information

11.1 Information on The toxicological effects of this product have not been thoroughly studied.

Toxicological Effects: Sodium Azide - Toxicity Data: Oral LDLO (rat): 27 mg/kg; Oral LDLO (woman): 14 mg/kg; Oral

LDLO (man): 29 mg/kg;

Chronic Toxicological

Effects: tun

 $Sodium\ Azide\ -\ Investigated\ as\ an\ agricultural\ chemical,\ drug,\ mutagen,\ reproductive\ effector,\ and$

tumorigen.

Only select Registry of Toxic Effects of Chemical Substances (RTECS) data is presented here.

See actual entry in RTECS for complete information.

Sodium Azide RTECS Number: VY8050000

Carcinogenicity: NTP? No IARC Monographs? No OSHA Regulated? No

CAS#	Hazardous Components (Chemical Name)	NTP	IARC	ACGIH	OSHA
26628-22-8	Sodium azide	n.a.	n.a.	A4	n.a.
NA	1,2-dioxetane-ene	n.a.	n.a.	n.a.	n.a.
NA	Tris Buffer	n.a.	n.a.	n.a.	n.a.
NA	Enhancer-450 alkaline phosphatase substrate	n.a.	n.a.	n.a.	n.a.
7732-18-5	Water	n.a.	n.a.	n.a.	n.a.

Section 12. Ecological Information

12.1 Toxicity: Avoid release into the environment.

Runoff from fire control or dilution water may cause pollution.

12.2 Persistence and

Degradability:

12.3 Bioaccumulative

No data available.

No data available.

Potential:

12.4 Mobility in Soil:

No data available.

12.5 Results of PBT and vPvB No data available.

assessment:

12.6 Other adverse effects:

No data available.

Section 13. Disposal Considerations

13.1 Waste Disposal Method: Dispose in accordance with local, state, and federal regulations.

Section 14. Transport Information

14.1 LAND TRANSPORT (US DOT):

DOT Proper Shipping Name:

Not dangerous goods.

DOT Hazard Class: UN/NA Number:

14.1 LAND TRANSPORT (European ADR/RID):

ADR/RID Shipping Name:

Not dangerous goods.

UN Number: Hazard Class:





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14.3 AIR TRANSPORT (ICAO/IATA):

ICAO/IATA Shipping Name: Not dangerous goods.

Additional Transport Transport in accordance with local, state, and federal regulations.

Information:

Section 15. Regulatory Information

EPA SARA (Superfund Amendments and Reauthorization Act of 1986) Lists

CAS#	Hazardous Components (Chemical Name)	S. 302 (EHS)	S. 304 RQ	S. 313 (TRI)
26628-22-8	Sodium azide	Yes 500 LB	Yes 1000 LB	Yes
NA	1,2-dioxetane-ene	No	No	No
NA	Tris Buffer	No	No	No
NA	Enhancer-450 alkaline phosphatase substrate	No	No	No
7732-18-5	Water	No	No	No

CAS#	Hazardous Components (Chemical Name)	Other US EPA or State Lists
26628-22-8	Sodium azide	CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: No
NA	1,2-dioxetane-ene	CAA HAP,ODC: No; CWA NPDES: No; TSCA: No; CA PROP.65: No
NA	Tris Buffer	CAA HAP,ODC: No; CWA NPDES: No; TSCA: No; CA PROP.65: No
NA	Enhancer-450 alkaline phosphatase substrate	CAA HAP,ODC: No; CWA NPDES: No; TSCA: No; CA PROP.65: No
7732-18-5	Water	CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: No

Regulatory Information This SDS was prepared in accordance with 29 CFR 1910.1200 and Regulation (EC)

Statement: No.1272/2008.

Section 16. Other Information

Revision Date: 01/03/2017

Additional Information About No data available.

This Product:

Company Policy or Disclaimer: DISCLAIMER: This information is believed to be accurate and represents the best information

currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for

their particular purposes.



SAFETY DATA SHEET TGR5 Reverse Transfection Strip Plate

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Revision: 01/16/2017

according to Regulation (EC) No. 1907/2006 as amended by (EC) No. 1272/2008

Section 1. Identification of the Substance/Mixture and of the Company/Undertaking

1.1 Product Code: 601441

Product Name: TGR5 Reverse Transfection Strip Plate

1.2 Relevant identified uses of the substance or mixture and uses advised against:

Relevant identified uses: For research use only, not for human or veterinary use.

