

• SAFETY DATA SHEET

Version 9.0
Revision Date 09/25/2025
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SECTION 1. IDENTIFICATION

1.1 Product identifiers

Product name : OxyBlot™ Protein Oxidation Detection Kit
Product Number : S7150
Catalogue No. : 637879
Brand : Millipore

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

Identified uses : Biochemical research/analysis
Uses advised against :

The product is being supplied under the TSCA R&D Exemption (40 CFR Section 720.36). It is the recipient's responsibility to comply with the requirements of the R&D exemption. The product may not be used for a non-exempt commercial purpose under TSCA unless appropriate consent is granted in writing by MilliporeSigma.

1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich Inc.
3050 SPRUCE ST
ST. LOUIS MO 63103
UNITED STATES
Telephone : +1 314 771-5765
Fax : +1 800 325-5052

1.4 Emergency telephone number

Emergency Phone # : 800-424-9300 CHEMTREC (USA) +1-703-527-3887 CHEMTREC (International) 24 Hours/day; 7 Days/week

This is a summary SDS for a kit. For the full SDS for each of the components listed in section 16 please visit our website.

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SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200)

Hazards for the product as supplied

Corrosive to metals : Category 1
Skin sensitisation : Category 1
Short-term (acute) aquatic hazard : Category 3

Other hazards

None known.

GHS label elements

Hazard pictograms : 

Signal Word : Warning

Hazard Statements : H290 May be corrosive to metals.
H317 May cause an allergic skin reaction.
H402 Harmful to aquatic life.

Precautionary statements : **Prevention:**
P234 Keep only in original packaging.
P261 Avoid breathing mist or vapours.
P272 Contaminated work clothing must not be allowed out of the workplace.
P273 Avoid release to the environment.
P280 Wear protective gloves.
Response:
P302 + P352 IF ON SKIN: Wash with plenty of water.
P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.
P390 Absorb spillage to prevent material damage.
Storage:
P406 Store in a corrosion resistant container with a resistant inner liner.
Disposal:
P501 Dispose of contents/ container to an approved waste disposal plant.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Refer to component SDS

SECTION 4. FIRST AID MEASURES

Refer to component SDS

SECTION 5. FIREFIGHTING MEASURES

Refer to component SDS

SECTION 6. ACCIDENTAL RELEASE MEASURES

Refer to component SDS

SECTION 7. HANDLING AND STORAGE

For precautions see section 2.2.

Conditions for safe storage : No metal containers.

Further information on storage conditions : Tightly closed.

Storage class : 10, Combustible liquids

Recommended storage temperature : Recommended storage temperature see product label.

Further information on storage stability : Recommended storage temperature see product label.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Refer to component SDS

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Refer to component SDS

SECTION 10. STABILITY AND REACTIVITY

Refer to component SDS

SECTION 11. TOXICOLOGICAL INFORMATION

Refer to component SDS

SECTION 12. ECOLOGICAL INFORMATION

Refer to component SDS

SECTION 13. DISPOSAL CONSIDERATIONS

Refer to component SDS

SECTION 14. TRANSPORT INFORMATION

International Regulations

IATA-DGR

UN/ID No. : UN 3316
Proper shipping name : Chemical kit
Class : 9
Packing group : II
Labels : Class 9 - Miscellaneous dangerous substances and articles
Packing instruction (cargo aircraft) : 960
Packing instruction (passenger aircraft) : 960

IMDG-Code

UN number : UN 3316
Proper shipping name : CHEMICAL KIT

Class : 9
Packing group : II
Labels : 9
EmS Code : F-A, S-P
Marine pollutant : no

Transport in bulk according to IMO instruments

Not applicable for product as supplied.

National Regulations

49 CFR Road

UN/ID/NA number : UN 3316
Proper shipping name : Chemical kits

Class : 9
Packing group : II
Labels : Class 9 - Miscellaneous dangerous substances and articles
ERG Code : 171
Marine pollutant : no

Poison Inhalation Hazard : No

Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

SECTION 15. REGULATORY INFORMATION

CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

Components	CAS-No.	Component TPQ (lbs)
1X 2, 4-Dinitrophenylhydrazine	Not Assigned	
Neutralization Solution	Not Assigned	
Mixture of Standard Proteins (Store at -25°C to -15°C upon receipt)	Not Assigned	
1° Antibody: Rb X DNP Antibody	Not Assigned	
2° Antibody: Gt X Rb IgG (HRP - Conjugated)	Not Assigned	
1X Derivatization-Control Solution	7647-01-0	

SARA 313 : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Clean Air Act

Warning: Manufactured with 1° Antibody: Rb X DNP Antibody, 2° Antibody: Gt X Rb IgG (HRP - Conjugated), a substance which harms public health and environment by destroying ozone in the upper atmosphere.

