# **Product Information**



A Safety Data Sheet (SDS) on this material is not required as it is non-hazardous. However, we do recommend the following minimum precautions when using this item:

- Store at correct temperature.
- Dispose of by in accordance with federal, state, and local regulations.
- Wash thoroughly after handling.

#### **WARNING:**

This product is not intended or approved for human or veterinary use.

The above information is believed to be correct but should only be used as a guide. Cayman Chemical disclaims any express or implied warranty as to the accuracy of the above information and shall not be held liable for any direct, incidental, or consequential damages resulting from reliance on the above information.

Copyright Cayman Chemical Company

#### Cayman Chemical

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1180 E. Ellsworth Road Ann Arbor, MI 48108 USA

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Page: 1 of 5

Supersedes Revision: 04/13/2010

Revision: 05/21/2015

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:** 700141

**Product Name:** Methyltransferase Assay Buffer

**Synonyms:** MT Assay Buffer;

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:

2.1.1 Classification according to Regulation (EC) No 1272/2008 [CLP]:

2.2 Label Elements:

2.2.1 Labeling according to Regulation (EC) No 1272/2008 [CLP]:

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 NA	Methyltransferase Assay Buffer	100.0 %	NA NA	No data available.

Page: 2 of 5



## SAFETY DATA SHEET Methyltransferase Assay Buffer

Revision: 05/21/2015 Supersedes Revision: 04/13/2010

Section 4. First Aid Measures

4.1 Description of First Aid

Measures:

Check the vital functions. Unconscious: maintain adequate airway and respiration. Respiratory arrest: artificial respiration or oxygen. Cardiac arrest: perform resuscitation. Victim conscious with laboured breathing: half-seated. Victim in shock: on his back with legs slightly raised. Vomiting: prevent asphyxia/aspiration pneumonia. Prevent cooling by covering the victim (no warming up). Keep watching the victim. Give psychological aid. Keep the victim calm, avoid physical strain.

Depending on the victim's condition: doctor/hospital.

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. Victim is fully conscious: immediately induce vomiting.

Ingestion of large quantities: immediately to hospital. Call Poison Information Centre

(www.big.be/antigif.htm).

**4.2 Important Symptoms and** Exposure may cause nausea, vomiting and diarrhea.

**Effects, Both Acute and** Inhalation may result in coughing and shortness of breath.

**Delayed:** Skin contact may result in redness, itching, and pain; chronic dermatitis may follow.

## 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 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:



Page: 3 of 5

Revision: 05/21/2015 Supersedes Revision: 04/13/2010

## 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:

CAS#	Partial Chemical Name	Britain EH40	France VL	Europe
NA	Methyltransferase Assay Buffer	No data.	No data.	No data.
CAS#	Partial Chemical Name	OSHA TWA	ACGIH TWA	Other Limits
NA	Methyltransferase Assay Buffer	No data.	No data.	No data.

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 facility and a safety

shower.

Wash thoroughly after handling.

No data available.

## Section 9. Physical and Chemical Properties

€.1	Intorma	ation on Bas	c Physical ai	nd Chemical	Properties
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Physical States: [ ] Gas [ X ] Liquid [ ] Solid

Appearance and Odor:

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

Hg):

Vapor Density (vs. Air = 1): No data.

Specific Gravity (Water = 1): No data.

Solubility in Water: No data.



Page: 4 of 5

Revision: 05/21/2015 Supersedes Revision: 04/13/2010

**Autoignition Pt:** 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]

**Conditions To Avoid:** 10.4 heat

moisture

Incompatibility - Materials aluminum 10.5

> To Avoid: brass

> > copper

oxidizing agents

strong bases

10.6 **Hazardous** carbon dioxide

> carbon monoxide **Decomposition or Byproducts:**

nitrogen oxides

Section 11. Toxicological Information

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

**Toxicological Effects:** 

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

CAS#	Hazardous Components (Chemical Name)	NTP	IARC	ACGIH	OSHA
NA	Methyltransferase Assay Buffer	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.



Page: 5 of 5

Revision: 05/21/2015 Supersedes Revision: 04/13/2010

## 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	Methyltransferase Assay Buffer	No	No	No
CAS#	Hazardous Components (Chemical Name)	Other US EPA or State Lists		
	,			

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:** 05/21/2015

Additional Information About N

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.



