

• SAFETY DATA SHEET

Version 7.1
Revision Date 10/14/2025
Print Date 10/15/2025

SECTION 1. IDENTIFICATION

1.1 Product identifiers

Product name : Duolink® In Situ Red Starter Kit
Mouse/Rabbit

Product Number : DUO92101

Brand : Sigma

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

Identified uses : Laboratory chemicals, Synthesis of substances

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.

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.

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

Respiratory sensitisation : Category 1

Skin sensitisation : Category 1

Sigma - DUO92101

Page 1 of 15

The life science business of Merck KGaA, Darmstadt, Germany
operates as MilliporeSigma in the US and Canada

Millipore
Sigma

Short-term (acute) aquatic hazard : Category 2

Long-term (chronic) aquatic hazard : Category 2

Other hazards

None known.

GHS label elements



Signal Word : Danger

Hazard Statements : H290 May be corrosive to metals.
H317 May cause an allergic skin reaction.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H411 Toxic to aquatic life with long lasting effects.

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.
P285 In case of inadequate ventilation wear respiratory protection.

Response:

P302 + P352 IF ON SKIN: Wash with plenty of water.
P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.
P342 + P311 If experiencing respiratory symptoms: Call a POISON CENTER/ doctor.
P390 Absorb spillage to prevent material damage.
P391 Collect spillage.

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.

Advice on safe handling	: Work under hood. Do not inhale substance/mixture. Avoid generation of vapours/aerosols.
Conditions for safe storage	: Keep container tightly closed in a dry and well-ventilated place. No metal containers.
Further information on storage conditions	: Tightly closed. Keep locked up or in an area accessible only to qualified or authorised persons.
Storage class	: 10, Combustible liquids
Recommended storage temperature	: -4 °F / -20 °C

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

Sigma - DUO92101

Page 3 of 15

The life science business of Merck KGaA, Darmstadt, Germany
operates as MilliporeSigma in the US and Canada

**Millipore
Sigma**

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	:	III
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	:	III
Labels	:	9
EmS Code	:	F-A, <u>S-P</u>
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	:	III
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)
Duolink® In Situ PLA® Probe Anti-Rabbit PLUS	Not Assigned	
Duolink® In Situ PLA® Probe Anti-Mouse MINUS	Not Assigned	
Duolink® In Situ Detection Reagents Red	Not Assigned	
Duolink® In Situ Wash Buffers, Fluorescence	Not Assigned	
Duolink® In Situ Mounting Medium with DAPI	Not Assigned	

SARA 311/312 Hazards : Acute Health Hazard
Chronic Health Hazard

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 Duolink® In Situ PLA® Probe Anti-Rabbit PLUS, Duolink® In Situ PLA® Probe Anti-Mouse MINUS, Duolink® In Situ Detection Reagents Red, Duolink® In Situ Wash Buffers, Fluorescence, Duolink® In Situ Mounting Medium with DAPI, 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
SubstancesOzone-
Depletion Potential

40 CFR Protection of : Environment; Part 82

Protection of
Stratospheric Ozone -
CAA Section 602 Class I
SubstancesOzone-
Depletion Potential

40 CFR Protection of : Environment; Part 82

Protection of
Stratospheric Ozone -
CAA Section 602 Class I
SubstancesOzone-
Depletion Potential

40 CFR Protection of : Environment; Part 82

Protection of
Stratospheric Ozone -
CAA Section 602 Class I
SubstancesOzone-
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):

Duolink® In Situ	Not Assigned	$\geq 90 - \leq 100 \%$
Mounting Medium		
with DAPI		
Duolink® In Situ	Not Assigned	$\geq 90 - \leq 100 \%$
Wash Buffers,		
Fluorescence		

Duolink® In Situ PLA® Probe Anti-Rabbit PLUS	Not Assigned	$\geq 90 - \leq 100 \%$
Duolink® In Situ PLA® Probe Anti-Mouse MINUS	Not Assigned	$\geq 90 - \leq 100 \%$
Duolink® In Situ Detection Reagents Red	Not Assigned	$\geq 90 - \leq 100 \%$

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

Duolink® In Situ Mounting Medium with DAPI	Not Assigned	$\geq 90 - \leq 100 \%$
Duolink® In Situ Wash Buffers, Fluorescence	Not Assigned	$\geq 90 - \leq 100 \%$
Duolink® In Situ PLA® Probe Anti-Rabbit PLUS	Not Assigned	$\geq 90 - \leq 100 \%$
Duolink® In Situ PLA® Probe Anti-Mouse MINUS	Not Assigned	$\geq 90 - \leq 100 \%$
Duolink® In Situ Detection Reagents Red	Not Assigned	$\geq 90 - \leq 100 \%$