40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances Ozone-Depletion Potential

40 CFR Protection of :
Environment; Part 82
Protection of
Stratospheric Ozone -
CAA Section 602 Class I
SubstancesOzone-
Depletion Potential

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

The following chemical(s) are listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F):

1° Antibody: Rb X	Not Assigned	>= 90 - <= 100 %
DNP Antibody		
2° Antibody: Gt X Rb	Not Assigned	>= 90 - <= 100 %
IgG (HRP - Conjugated)		

The following chemical(s) are listed under the U.S. Clean Air Act Section 111 SOCM I Intermediate or Final VOC's (40 CFR 60.489):

1° Antibody: Rb X	Not Assigned	>= 90 - <= 100 %
DNP Antibody		
2° Antibody: Gt X Rb	Not Assigned	>= 90 - <= 100 %
IgG (HRP - Conjugated)		

Clean Water Act

The following Hazardous Substances are listed under the U.S. CleanWater Act, Section 311, Table 116.4A:

1° Antibody: Rb X	Not Assigned	>= 90 - <= 100 %
DNP Antibody		
2° Antibody: Gt X Rb	Not Assigned	>= 90 - <= 100 %
IgG (HRP - Conjugated)		

The following Hazardous Chemicals are listed under the U.S. CleanWater Act, Section 311, Table 117.3:

1° Antibody: Rb X	Not Assigned	>= 90 - <= 100 %
DNP Antibody		
2° Antibody: Gt X Rb	Not Assigned	>= 90 - <= 100 %
IgG (HRP - Conjugated)		

This product contains the following toxic pollutants listed under the U.S. Clean Water Act Section 307

1° Antibody: Rb X	Not Assigned	>= 90 - <= 100 %
DNP Antibody		
2° Antibody: Gt X Rb	Not Assigned	>= 90 - <= 100 %
IgG (HRP - Conjugated)		

This product contains the following priority pollutants related to the U.S. Clean Water Act:

1° Antibody: Rb X	Not Assigned	>= 90 - <= 100 %
DNP Antibody		

2°Antibody: Gt X Rb Not Assigned >= 90 - <= 100 %
IgG (HRP -
Conjugated)

US State Regulations

Massachusetts Right To Know

Neutralization Solution Not Assigned
Mixture of Standard Proteins (Store at -25°C to -15°C upon receipt) Not Assigned
1X 2, 4- Dinitrophenylhydrazine Not Assigned
1° Antibody: Rb X DNP Antibody Not Assigned
2°Antibody: Gt X Rb IgG (HRP - Conjugated) Not Assigned
1X Derivatization-Control Solution 7647-01-0

Pennsylvania Right To Know

Neutralization Solution Not Assigned
Mixture of Standard Proteins (Store at -25°C to -15°C upon receipt) Not Assigned
1X 2, 4- Dinitrophenylhydrazine Not Assigned
1° Antibody: Rb X DNP Antibody Not Assigned
1X Derivatization-Control Solution 7647-01-0

Maine Chemicals of High Concern

Neutralization Solution Not Assigned
Mixture of Standard Proteins (Store at -25°C to -15°C upon receipt) Not Assigned
1X 2, 4- Dinitrophenylhydrazine Not Assigned
1° Antibody: Rb X DNP Antibody Not Assigned
2°Antibody: Gt X Rb IgG (HRP - Conjugated) Not Assigned
1X Derivatization-Control Solution 7647-01-0

Vermont Chemicals of High Concern

1X 2, 4- Dinitrophenylhydrazine Not Assigned
Neutralization Solution Not Assigned
Mixture of Standard Proteins (Store at -25°C to -15°C upon receipt) Not Assigned
1° Antibody: Rb X DNP Antibody Not Assigned
2°Antibody: Gt X Rb IgG (HRP - Conjugated) Not Assigned
1X Derivatization-Control Solution 7647-01-0

Washington Chemicals of High Concern

1X 2, 4- Dinitrophenylhydrazine Not Assigned
Neutralization Solution Not Assigned
Mixture of Standard Proteins (Store at -25°C to -15°C upon receipt) Not Assigned
1° Antibody: Rb X DNP Antibody Not Assigned
2°Antibody: Gt X Rb IgG (HRP - Conjugated) Not Assigned
1X Derivatization-Control Solution 7647-01-0

The components of this product are reported in the following inventories:

TSCA : Product contains substance(s) not listed on TSCA inventory.