1.3 Details of the Supplier of the Safety Data Sheet:

Company Name: Cayman Chemical Company

1180 E. Ellsworth Rd. Ann Arbor, MI 48108

Web site address: www.caymanchem.com

Information: Cayman Chemical Company +1 (734)971-3335

1.4 Emergency telephone number:

Emergency Contact: CHEMTREC Within USA and Canada: +1 (800)424-9300

CHEMTREC Outside USA and Canada: +1 (703)527-3887

Section 2. Hazards Identification

2.1 Classification of the Substance or Mixture:

2.2 Label Elements:

GHS Signal Word: None

GHS Hazard Phrases:

Based on evaluation of currently available data this substance or mixture is not classifiable according to GHS.

GHS Precaution Phrases:

No phrases apply.

GHS Response Phrases:

No phrases apply.

GHS Storage and Disposal Phrases:

Please refer to Section 7 for Storage and Section 13 for Disposal information.

2.3 Adverse Human Health Material may be irritating to the mucous membranes and upper respiratory tract.

Effects and Symptoms: May be harmful by inhalation, ingestion, or skin absorption.

May cause eye, skin, or respiratory system irritation.

To the best of our knowledge, the toxicological properties have not been thoroughly investigated.

Section 3. Composition/Information on Ingredients

	Hazardous Components (Chemical Name)/ REACH Registration No.	Concentration	EC No./ EC Index No.	GHS Classification
NA	TGR5 Reverse Transfection Strip Plate	100.0 %	NA	No data available.
NA			NA	

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Section 4. First Aid Measures

4.1 Description of First Aid

Measures:

In Case of Inhalation: Remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel.

Get immediate medical attention.

In Case of Skin Contact: Immediately wash skin with soap and plenty of water for at least 15 minutes. Remove contaminated

clothing. Get medical attention if symptoms occur. Wash clothing before reuse.

In Case of Eye Contact: Hold eyelids apart and flush eyes with plenty of water for at least 15 minutes. Have eyes examined

and tested by medical personnel.

In Case of Ingestion: Wash out mouth with water provided person is conscious. Never give anything by mouth to an

unconscious person. Get medical attention. Do NOT induce vomiting unless directed to do so by

medical personnel.

Section 5. Fire Fighting Measures

5.1 Suitable Extinguishing Use alcohol-resistant foam, carbon dioxide, water, or dry chemical spray.

Media: Use water spray to cool fire-exposed containers.

Unsuitable Extinguishing A solid water stream may be inefficient.

Media:

5.2 Flammable Properties and No data available.

Hazards:

No data available.

Flash Pt: No data.

Explosive Limits: LEL: No data. UEL: No data.

Autoignition Pt: No data.

5.3 Fire Fighting Instructions: As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or

equivalent), and full protective gear to prevent contact with skin and eyes.

Section 6. Accidental Release Measures

6.1 Protective Precautions, Avoid raising and breathing dust, and provide adequate ventilation.

Protective Equipment and As conditions warrant, wear a NIOSH approved self-contained breathing apparatus, or respirator,

Emergency Procedures: and appropriate personal protection (rubber boots, safety goggles, and heavy rubber gloves).

6.2 Environmental Take steps to avoid release into the environment, if safe to do so.

Precautions:

6.3 Methods and Material For Contain spill and collect, as appropriate.

Containment and Cleaning Transfer to a chemical waste container for disposal in accordance with local regulations.

Up:

Section 7. Handling and Storage

7.1 Precautions To Be Taken Avoid breathing dust/fume/gas/mist/vapours/spray.

in Handling: Avoid prolonged or repeated exposure.

7.2 Precautions To Be Taken Keep container tightly closed.

in Storing: Store in accordance with information listed on the product insert.

Section 8. Exposure Controls/Personal Protection

8.1 Exposure Parameters:

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To Avoid:

Hazardous

10.6

No data available.