Page: 1 of 5

Revision: 06/07/2015 Supersedes Revision: 04/13/2010

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:** 700142

**Product Name:** Methyltransferase Assay Buffer Additive

**Synonyms:** MT Assay Buffer Additive;

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.

The toxicological properties of this product have not been fully evaluated.

## Section 3. Composition/Information on Ingredients

CAS#/ RTECS#	Hazardous Components (Chemical Name)/ REACH Registration No.	Concentration	EC No./ EC Index No.	GHS Classification
NA NA	Methyltransferase Assay Buffer Additive	100.0 %	NA NA	No data available.





Revision: 06/07/2015 Supersedes Revision: 04/13/2010

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.

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

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.

LEL: No data. **Explosive Limits:** 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,

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

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

**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.

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

## Section 8. Exposure Controls/Personal Protection

#### 8.1 **Exposure Parameters:**

CAS#	Partial Chemical Name	Britain EH40	France VL	Europe
NA	Methyltransferase Assay Buffer	No data.	No data.	No data.

Multi-region format

Page: 3 of 5



## **SAFETY DATA SHEET**

**Methyltransferase Assay Buffer Additive** 

Revision: 06/07/2015 Supersedes Revision: 04/13/2010

	Additive			
CAS#	Partial Chemical Name	OSHA TWA	ACGIH TWA	Other Limits
NA	Methyltransferase Assay Buffer Additive	No data.	No data.	No data.

8.2 **Exposure Controls:** 

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

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

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

Wash thoroughly after handling.

No data available.

## Section 9. Physical and Chemical Properties

9.1	Information on Basic Physical and Chemical Properties	
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[ ] Gas [X] Liquid [ ] Solid **Physical States:** 

Solution Appearance and Odor: **Melting Point:** No data. No data. **Boiling Point:** No data. Flash Pt: No data. **Evaporation Rate:** 

No data available. Flammability (solid, gas):

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

No data. Vapor Pressure (vs. Air or mm

Hg):

Vapor Density (vs. Air = 1): No data. No data. Specific Gravity (Water = 1): No data. Solubility in Water: **Autoignition Pt:** No data.

9.2 Other Information

> No data. **Percent Volatile:**

## Section 10. Stability and Reactivity

10.1 Reactivity: No data available.

10.2 Unstable [ ] Stable [X] Stability:

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

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

10.4 No data available. **Conditions To Avoid:** 10.5

Incompatibility - Materials No data available.

To Avoid:

10.6 No data available. **Hazardous** 





Revision: 06/07/2015
Supersedes Revision: 04/13/2010

**Decomposition or** 

**Byproducts:** 

## Section 11. Toxicological Information

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

**Toxicological Effects:** 

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

CAS#	Hazardous Components (Chemical Name)	NTP	IARC	ACGIH	OSHA
NA	Methyltransferase Assay Buffer Additive	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	Methyltransferase Assay Buffer Additive	No	No	No
CAS#	Hazardous Components (Chemical Name)	Other US EPA or State Lists		
NA	Methyltransferase Assay Buffer Additive	CAA HAP,ODC: No; CWA NPDES: No; TSCA: No; CA PROP.65: No		



Page: 5 of 5

Revision: 06/07/2015 Supersedes Revision: 04/13/2010

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:** 06/07/2015

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.



Page: 1 of 5

Supersedes Revision: 04/13/2010

Revision: 06/08/2015

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:** 700143

**Product Name:** Methyltransferase Enzyme Mixture

**Synonyms:** MT Enzyme Mixture;

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 NA	Methyltransferase Enzyme Mixture	100.0 %	NA NA	No data available.



Page: 2 of 5

Revision: 06/08/2015 Supersedes Revision: 04/13/2010

#### 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 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.

## Section 8. Exposure Controls/Personal Protection

#### 8.1 Exposure Parameters:

CAS#	Partial Chemical Name	Britain EH40	France VL	Europe
NA	Methyltransferase Enzyme Mixture	No data.	No data.	No data.

Multi-region format



Page: 3 of 5

Revision: 06/08/2015 Supersedes Revision: 04/13/2010

CAS#	Partial Chemical Name	OSHA TWA	ACGIH TWA	Other Limits
NA	Methyltransferase Enzyme Mixture	No data.	No data.	No data.

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.

## Section 9. Physical and Chemical Properties

9.1	Information of	on Basic	Physical ar	nd Chemical I	Properties
-----	----------------	----------	-------------	---------------	------------

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

Appearance and Odor: Solution

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 mm No data.

