

S-Glutathionylated Protein Detection Kit

Revision: 03/09/2016

Supersedes Revision: 05/10/2013

1. Product and Company Identification

Product Code: 10010721
Product Name: S-Glutathionylated Protein Detection Kit
Company Name: Cayman Chemical Company
 1180 E. Ellsworth Rd.
 Ann Arbor, MI 48108
Web site address: www.caymanchem.com
Emergency Contact: CHEMTREC Within USA and Canada: +1 (800)424-9300
 CHEMTREC Outside USA and Canada: +1 (703)527-3887
Information: Cayman Chemical Company +1 (734)971-3335
Intended Use: For research use only, not for human or veterinary use.

2. Hazards Identification

Acute Toxicity: Oral, Category 2
Skin Corrosion/Irritation, Category 1B
Serious Eye Damage/Eye Irritation, Category 1
Specific Target Organ Toxicity (single exposure), Category 3
Acute Toxicity: Inhalation, Category 4
Acute Toxicity: Skin, Category 3
Skin Sensitization, Category 1
Acute Toxicity: Oral, Category 4
Skin Corrosion/Irritation, Category 2
Respiratory Sensitization, Category 1


GHS Signal Word:
Danger
GHS Hazard Phrases:

Ingredient CAS# N/A, PSSG Assay Buffer (10X):

H302: Harmful if swallowed.

H316: Causes mild skin irritation.

H319: Causes serious eye irritation.

H335: May cause respiratory irritation.

Ingredient CAS# N/A, PSSG Blocking Reagent:

H332: Harmful if inhaled.

H300: Fatal if swallowed.

H311: Toxic in contact with skin.

H314: Causes severe skin burns and eye damage.

H317: May cause an allergic skin reaction.

Ingredient CAS# N/A, PSSG Lysis Buffer:

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

Ingredient CAS# N/A, PSSG Reduction Reagent:

H302: Harmful if swallowed.

H315: Causes skin irritation.

H318: Causes serious eye damage.

H335: May cause respiratory irritation.

GHS Precaution Phrases:

Ingredient CAS# N/A, PSSG Assay Buffer (10X):
P264: Wash hands thoroughly after handling.
P280: Wear protective gloves/clothing and eye/face protection as specified by the manufacturer/supplier or the competent authority.
P261: Avoid breathing dust/fume/gas/mist/vapours/spray.

Ingredient CAS# N/A, PSSG Blocking Reagent:
P264: Wash hands thoroughly after handling.
P280: Wear protective gloves/clothing and eye/face protection as specified by the manufacturer/supplier or the competent authority.
P361+364: Take off immediately all contaminated clothing and wash it before reuse.
P260: Do not breathe dust/fume/gas/mist/vapours/spray.
P272: Contaminated work clothing should not be allowed out of the workplace.
P362+364: Take off contaminated clothing and wash it before reuse.

Ingredient CAS# N/A, PSSG Reduction Reagent:
P264: Wash hands thoroughly after handling.
P280: Wear protective gloves/clothing and eye/face protection as specified by the manufacturer/supplier or the competent authority.
P362+364: Take off contaminated clothing and wash it before reuse.
P261: Avoid breathing dust/fume/gas/mist/vapours/spray.

GHS Response Phrases:

Ingredient CAS# N/A, PSSG Assay Buffer (10X):
P301+312: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P330: Rinse mouth.
P332+313: If skin irritation occurs, get medical advice/attention.
P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+313: If eye irritation persists, get medical advice/attention.
P309+311: Call a POISON CENTER or doctor/physician if exposed or you feel unwell.
P304+340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

Ingredient CAS# N/A, PSSG Blocking Reagent:
P304+340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P312: Call a POISON CENTER or doctor/physician if you feel unwell.
P301+310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P330: Rinse mouth.
P302+352: IF ON SKIN: Wash with plenty of soap and water.
P321: Specific treatment (see ... on this label) ... reference to supplemental first aid instruction - if immediate administration of antidote is required.
P303+361+353: IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.
P363: Wash contaminated clothing before reuse.
P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P301+330+331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P310: Immediately call a POISON CENTER or doctor/physician.
P333+313: If skin irritation or rash occurs, seek medical advice/attention.

Ingredient CAS# N/A, PSSG Reduction Reagent:
P301+312: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

P330: Rinse mouth.
P302+352: IF ON SKIN: Wash with plenty of soap and water.
P332+313: If skin irritation occurs, get medical advice/attention.
P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310: Immediately call a POISON CENTER or doctor/physician.
P309+311: Call a POISON CENTER or doctor/physician if exposed or you feel unwell.
P304+340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

GHS Storage and Disposal Phrases:

Ingredient CAS# N/A, PSSG Assay Buffer (10X):
Please refer to Section 7 for Storage and Section 13 for Disposal information.