SAFETY DATA SHEETTGR5 Reverse Transfection Strip Plate

Cay	man	Revision: 01/16/2017
8.2	Exposure Controls:	
8.2.1	Engineering Controls (Ventilation etc.):	Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.
8.2.2	Personal protection equip	oment:
	Eye Protection:	Safety glasses
	Protective Gloves:	Compatible chemical-resistant gloves
	Other Protective Clothing	:Lab coat
	Respiratory Equipment	NIOSH approved respirator, as conditions warrant.
	(Specify Type):	
	Work/Hygienic/Maintenan	Do not take internally.
	ce Practices:	Facilities storing or utilizing this material should be equipped with an eyewash and a safety shower
		Wash thoroughly after handling.
		No data available.
	Se	ection 9. Physical and Chemical Properties
9.1	Information on Basic Phys	sical and Chemical Properties
	Physical States:	[] Gas [] Liquid [X] Solid
	Appearance and Odor:	Plate
	pH:	No data.
	Melting Point:	No data.
	Boiling Point:	No data.
	Flash Pt:	No data.
	Evaporation Rate:	No data.
	Flammability (solid, gas):	No data available.
	Explosive Limits:	LEL: No data. UEL: No data.
	Vapor Pressure (vs. Air or	r mm No data.
	Hg):	
	Vapor Density (vs. Air = 1)): No data.
	Specific Gravity (Water =	1): No data.
	Solubility in Water:	No data.
	Octanol/Water Partition	No data.
	Coefficient:	
	Autoignition Pt:	No data.
	Decomposition Temperate	ure: No data.
	Viscosity:	No data.
9.2	Other Information	
	Percent Volatile:	No data.
		Section 10. Stability and Reactivity
10.1	Reactivity:	No data available.
10.2	Stability:	Unstable [] Stable [X]
10.3	Stability Note(s):	Stable if stored in accordance with information listed on the product insert.
	Polymerization:	Will occur [] Will not occur [X]
10.4	Conditions To Avoid:	No data available.
10.5	Incompatibility - Materials	No data available.

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SAFETY DATA SHEET TGR5 Reverse Transfection Strip Plate

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Decomposition or

Byproducts:

Section 11. Toxicological Information

11.1 Information on The toxicological effects of this product have not been thoroughly studied.

Toxicological Effects:

CAS#	Hazardous Components (Chemical Name)	NTP	IARC	ACGIH	OSHA
NA	TGR5 Reverse Transfection Strip Plate	n.a.	n.a.	n.a.	n.a.

Section 12. Ecological Information

12.1 Toxicity: Avoid release into the environment.

Runoff from fire control or dilution water may cause pollution.

12.2 Persistence and No data available.

Degradability:

12.3 Bioaccumulative No data available.

Potential:

12.4 Mobility in Soil: No data available.

12.5 Results of PBT and vPvB No data available.

assessment:

12.6 Other adverse effects: No data available.

Section 13. Disposal Considerations

13.1 Waste Disposal Method: Dispose in accordance with local, state, and federal regulations.

Section 14. Transport Information

14.1 LAND TRANSPORT (US DOT):

DOT Proper Shipping Name: Not dangerous goods.

DOT Hazard Class: UN/NA Number:

14.1 LAND TRANSPORT (European ADR/RID):

ADR/RID Shipping Name: Not dangerous goods.

UN Number: Hazard Class:

14.3 AIR TRANSPORT (ICAO/IATA):

ICAO/IATA Shipping Name: Not dangerous goods.

Additional Transport Transport in accordance with local, state, and federal regulations.

Information:

Section 15. Regulatory Information

EPA SARA (Superfund Amendments and Reauthorization Act of 1986) Lists

CAS#	Hazardous Components (Chemical Name)	S. 302 (EHS) S. 304 RQ S. 313 (TRI)				
NA	TGR5 Reverse Transfection Strip Plate	No	No	No		
CAS#	Hazardous Components (Chemical Name)	Other US EPA or State Lists				
NA	TGR5 Reverse Transfection Strip Plate	CAA HAP,ODC: No; CWA NPDES: No; TSCA: No; CA PROP.65: No				



SAFETY DATA SHEET TGR5 Reverse Transfection Strip Plate

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Regulatory Information This SDS was prepared in accordance with 29 CFR 1910.1200 and Regulation (EC)

Statement: No.1272/2008.