TSCA list

The following substance(s) is/are subject to a Significant New Use Rule:

1X 2, 4- Dinitrophenylhydrazine	Not Assigned
Neutralization Solution	Not Assigned
Mixture of Standard Proteins (Store at -25°C to -15°C upon receipt)	Not Assigned
1° Antibody: Rb X DNP Antibody	Not Assigned
2°Antibody: Gt X Rb IgG (HRP - Conjugated)	Not Assigned
1X Derivatization-Control Solution	7647-01-0

The following substance(s) is/are subject to TSCA 12(b) export notification requirements:

1X 2, 4- Dinitrophenylhydrazine	Not Assigned
Neutralization Solution	Not Assigned
Mixture of Standard Proteins (Store at -25°C to -15°C upon receipt)	Not Assigned
1° Antibody: Rb X DNP Antibody	Not Assigned
2°Antibody: Gt X Rb IgG (HRP - Conjugated)	Not Assigned
1X Derivatization-Control Solution	7647-01-0

SECTION 16. OTHER INFORMATION

Kit Components:

1X 2, 4- Dinitrophenylhydrazine	Sigma-Aldrich	90448M
Neutralization Solution		90449
Mixture of Standard Proteins (Store at -25°C to -15°C upon receipt)	Sigma-Aldrich	90450M
1° Antibody: Rb X DNP Antibody	Sigma-Aldrich	90451M
2°Antibody: Gt X Rb IgG (HRP - Conjugated)		90452
1X Derivatization-Control Solution		90463

Relevant changes since previous version

7. Handling and storage

Full text of other abbreviations

AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response,

Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonised System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organisation; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardisation; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organisation for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

The information is believed to be correct but is not exhaustive and will be used solely as a guideline, which is based on current knowledge of the chemical substance or mixture and is applicable to appropriate safety precautions for the product. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

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The branding on the header and/or footer of this document may temporarily not visually match the product purchased as we transition our branding. However, all of the information in the document regarding the product remains unchanged and matches the product ordered. For further information please contact mlsbranding@sial.com.

Kit Components:

1X 2, 4- Dinitrophenylhydrazine					
Product identifier	Pictogram	Signal Word	Hazard Statements	Precautionary statements	Supplemental information
Sigma-Aldrich - 90448M		Warning	May be corrosive to metals.	Keep only in original packaging. Absorb spillage to prevent material damage. Store in a corrosion resistant container with a resistant inner liner.	

Neutralization Solution					
Product identifier	Pictogram	Signal Word	Hazard Statements	Precautionary statements	Supplemental information
90449 -					Not a hazardous substance or mixture.

Mixture of Standard Proteins (Store at -25°C to -15°C upon receipt)					
Product identifier	Pictogram	Signal Word	Hazard Statements	Precautionary statements	Supplemental information
Sigma-Aldrich - 90450M					Not a hazardous substance or mixture.

1° Antibody: Rb X DNP Antibody					
Product identifier	Pictogram	Signal Word	Hazard Statements	Precautionary statements	Supplemental information
Sigma-Aldrich - 90451M		Warning	May cause an allergic skin reaction. Harmful to aquatic life.	Avoid breathing mist or vapours. IF ON SKIN: Wash with plenty of soap and water. Dispose of contents/ container to an approved waste	

				disposal plant. Contaminated work clothing must not be allowed out of the workplace. If skin irritation or rash occurs: Get medical advice/ attention. Avoid release to the environment. Wash contaminated clothing before reuse. Wear protective gloves.	
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2°Antibody: Gt X Rb IgG (HRP - Conjugated)					
Product identifier	Pictogram	Signal Word	Hazard Statements	Precautionary statements	Supplemental information
90452 -		Warning	May cause an allergic skin reaction. Harmful to aquatic life.	Avoid breathing mist or vapours. IF ON SKIN: Wash with plenty of soap and water. Dispose of contents/ container to an approved waste disposal plant. Contaminated work clothing must not be allowed out of the workplace. If skin irritation or rash occurs: Get medical advice/ attention. Avoid release to the environment. Wash contaminated clothing before reuse. Wear	

				protective gloves.	
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1X Derivatization-Control Solution

Product identifier	Pictogram	Signal Word	Hazard Statements	Precautionary statements	Supplemental information
90463 -		Warning	May be corrosive to metals.	Keep only in original packaging. Absorb spillage to prevent material damage. Store in a corrosion resistant container with a resistant inner liner.	