Clean Water Act

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

Duolink® In Situ Mounting Medium with DAPI	Not Assigned	$\geq 90 - \leq 100 \%$
Duolink® In Situ Wash Buffers, Fluorescence	Not Assigned	$\geq 90 - \leq 100 \%$
Duolink® In Situ PLA® Probe Anti-Rabbit PLUS	Not Assigned	$\geq 90 - \leq 100 \%$
Duolink® In Situ PLA® Probe Anti-Mouse MINUS	Not Assigned	$\geq 90 - \leq 100 \%$
Duolink® In Situ Detection Reagents Red	Not Assigned	$\geq 90 - \leq 100 \%$

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

Duolink® In Situ Mounting Medium with DAPI	Not Assigned	$\geq 90 - \leq 100 \%$
--	--------------	-------------------------

Duolink® In Situ Wash Buffers, Fluorescence	Not Assigned	>= 90 - <= 100 %
Duolink® In Situ PLA® Probe Anti-Rabbit PLUS	Not Assigned	>= 90 - <= 100 %
Duolink® In Situ PLA® Probe Anti-Mouse MINUS	Not Assigned	>= 90 - <= 100 %
Duolink® In Situ Detection Reagents Red	Not Assigned	>= 90 - <= 100 %

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

Duolink® In Situ Mounting Medium with DAPI	Not Assigned	>= 90 - <= 100 %
Duolink® In Situ Wash Buffers, Fluorescence	Not Assigned	>= 90 - <= 100 %
Duolink® In Situ PLA® Probe Anti-Rabbit PLUS	Not Assigned	>= 90 - <= 100 %
Duolink® In Situ PLA® Probe Anti-Mouse MINUS	Not Assigned	>= 90 - <= 100 %
Duolink® In Situ Detection Reagents Red	Not Assigned	>= 90 - <= 100 %

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

Duolink® In Situ Mounting Medium with DAPI	Not Assigned	>= 90 - <= 100 %
Duolink® In Situ Wash Buffers, Fluorescence	Not Assigned	>= 90 - <= 100 %
Duolink® In Situ PLA® Probe Anti-Rabbit PLUS	Not Assigned	>= 90 - <= 100 %
Duolink® In Situ PLA® Probe Anti-Mouse MINUS	Not Assigned	>= 90 - <= 100 %
Duolink® In Situ Detection Reagents Red	Not Assigned	>= 90 - <= 100 %

US State Regulations

Massachusetts Right To Know

Duolink® In Situ Mounting Medium with DAPI	Not Assigned
Duolink® In Situ Wash Buffers, Fluorescence	Not Assigned
Duolink® In Situ PLA® Probe Anti-Rabbit PLUS	Not Assigned
Duolink® In Situ PLA® Probe Anti-Mouse MINUS	Not Assigned

Duolink® In Situ Detection Reagents Red	Not Assigned
Pennsylvania Right To Know	
Duolink® In Situ Mounting Medium with DAPI	Not Assigned
Duolink® In Situ Detection Reagents Red	Not Assigned
Maine Chemicals of High Concern	
Duolink® In Situ Mounting Medium with DAPI	Not Assigned
Duolink® In Situ Wash Buffers, Fluorescence	Not Assigned
Duolink® In Situ PLA® Probe Anti-Rabbit PLUS	Not Assigned
Duolink® In Situ PLA® Probe Anti-Mouse MINUS	Not Assigned
Duolink® In Situ Detection Reagents Red	Not Assigned
Vermont Chemicals of High Concern	
Duolink® In Situ PLA® Probe Anti-Rabbit PLUS	Not Assigned
Duolink® In Situ PLA® Probe Anti-Mouse MINUS	Not Assigned
Duolink® In Situ Detection Reagents Red	Not Assigned
Duolink® In Situ Wash Buffers, Fluorescence	Not Assigned
Duolink® In Situ Mounting Medium with DAPI	Not Assigned
Washington Chemicals of High Concern	
Duolink® In Situ PLA® Probe Anti-Rabbit PLUS	Not Assigned
Duolink® In Situ PLA® Probe Anti-Mouse MINUS	Not Assigned
Duolink® In Situ Detection Reagents Red	Not Assigned
Duolink® In Situ Wash Buffers, Fluorescence	Not Assigned
Duolink® In Situ Mounting Medium with DAPI	Not Assigned