Hg):

Vapor Density (vs. Air = 1): No data.

Specific Gravity (Water = 1): No data.

Solubility in Water: No data.

Autoignition Pt: 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.

To Avoid:

**10.6 Hazardous** No data available.

Decomposition or Byproducts:

Multi-region format



Page: 4 of 5

Revision: 06/08/2015 Supersedes Revision: 04/13/2010

Section 11. Toxicological Information

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

11.1 Information on Toxicological Effects:

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

CAS # Hazardous Components (Chemical Name) NTP IARC ACGIH OSHA

NA Methyltransferase Enzyme Mixture 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	Methyltransferase Enzyme Mixture	No	No	No
CAS#	Hazardayıa Campananta (Chamical Nama)	Other US EPA or State Lists		
CAS#	Hazardous Components (Chemical Name)	Other US EPA or S	State Lists	



Page: 5 of 5

Revision: 06/08/2015 Supersedes Revision: 04/13/2010

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:** 06/08/2015

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 Methyltransferase Colorimetric Mixture**

Page: 1 of 5

Revision: 06/04/2015 Supersedes Revision: 04/15/2010

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:** 700144

**Product Name:** Methyltransferase Colorimetric Mixture

**Synonyms:** MT Colorimetric Mixture;

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

CAS#/ RTECS#	Hazardous Components (Chemical Name)/ REACH Registration No.	Concentration	EC No./ EC Index No.	GHS Classification
NA NA	3,5-Dichloro-2-hydroxybenzenesulfonic acid	0.0 -50.0 %	NA NA	No data available.
NA NA	4-Aminoantipyrine	0.0 -50.0 %	NA NA	No data available.





## Methyltransferase Colorimetric Mixture

Revision: 06/04/2015 Supersedes Revision: 04/15/2010

#### 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:

CAS#	Partial Chemical Name	Britain EH40	France VL	Europe
NA	3,5-Dichloro-2-hydroxybenzenesulfonic	No data.	No data.	No data.

Multi-region format



**Methyltransferase Colorimetric Mixture** 

Revision: 06/04/2015 Supersedes Revision: 04/15/2010

	1	1	1	
	acid			
NA	4-Aminoantipyrine	No data.	No data.	No data.
CAS#	Partial Chemical Name	OSHA TWA	ACGIH TWA	Other Limits
NA	3,5-Dichloro-2-hydroxybenzenesulfonic acid	No data.	No data.	No data.
NA	4-Aminoantipyrine	No data.	No data.	No data.

8.2 **Exposure Controls:** 

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

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

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.

### Section 9. Physical and Chemical Properties

1	Information on Basic Physical and Chemical Properties	

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

A lyophilized powder of 3,5-dichloro-2-hydroxybenzenesulfonic acid and 4 aminoantipyrine **Appearance and Odor:** 

**Melting Point:** No data. No data. **Boiling Point:** No data. Flash Pt: **Evaporation Rate:** No data.

Flammability (solid, gas): No data available.

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

Vapor Pressure (vs. Air or mm No data.

Vapor Density (vs. Air = 1): No data. Specific Gravity (Water = 1): No data. No data. Solubility in Water: No data. **Autoignition Pt:** 

Page: 4 of 5



## SAFETY DATA SHEET Methyltransferase Colorimetric Mixture

Revision: 06/04/2015 Supersedes Revision: 04/15/2010

9.	2	Othor	Inform	nation
7.	_	Other	HIIOH	пашоп

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.

To Avoid:

**10.6 Hazardous** No data available.

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	3,5-Dichloro-2-hydroxybenzenesulfonic acid	n.a.	n.a.	n.a.	n.a.
NA	4-Aminoantipyrine	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:



## SAFETY DATA SHEET Methyltransferase Colorimetric Mixture

Page: 5 of 5

Revision: 06/04/2015 Supersedes Revision: 04/15/2010

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	3,5-Dichloro-2-hydroxybenzenesulfonic acid	No	No	No
NA	4-Aminoantipyrine	No	No	No

CAS#	Hazardous Components (Chemical Name)	Other US EPA or State Lists
NA	3,5-Dichloro-2-hydroxybenzenesulfonic acid	CAA HAP,ODC: No; CWA NPDES: No; TSCA: No; CA PROP.65: No
NA	4-Aminoantipyrine	CAA HAP,ODC: No; CWA NPDES: No; TSCA: No; 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:** 06/04/2015