Section 16. Other Information

Revision Date: 01/16/2017

Additional Information About

No data available.

This Product:

Company Policy or Disclaimer: DISCLAIMER: This information is believed to be accurate and represents the best information

currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for

their particular purposes.

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SAFETY DATA SHEET TGR5 Receptor Agonist (positive control), 10 mM

Revision: 01/16/2017

according to Regulation (EC) No. 1907/2006 as amended by (EC) No. 1272/2008

Section 1. Identification of the Substance/Mixture and of the Company/Undertaking

1.1 Product Code: 601442

Product Name: TGR5 Receptor Agonist (positive control), 10 mM

1.2 Relevant identified uses of the substance or mixture and uses advised against:

Relevant identified uses: For research use only, not for human or veterinary use.

1.3 Details of the Supplier of the Safety Data Sheet:

Company Name: Cayman Chemical Company

1180 E. Ellsworth Rd. Ann Arbor, MI 48108

Web site address: www.caymanchem.com

Information: Cayman Chemical Company +1 (734)971-3335

1.4 Emergency telephone number:

Emergency Contact: CHEMTREC Within USA and Canada: +1 (800)424-9300

CHEMTREC Outside USA and Canada: +1 (703)527-3887

Section 2. Hazards Identification

2.1 Classification of the Substance or Mixture:

Flammable Liquids, Category 4

2.2 Label Elements:

GHS Signal Word: Warning

GHS Hazard Phrases: H227: Combustible liquid.

GHS Precaution Phrases:

P210: Keep away from {heat/sparks/open flames/hot surfaces}. - No smoking.

P280: Wear {protective gloves/protective clothing/eye protection/face protection}.

GHS Response Phrases:

No phrases apply.

GHS Storage and Disposal Phrases:

Please refer to Section 7 for Storage and Section 13 for Disposal information.

2.3 Adverse Human Health DMSO has the potential to carry toxic materials or materials of unknown toxicity into the body.

Effects and Symptoms: DMSO is readily absorbed through skin.

Material may be irritating to the mucous membranes and upper respiratory tract.

May be harmful by inhalation, ingestion, or skin absorption.

May cause respiratory system irritation.

To the best of our knowledge, the toxicological properties have not been thoroughly investigated.



SAFETY DATA SHEET TGR5 Receptor Agonist (positive control), 10 mM

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Section 3. Composition/Information on Ingredients

	Coulon of Composition and Institute and Inst							
CAS#/ RTECS#	Hazardous Components (Chemical Name)/ REACH Registration No.	Concentration	EC No./ EC Index No.	GHS Classification				
NA NA	TGR5 Receptor Agonist (positive control), 10 mM	0.36 %	NA NA	No data available.				
67-68-5 PV6210000	Dimethyl sulfoxide, anhydrous	99.64 %	200-664-3 NA	Flam. Liq. 4: H227				

Section 4. First Aid Measures

4.1 Description of First Aid

Measures:

In Case of Inhalation: Remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel.

Get immediate medical attention.

In Case of Skin Contact: Immediately wash skin with soap and plenty of water for at least 15 minutes. Remove contaminated

clothing. Get medical attention if symptoms occur. Wash clothing before reuse.

In Case of Eye Contact: Hold eyelids apart and flush eyes with plenty of water for at least 15 minutes. Have eyes examined

and tested by medical personnel.

In Case of Ingestion: Wash out mouth with water provided person is conscious. Never give anything by mouth to an

unconscious person. Get medical attention. Do NOT induce vomiting unless directed to do so by

medical personnel.

4.2 Important Symptoms and Exposure may cause: hematuria or shortness of breath (dyspnea).

Effects, Both Acute and Exposure may cause: gastrointestinal irritation with nausea, vomiting, diarrhea, headache,

Delayed: dizziness, and drowsiness.

Eye contact may cause blurry vision, burning sensation, redness, tearing, and vasodilation.

Section 5. Fire Fighting Measures

5.1 Suitable Extinguishing Use alcohol-resistant foam, carbon dioxide, water, or dry chemical spray.

Media: Use water spray to cool fire-exposed containers.