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:

Duolink® In Situ PLA® Probe	Not Assigned
Anti-Rabbit PLUS	
Duolink® In Situ PLA® Probe	Not Assigned
Anti-Mouse MINUS	
Duolink® In Situ Detection Reagents Red	Not Assigned
Duolink® In Situ Wash Buffers, Fluorescence	Not Assigned
Duolink® In Situ Mounting Medium with DAPI	Not Assigned

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

Duolink® In Situ PLA® Probe	Not Assigned
Anti-Rabbit PLUS	
Duolink® In Situ PLA® Probe	Not Assigned
Anti-Mouse MINUS	
Duolink® In Situ Detection Reagents Red	Not Assigned
Duolink® In Situ Wash Buffers,	Not Assigned

Fluorescence
Duolink® In Situ Mounting
Medium with DAPI Not Assigned

SECTION 16. OTHER INFORMATION

Kit Components:

Duolink® In Situ PLA®	Sigma	DUO92002
Probe Anti-Rabbit PLUS		
Duolink® In Situ PLA®	Sigma	DUO92004
Probe Anti-Mouse MINUS		
Duolink® In Situ	Sigma	DUO92008
Detection Reagents Red		
Duolink® In Situ Wash	Sigma	DUO82049
Buffers, Fluorescence		
Duolink® In Situ	Sigma	DUO82040
Mounting Medium with		
DAPI		

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

Copyright 2025 Sigma-Aldrich Co. LLC. License granted to make unlimited paper copies for internal use only.

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.

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.

Copyright 2025 Sigma-Aldrich Co. LLC. License granted to make unlimited paper copies for internal use only.

Revision Date : 10/14/2025

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.

US / EN

Kit Components:

Duolink® In Situ PLA® Probe Anti-Rabbit PLUS					
Product identifier	Pictogram	Signal Word	Hazard Statements	Precautionary statements	Supplemental information
Sigma - DUO92002		Warning	May cause an allergic skin reaction. Toxic to aquatic life with long lasting effects.	Avoid breathing mist or vapours. IF ON SKIN: Wash with plenty of 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. Take off contaminated clothing and wash it before reuse. Wear protective gloves. Collect spillage.	

Duolink® In Situ PLA® Probe Anti-Mouse MINUS					
Product identifier	Pictogram	Signal Word	Hazard Statements	Precautionary statements	Supplemental information
Sigma - DUO92004		Warning	May cause an allergic skin reaction. Toxic to aquatic life with long	Avoid breathing mist or vapours. IF ON SKIN: Wash with plenty of water.	

			lasting effects.	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. Take off contaminated clothing and wash it before reuse. Wear protective gloves. Collect spillage.	
--	--	--	------------------	---	--

Duolink® In Situ Detection Reagents Red					
Product identifier	Pictogram	Signal Word	Hazard Statements	Precautionary statements	Supplemental information
Sigma - DUO92008		Danger	May cause allergy or asthma symptoms or breathing difficulties if inhaled. Harmful to aquatic life with long lasting effects.	Avoid breathing mist or vapours. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Dispose of contents/ container to an approved waste disposal plant. Avoid release to the environment. If experiencing respiratory symptoms: Call a POISON CENTER/ doctor. In case of	

Sigma - DUO92101

Page 13 of 15

The life science business of Merck KGaA, Darmstadt, Germany operates as MilliporeSigma in the US and Canada

Millipore
Sigma

				inadequate ventilation wear respiratory protection.	
--	--	--	--	---	--

Duolink® In Situ Wash Buffers, Fluorescence

Product identifier	Pictogram	Signal Word	Hazard Statements	Precautionary statements	Supplemental information
Sigma - DUO82049					No hazard pictogram, no signal word, no hazard statement(s), no precautionary statement(s) required.

Duolink® In Situ Mounting Medium with DAPI

Product identifier	Pictogram	Signal Word	Hazard Statements	Precautionary statements	Supplemental information
Sigma - DUO82040		Warning	May be corrosive to metals. May cause an allergic skin reaction. Harmful to aquatic life with long lasting effects.	Keep only in original packaging. IF ON SKIN: Wash with plenty of water. Store in a corrosion resistant container with a resistant inner liner. Dispose of contents/container to an approved waste disposal plant. Avoid breathing mist or vapours. If skin irritation or rash occurs: Get medical advice/attention. Contaminated work clothing must not be allowed out of the workplace. Absorb spillage to prevent material damage.	

				Avoid release to the environment. Wear protective gloves.	
--	--	--	--	--	--