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 Methyltransferase Assay AdoHcy Positive Control

Page: 1 of 5

Revision: 06/07/2015 Supersedes Revision: 04/13/2010

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:** 700145

**Product Name:** Methyltransferase Assay AdoHcy Positive Control

**Synonyms:** MT Assay AdoHcy Positive Control;

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

CAS#/ RTECS#	Hazardous Components (Chemical Name)/ REACH Registration No.	Concentration	EC No./ EC Index No.	GHS Classification
NA NA	Adenosylhomocysteine	0.04 %	NA NA	No data available.
7732-18-5 ZC0110000	Water	99.96 %	231-791-2 NA	No data available.



## SAFETY DATA SHEET Methyltransferase Assay AdoHcy Positive Control

Page: 2 of 5

Revision: 06/07/2015 Supersedes Revision: 04/13/2010

### 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.

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

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.

LEL: No data. **Explosive Limits:** 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 breathing vapors and provide adequate ventilation.

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

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

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

**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.

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

## Section 8. Exposure Controls/Personal Protection

#### 8.1 **Exposure Parameters:**

CAS#	Partial Chemical Name	Britain EH40	France VL	Europe
NA	Adenosylhomocysteine	No data.	No data.	No data.

Multi-region format



## Methyltransferase Assay AdoHcy Positive Control

Revision: 06/07/2015 Supersedes Revision: 04/13/2010

Page: 3 of 5

7732-18-5 Water No data. No data. No data. CAS# **Partial Chemical Name OSHA TWA ACGIH TWA Other Limits** No data. No data. No data. NA Adenosylhomocysteine 7732-18-5 No data. No data. No data. Water

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.

## Section 9. Physical and Chemical Properties

9.1	Information	on Basic	Physical and	Chemical	<b>Properties</b>
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Physical States: [ ] Gas [ X ] Liquid [ ] Solid

Appearance and Odor: Solution

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 mm No data.

Hq):

Vapor Density (vs. Air = 1): No data.

Specific Gravity (Water = 1): No data.

Solubility in Water: No data.

Autoignition Pt: 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.

To Avoid:

**10.6 Hazardous** No data available.





Methyltransferase Assay AdoHcy Positive Control

Revision: 06/07/2015 Supersedes Revision: 04/13/2010

**Decomposition or** 

**Byproducts:** 

## Section 11. Toxicological Information

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

**Toxicological Effects:** 

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

CAS # Hazardous Components (Chemical Name)		NTP	IARC	ACGIH	OSHA
NA	Adenosylhomocysteine	n.a.	n.a.	n.a.	n.a.
7732-18-5	Water	n.a.	n.a.	n.a.	n.a.

## Section 12. Ecological Information

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

Runoff from fire control or dilution water may cause pollution.

12.2 Persistence and No data available.

Degradability:

No data available. 12.3 **Bioaccumulative** 

Potential:

12.4 No data available. **Mobility in Soil:** 

12.5 Results of PBT and vPvB No data available.

assessment:

No data available. 12.6 Other adverse effects:

## Section 13. Disposal Considerations

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

## Section 14. Transport Information

#### LAND TRANSPORT (US DOT): 14.1

Not dangerous goods. **DOT Proper Shipping Name:** 

**DOT Hazard Class: UN/NA Number:** 

#### LAND TRANSPORT (European ADR/RID):

ADR/RID Shipping Name: Not dangerous goods.

**UN Number: Hazard Class:** 

#### **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	Adenosylhomocysteine	No	No	No
7732-18-5	Water	No	No	No



# SAFETY DATA SHEET Methyltransferase Assay AdoHcy Positive Control

Page: 5 of 5

Revision: 06/07/2015 Supersedes Revision: 04/13/2010

CAS#	Hazardous Components (Chemical Name)	Other US EPA or State Lists
NA	Adenosylhomocysteine	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:** 06/07/2015

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.



## Methyltransferase Assay S-Adenosylmethionine

Revision: 05/21/2015

Page: 1 of 5

Supersedes Revision: 04/13/2010

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:** 700146

Product Name: Methyltransferase Assay S-Adenosylmethionine

**Synonyms:** MT Assay SAM;

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:

2.1.1 Classification according to Regulation (EC) No 1272/2008 [CLP]:

2.2 Label Elements:

2.2.1 Labeling according to Regulation (EC) No 1272/2008 [CLP]:

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.