Unsuitable Extinguishing A solid water stream may be inefficient.

Media:

5.2 Flammable Properties andCan release vapors that form explosive mixtures at temperatures at or above the flashpoint.

Hazards: Container explosion may occur under fire conditions.

Emits toxic fumes under fire conditions.

Sensitive to static discharge.

Vapors can travel to a source of ignition and flash back.

No data available.

Flash Pt: 89.00 C Method Used: Closed Cup

Explosive Limits: LEL: 3.5% at 25.0 C UEL: 42.0% at 25.0 C

Autoignition Pt: 215.00 C

5.3 Fire Fighting Instructions: As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or

equivalent), and full protective gear to prevent contact with skin and eyes.

Note: Combustible as diluted in dimethyl sulfoxide



SAFETY DATA SHEET TGR5 Receptor Agonist (positive control), 10 mM

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Section 6. Accidental Release Measures

6.1 Protective Precautions, Avoid breathing vapors and provide adequate ventilation.

Protective Equipment and As conditions warrant, wear a NIOSH approved self-contained breathing apparatus, or respirator,

Emergency Procedures: and appropriate personal protection (rubber boots, safety goggles, and heavy rubber gloves).

6.2 Environmental Take steps to avoid release into the environment, if safe to do so.

Precautions:

6.3 Methods and Material For Contain spill and collect, as appropriate.

Containment and Cleaning Transfer to a chemical waste container for disposal in accordance with local regulations.

Up:

Section 7. Handling and Storage

7.1 Precautions To Be Taken Avoid breathing dust/fume/gas/mist/vapours/spray.

in Handling: Avoid prolonged or repeated exposure.

Keep away from sources of ignition.

Take precautionary measures against static discharge.

7.2 Precautions To Be Taken Keep away from heat, sparks and flame.

in Storing: Keep container tightly closed.

Store in accordance with information listed on the product insert.

Other Precautions: Hygroscopic

Section 8. Exposure Controls/Personal Protection

8.1 Exposure Parameters:

8.2 Exposure Controls:

(Ventilation etc.): levels below recommended exposure limits.

8.2.2 Personal protection equipment:

Eye Protection: Safety glasses

Protective Gloves: Compatible chemical-resistant gloves

Other Protective Clothing: Lab coat

Respiratory Equipment NIOSH approved respirator, as conditions warrant.

(Specify Type):

Work/Hygienic/Maintenan Do not take internally.

ce Practices: Facilities storing or utilizing this material should be equipped with an eyewash and a safety shower.

Wash thoroughly after handling.

No data available.



SAFETY DATA SHEET

TGR5 Receptor Agonist (positive control), 10 mM

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Section 9. Physical and Chemical Properties

9.1 Information on Basic Physical and Chemical Properties

> **Physical States:** [] Gas [X] Liquid [] Solid

Appearance and Odor: A solution in DMSO

pH: No data. **Melting Point:** No data. **Boiling Point:** No data.

Flash Pt: 89.00 C Method Used: Closed Cup

Evaporation Rate: No data.

Flammability (solid, gas): No data available.

Explosive Limits: LEL: 3.5% at 25.0 C UEL: 42.0% at 25.0 C

Vapor Pressure (vs. Air or mm 0.37 MM_HG at 20.0 C

Vapor Density (vs. Air = 1): No data. Specific Gravity (Water = 1): No data. Solubility in Water: No data. **Octanol/Water Partition** No data.

Coefficient:

Autoignition Pt: 215.00 C **Decomposition Temperature:** No data. Viscosity: No data.

9.2 Other Information

> **Percent Volatile:** No data.