Ingredient CAS# N/A, PSSG Blocking Reagent:
Please refer to Section 7 for Storage and Section 13 for Disposal information.

Ingredient CAS# N/A, PSSG Lysis Buffer:
Please refer to Section 7 for Storage and Section 13 for Disposal information.

Ingredient CAS# N/A, PSSG Reduction Reagent:
Please refer to Section 7 for Storage and Section 13 for Disposal information.

Potential Health Effects (Acute and Chronic):

Ingredient CAS# N/A, PSSG Assay Buffer (10X):
Causes mild skin irritation.
Causes respiratory system irritation.
Causes serious eye irritation.
Harmful if swallowed.
Material is irritating to the mucous membranes and upper respiratory tract.
May be harmful by inhalation or skin absorption.
To the best of our knowledge, the toxicological properties have not been thoroughly investigated.

Ingredient CAS# N/A, PSSG Blocking Reagent:
Causes severe skin burns and eye damage.
Fatal if swallowed.
Harmful if inhaled.
Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract.
May cause allergic skin reaction.
Toxic in contact with skin.
To the best of our knowledge, the toxicological properties have not been thoroughly investigated.

Ingredient CAS# N/A, PSSG Lysis Buffer:
Material may be irritating to the mucous membranes and upper respiratory tract.
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.

Ingredient CAS# N/A, PSSG Reduction Reagent:
Causes serious eye damage.
Causes skin or respiratory system irritation.
Harmful if swallowed.

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Material is irritating to the mucous membranes and upper respiratory tract.
 May be harmful by inhalation or skin absorption.
 To the best of our knowledge, the toxicological properties have not been thoroughly investigated.

3. Composition/Information on Ingredients

CAS #	Hazardous Components (Chemical Name)	Concentration	RTECS #
NA	PSSG Assay Buffer (10X)	17.821 %	NA
NA	PSSG Blocking Reagent	66.829 %	NA
NA	PSSG Lysis Buffer	4.455 %	NA
NA	PSSG Reduction Reagent	10.131 %	NA
NA	PSSG Labeling Reagent	0.668 %	NA
NA	PSSG Detection Reagent I (HRP)	0.058 %	NA
NA	PSSG Detection Reagent II (FITC)	0.037 %	NA

4. First Aid Measures

Emergency and First Aid

Procedures:

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 20 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 20 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.

Signs and Symptoms Of

Exposure: Ingredient CAS# N/A, PSSG Blocking Reagent:
 Exposure may cause: coughing and stomach pains.
 Eye contact may result in pain, redness, and watering.
 Skin contact may result in redness, pain, or blistering.

5. Fire Fighting Measures

Flash Pt: No data.

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

Autoignition Pt: No data.

Suitable Extinguishing Media: Use alcohol-resistant foam, carbon dioxide, water, or dry chemical spray.
 Use water spray to cool fire-exposed containers.

Unsuitable Extinguishing Media: A solid water stream may be inefficient.

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.

Flammable Properties and Hazards: Ingredient CAS# N/A, PSSG Blocking Reagent:
 Combustible solid.

No data available.

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6. Accidental Release Measures

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).
Environmental Precautions: Take steps to avoid release into the environment, if safe to do so.
Steps To Be Taken In Case Contain spill and collect, as appropriate.
Material Is Released Or Spilled: Transfer to a chemical waste container for disposal in accordance with local regulations.

7. Handling and Storage

Precautions To Be Taken in Avoid breathing dust/fume/gas/mist/vapours/spray.
Handling: Avoid prolonged or repeated exposure.
Precautions To Be Taken in Keep container tightly closed.
Storing: Store in accordance with information listed on the product insert.

8. Exposure Controls/Personal Protection

CAS #	Partial Chemical Name	OSHA TWA	ACGIH TWA	Other Limits
NA	PSSG Assay Buffer (10X)	No data.	No data.	No data.
NA	PSSG Blocking Reagent	No data.	No data.	No data.
NA	PSSG Lysis Buffer	No data.	No data.	No data.
NA	PSSG Reduction Reagent	No data.	No data.	No data.
NA	PSSG Labeling Reagent	No data.	No data.	No data.
NA	PSSG Detection Reagent I (HRP)	No data.	No data.	No data.
NA	PSSG Detection Reagent II (FITC)	No data.	No data.	No data.

Respiratory Equipment (Specify Type): NIOSH approved respirator, as conditions warrant.
Eye Protection: Safety glasses
Protective Gloves: Compatible chemical-resistant gloves
Other Protective Clothing: Lab coat
Engineering Controls (Ventilation etc.): Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.
Work/Hygienic/Maintenance Practices: Do not take internally.
 Facilities storing or utilizing this material should be equipped with an eyewash and a safety shower.
 Wash thoroughly after handling.