The toxicological properties of this product have not been fully evaluated.

## Section 3. Composition/Information on Ingredients

Hazardous Components (Chemical Name)/ REACH Registration No.	Concentration	EC No./ EC Index No.	GHS Classification
(3S)-5'-[(3-Amino-3-carboxypropyl)methylsulphonio]-5'-deoxyadenosine chloride	100.0 %	246-184-8 NA	No data available.



Methyltransferase Assay S-Adenosylmethionine

Revision: 05/21/2015 Supersedes Revision: 04/13/2010

Page: 2 of 5

### 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:

Flash Pt: No data.

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

**Autoignition Pt:** No data.

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

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

### 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,

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

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

**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.

Avoid prolonged or repeated exposure. in Handling:

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:**

CAS#	Partial Chemical Name	Britain EH40	France VL	Europe
24346-00-7	(3S)-5'-[(3-Amino-3-carboxypropyl)meth ylsulphonio]-5'-deoxyadenosine chloride	No data.	No data.	No data.

Multi-region format



**Methyltransferase Assay S-Adenosylmethionine** 

Revision: 05/21/2015

Page: 3 of 5

Supersedes Revision: 04/13/2010

CAS#	Partial Chemical Name	OSHA TWA	ACGIH TWA	Other Limits
24346-00-7	(3S)-5'-[(3-Amino-3-carboxypropyl)meth ylsulphonio]-5'-deoxyadenosine chloride	No data.	No data.	No data.

8.2 **Exposure Controls:** 

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

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

8.2.2 Personal protection equipment:

**Eye Protection:** Safety glasses

**Protective Gloves:** Compatible chemical-resistant gloves

Other Protective Clothing: Lab coat

NIOSH approved respirator, as conditions warrant. **Respiratory Equipment** 

(Specify Type):

Work/Hygienic/Maintenan Do not take internally.

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

Wash thoroughly after handling.

No data available.

## Section 9. Physical and Chemical Properties

9.1 Information on Basic Physical and Chemical Properties

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

A lyophilized powder Appearance and Odor:

**Melting Point:** No data. No data. **Boiling Point:** No data. Flash Pt: No data. **Evaporation Rate:** 

No data available. Flammability (solid, gas):

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

No data. Vapor Pressure (vs. Air or mm

Hg):

Vapor Density (vs. Air = 1): No data. Specific Gravity (Water = 1): No data. No data. Solubility in Water: **Autoignition Pt:** No data.

9.2 Other Information

> No data. Percent Volatile:

## Section 10. Stability and Reactivity

10.1 No data available. 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:** No data available.

10.5 Incompatibility - Materials strong oxidizing agents

To Avoid:

10.6 **Hazardous** carbon dioxide

carbon monoxide **Decomposition or** 

Multi-region format





## Methyltransferase Assay S-Adenosylmethionine

Revision: 05/21/2015 Supersedes Revision: 04/13/2010

Byproducts: nitrogen oxides

sulfur oxides

Section 11. Toxicological Information

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

**Toxicological Effects:** 

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

CAS#	Hazardous Components (Chemical Name)	NTP	IARC	ACGIH	OSHA
24346-00-7	(3S)-5'-[(3-Amino-3-carboxypropyl)methylsulphonio]-5'-deox yadenosine chloride	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)
24346-00-7	(3S)-5'-[(3-Amino-3-carboxypropyl)methylsulphoni o]-5'-deoxyadenosine chloride	No	No	No



## Methyltransferase Assay S-Adenosylmethionine

Revision: 05/21/2015

Page: 5 of 5

Supersedes Revision: 04/13/2010

CAS#	Hazardous Components (Chemical Name)	Other US EPA or State Lists
24346-00-7	(3S)-5'-[(3-Amino-3-carboxypropyl)methylsulphoni o]-5'-deoxyadenosine chloride	CAA HAP,ODC: No; CWA NPDES: No; TSCA: No; 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:** 05/21/2015

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** HCl Assay Reagent (20 mM)

Revision: 06/07/2015

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:** 700012

> **Product Name:** HCI Assay Reagent (20 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:

> CHEMTREC Within USA and Canada: **Emergency Contact:** +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

2.2 **Label Elements:** 

> **GHS Signal Word:** Warning

**GHS Hazard Phrases:** 

H316: Causes mild skin irritation.