Section 10. Stability and Reactivity

No data available. 10.1 Reactivity:

10.2 Unstable [] Stable [X] Stability:

10.3 Stable if stored in accordance with information listed on the product insert. Stability Note(s):

Will not occur [X] Polymerization: Will occur []

10.4 **Conditions To Avoid:** heat, flames and sparks

10.5 Incompatibility - Materials acid chlorides

> To Avoid: alkali metals

> > phosphorus halides

strong acids

strong oxidizing agents strong reducing agents

10.6 carbon monoxide **Hazardous**

> carbon dioxide **Decomposition or** sulfur oxides **Byproducts:**



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Section 11. Toxicological Information

11.1 Information on The toxicological effects of this product have not been thoroughly studied.

DMSO - Toxicity Data: Oral LD50 (rat): 14,500 mg/kg; Skin LD50 (rat): 40,000 mg/kg; Oral LD50 **Toxicological Effects:**

(mouse): 7,920 mg/kg; Skin LD50 (mouse): 50,000 mg/kg; Skin TDLO (woman): 1,800 mg/kg;

Inhalation LC50 (rat): >1,600 mg/m3 (4h);

DMSO - Irritation Data: Eyes (rabbit): 100 mg mild; Skin (rabbit): 500 mg (24h) mild;

Chronic Toxicological

DMSO - Investigated as a mutagen, reproductive effector, and tumorigen.

Effects:

Only select Registry of Toxic Effects of Chemical Substances (RTECS) data is presented here.

See actual entry in RTECS for complete information.

DMSO RTECS Number: PV6210000

Carcinogenicity: NTP? No IARC Monographs? No OSHA Regulated? No

CAS#	Hazardous Components (Chemical Name)	NTP	IARC	ACGIH	OSHA
NA	TGR5 Receptor Agonist (positive control), 10 mM	n.a.	n.a.	n.a.	n.a.
67-68-5	Dimethyl sulfoxide, anhydrous	n.a.	n.a.	n.a.	n.a.

Section 12. Ecological Information

12.1 Avoid release into the environment. **Toxicity:**

Runoff from fire control or dilution water may cause pollution.

12.2 Persistence and No data available.

Degradability:

Bioaccumulative 12.3

No data available.

Potential:

12.4 Mobility in Soil: No data available.

12.5 Results of PBT and vPvB No data available.

assessment:

12.6 Other adverse effects: No data available.

Section 13. Disposal Considerations

13.1 Waste Disposal Method: Dispose in accordance with local, state, and federal regulations.

Section 14. Transport Information

14.1 LAND TRANSPORT (US DOT):

DOT Proper Shipping Name: Combustible liquid, n.o.s. (Dimethyl sulfoxide)

DOT Hazard Class:

Ш **UN/NA Number:** NA1993 **Packing Group:**

14.1 LAND TRANSPORT (European ADR/RID):

ADR/RID Shipping Name: Combustible liquid, n.o.s. (Dimethyl sulfoxide)

UN Number: 1993 **Packing Group:** Ш

Hazard Class:

14.3 AIR TRANSPORT (ICAO/IATA):

ICAO/IATA Shipping Name: Environmentally hazardous substances, solid, n.o.s. (Dimethyl sulfoxide)

3077 **Packing Group:** Ш **UN Number:**

Hazard Class: 9 - CLASS 9

Additional Transport Transport in accordance with local, state, and federal regulations.

Information: When sold in quantities of less than or equal to 1 mL, or 1 g, with an Excepted Quantity Code of

> E1, E2, E4, or E5, this item meets the De Minimis Quantities exemption, per IATA 2.6.10. Therefore packaging does not have to be labeled as Dangerous Goods/Excepted Quantity.

> > Multi-region format





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Section 15. Regulatory Information

EPA SARA (Superfund Amendments and Reauthorization Act of 1986) Lists

CAS#	Hazardous Components (Chemical Name)	S. 302 (EHS)	S. 304 RQ	S. 313 (TRI)
NA	TGR5 Receptor Agonist (positive control), 10 mM	No	No	No
67-68-5	Dimethyl sulfoxide, anhydrous	No	No	No

CAS#	Hazardous Components (Chemical Name)	Other US EPA or State Lists
NA	TGR5 Receptor Agonist (positive control), 10 mM	CAA HAP,ODC: No; CWA NPDES: No; TSCA: No; CA PROP.65: No
67-68-5	Dimethyl sulfoxide, anhydrous	CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: No

Regulatory Information This SDS was prepared in accordance with 29 CFR 1910.1200 and Regulation (EC)

Statement: No.1272/2008.

Section 16. Other Information

Revision Date: 01/16/2017

Additional Information About No data available.

This Product:

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currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for

their particular purposes.