9. Physical and Chemical Properties

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

Appearance and Odor: Ingredient CAS# N/A, PSSG Blocking Reagent:
 A crystalline solid

Ingredient CAS# N/A, PSSG Reduction Reagent:
 A lyophilized powder

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 Hg): No data.

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

Specific Gravity (Water = 1): No data.

Solubility in Water: No data.

Percent Volatile: No data.

Autoignition Pt: No data.

10. Stability and Reactivity

Stability: Unstable [] Stable [X]

Conditions To Avoid: No data available.

Incompatibility - Materials To Avoid: Ingredient CAS# N/A, PSSG Blocking Reagent:
 strong acids
 strong bases
 strong oxidizing agents

Hazardous Decomposition or Byproducts: Ingredient CAS# N/A, PSSG Blocking Reagent:
 carbon dioxide
 carbon monoxide
 nitrogen oxides

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

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

11. Toxicological Information

Toxicological Information: The toxicological effects of this product have not been thoroughly studied.

CAS #	Hazardous Components (Chemical Name)	NTP	IARC	ACGIH	OSHA
NA	PSSG Assay Buffer (10X)	n.a.	n.a.	n.a.	n.a.
NA	PSSG Blocking Reagent	n.a.	n.a.	n.a.	n.a.
NA	PSSG Lysis Buffer	n.a.	n.a.	n.a.	n.a.
NA	PSSG Reduction Reagent	n.a.	n.a.	n.a.	n.a.
NA	PSSG Labeling Reagent	n.a.	n.a.	n.a.	n.a.
NA	PSSG Detection Reagent I (HRP)	n.a.	n.a.	n.a.	n.a.
NA	PSSG Detection Reagent II (FITC)	n.a.	n.a.	n.a.	n.a.

12. Ecological Information

General Ecological Information: Avoid release into the environment.
 Runoff from fire control or dilution water may cause pollution.

13. Disposal Considerations

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

14. Transport Information

LAND TRANSPORT (US DOT):

DOT Proper Shipping Name: Ingredient CAS# N/A, PSSG Blocking Reagent:
 Toxic solids, corrosive, organic, n.o.s. (N-Ethylmaleimide)

DOT Hazard Class: 6.1 (8) POISON, CORROSIVE

UN/NA Number: 2928 **Packing Group:** II



LAND TRANSPORT (European ADR/RID):

ADR/RID Shipping Name: Ingredient CAS# N/A, PSSG Blocking Reagent:
 Toxic solids, corrosive, organic, n.o.s. (N-Ethylmaleimide)

UN Number: 2928 **Packing Group:** II

Hazard Class: 6.1 (8) - POISON, CORROSIVE

AIR TRANSPORT (ICAO/IATA):

ICAO/IATA Shipping Name: Ingredient CAS# N/A, PSSG Blocking Reagent:
 Toxic solids, corrosive, organic, n.o.s. (N-Ethylmaleimide)

UN Number: 2928 **Packing Group:** II

Hazard Class: 6.1 (8) - POISON, CORROSIVE **IATA Classification:** 6.1(8)

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

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	PSSG Assay Buffer (10X)	No	No	No
NA	PSSG Blocking Reagent	No	No	No
NA	PSSG Lysis Buffer	No	No	No
NA	PSSG Reduction Reagent	No	No	No



SAFETY DATA SHEET

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NA	PSSG Labeling Reagent	No	No	No
NA	PSSG Detection Reagent I (HRP)	No	No	No
NA	PSSG Detection Reagent II (FITC)	No	No	No

CAS #	Hazardous Components (Chemical Name)	Other US EPA or State Lists
NA	PSSG Assay Buffer (10X)	CAA HAP,ODC: No; CWA NPDES: No; TSCA: No; CA PROP.65: No
NA	PSSG Blocking Reagent	CAA HAP,ODC: No; CWA NPDES: No; TSCA: No; CA PROP.65: No
NA	PSSG Lysis Buffer	CAA HAP,ODC: No; CWA NPDES: No; TSCA: No; CA PROP.65: No
NA	PSSG Reduction Reagent	CAA HAP,ODC: No; CWA NPDES: No; TSCA: No; CA PROP.65: No
NA	PSSG Labeling Reagent	CAA HAP,ODC: No; CWA NPDES: No; TSCA: No; CA PROP.65: No
NA	PSSG Detection Reagent I (HRP)	CAA HAP,ODC: No; CWA NPDES: No; TSCA: No; CA PROP.65: No
NA	PSSG Detection Reagent II (FITC)	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.

16. Other Information

Revision Date:

03/09/2016

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.