**GHS Precaution Phrases:** 

No phrases apply.

**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:** 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.

## Section 3. Composition/Information on Ingredients

CAS#/ RTECS#	Hazardous Components (Chemical Name)/ REACH Registration No.	Concentration	EC No./ EC Index No.	GHS Classification
7647-01-0 MW4025000	Hydrochloric acid	0.17 %	231-595-7 017-002-00-2	Comp. Gas: H280 Skin Corr. 1A: H314 Acute Tox.(I) 3: H331
7732-18-5 ZC0110000	Water	99.83 %	231-791-2 NA	No data available.





## SAFETY DATA SHEET HCl Assay Reagent (20 mM)

Revision: 06/07/2015

#### 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 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.

## Section 8. Exposure Controls/Personal Protection

#### 8.1 Exposure Parameters:

CAS#	Partial Chemical Name	Britain EH40	France VL	Europe
7647-01-0	Hydrochloric acid	TWA: 2 mg/m3 (1 ppm) STEL: 8 mg/m3 (5 ppm)	STEL: 7.6 mg/m3 (5 ppm)	TWA: 8 mg/m3 STEL: 15 mg/m3
ĺ	'	'	'	Multi-region format

Page: 3 of 5



## **SAFETY DATA SHEET** HCl Assay Reagent (20 mM)

Revision: 06/07/2015

7732-18-5	Water	No data.	No data.	No data.
CAS#	Partial Chemical Name	OSHA TWA	ACGIH TWA	Other Limits
7647-01-0	Hydrochloric acid	CEIL: 5 ppm	CEIL: 2 ppm	No data.
7732-18-5	Water	No data.	No data.	No data.

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 and a safety shower.

Wash thoroughly after handling.

No data available.

## Section 9. Physical and Chemical Properties

9.1	Information on Basic Physical and Chemical Properties					
	Physical States:	[ ] Gas	[ X ] Liquid	[ ] Solid		
	Appearance and Odor:	Solution				
	Melting Point:	No data.				
	<b>Boiling Point:</b>	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 mm No data.

Ha):

Vapor Density (vs. Air = 1): No data.

Specific Gravity (Water = 1): No data.

Solubility in Water: No data.

Autoignition Pt: 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.

To Avoid:

**10.6 Hazardous** No data available.

**Decomposition or** 





## **SAFETY DATA SHEET** HCl Assay Reagent (20 mM)

Revision: 06/07/2015

Byproducts:

## Section 11. Toxicological Information

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

Toxicological Effects: Acetic acid - Toxicity Data: Oral LD50 (rabbit): 900 mg/kg; Inhalation LCLO (rabbit): 4413

ppm/30M; Inhalation LC50 (mouse): 8300 mg/m3/30M;

**Chronic Toxicological** Acetic acid - Investigated as a tumorigen, mutagen, and reproductive effector.

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

See actual entry in RTECS for complete information.

Acetic Acid RTECS Number: MW4025000

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

CAS#	Hazardous Components (Chemical Name)	NTP	IARC	ACGIH	OSHA
7647-01-0	Hydrochloric acid	n.a.	3	A4	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 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:





## **SAFETY DATA SHEET** HCl Assay Reagent (20 mM)

Revision: 06/07/2015

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)
7647-01-0	Hydrochloric acid	Yes 500 LB	Yes 5000 LB	Yes
7732-18-5	Water	No	No	No

CAS#	Hazardous Components (Chemical Name)	Other US EPA or State Lists		
7647-01-0	Hydrochloric acid	CAA HAP,ODC: HAP; CWA NPDES: No; TSCA: Yes - Inventory, 4 Test; 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:** 06/07/2015

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.

# **Product Information**



A Safety Data Sheet (SDS) on this material is not required as it is non-hazardous. However, we do recommend the following minimum precautions when using this item:

- Store at correct temperature.
- Dispose of by in accordance with federal, state, and local regulations.
- Wash thoroughly after handling.

#### **WARNING:**

This product is not intended or approved for human or veterinary use.

The above information is believed to be correct but should only be used as a guide. Cayman Chemical disclaims any express or implied warranty as to the accuracy of the above information and shall not be held liable for any direct, incidental, or consequential damages resulting from reliance on the above information.

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