

SAFETY DATA SHEET

Version 6.14 Revision Date 03/02/2024 Print Date 07/13/2024

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers

Product name : ProteoSilver™ Silver Stain Kit

Product Number : PROTSIL1 Brand : Sigma

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

Identified uses : Laboratory chemicals, Synthesis of substances

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

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

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Flammable liquids (Category 3), H226 Corrosive to Metals (Category 1), H290

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Acute toxicity, Oral (Category 3), H301 Acute toxicity, Inhalation (Category 2), H330 Acute toxicity, Dermal (Category 3), H311 Skin corrosion (Category 1A), H314 Serious eye damage (Category 1), H318 Skin sensitization (Category 1), H317 Germ cell mutagenicity (Category 2), H341 Carcinogenicity (Category 1B), H350 Reproductive toxicity (Category 1B), H360

Specific target organ toxicity - single exposure (Category 2), Eyes, Central nervous system, H371

Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335 Short-term (acute) aquatic hazard (Category 1), H400 Long-term (chronic) aquatic hazard (Category 1), H410

For the full text of the H-Statements mentioned in this Section, see Section 16.

2.2 GHS Label elements, including precautionary statements

Pictogram $\wedge \wedge \wedge \wedge \wedge \wedge$

Pictogram	
Signal Word	Danger
Hazard Statements	
H226	Flammable liquid and vapor.
H290	May be corrosive to metals.
H301 + H311	Toxic if swallowed or in contact with skin.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H330	Fatal if inhaled.
H335	May cause respiratory irritation.
H341	Suspected of causing genetic defects.
H350	May cause cancer.
H360	May damage fertility or the unborn child.
H371	May cause damage to organs (Eyes, Central nervous system).
H410	Very toxic to aquatic life with long lasting effects.
Precautionary Statements	
P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and
	understood.
P210	Keep away from heat/ sparks/ open flames/ hot surfaces. No
	smoking.
P233	Keep container tightly closed.
P234	Keep only in original container.
P240	Ground/bond container and receiving equipment.
P241	Use explosion-proof electrical/ ventilating/ lighting/ equipment.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P260	Do not breathe mist or vapors.

Wash skin thoroughly after handling.

Do not eat, drink or smoke when using this product.

Use only outdoors or in a well-ventilated area.

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P264

P270

P271



P272	Contaminated work clothing must not be allowed out of the workplace.
P273	Avoid release to the environment.
P280	Wear protective gloves/ protective clothing/ eye protection/ face protection.
P284	Wear respiratory protection.
P301 + P310 + P330	IF SWALLOWED: Immediately call a POISON CENTER/ doctor. Rinse mouth.
P301 + P330 + P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P304 + P340 + P310	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/ doctor.
P305 + P351 + P338 +	IF IN EYES: Rinse cautiously with water for several minutes.
P310	Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/ doctor.
P308 + P311	IF exposed or concerned: Call a POISON CENTER/ doctor.
P308 + P313	IF exposed or concerned: Get medical advice/ attention.
P333 + P313	If skin irritation or rash occurs: Get medical advice/ attention.
P362	Take off contaminated clothing and wash before reuse.
P370 + P378	In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.
P390	Absorb spillage to prevent material damage.
P391	Collect spillage.
P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
P403 + P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.
P406	Store in corrosive resistant container with a resistant inner liner.
P501	Dispose of contents/ container to an approved waste disposal plant.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS Lachrymator.

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

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SECTION 6: Accidental release measures

Refer to component SDS

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling

Work under hood. Do not inhale substance/mixture. Avoid generation of vapours/aerosols.

Advice on protection against fire and explosion

Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharge.

Hygiene measures

Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

No metal containers.

Keep container tightly closed in a dry and well-ventilated place. Keep away from heat and sources of ignition. Keep locked up or in an area accessible only to qualified or authorized persons.

Storage class

Storage class (TRGS 510): 3: Flammable liquids

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

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

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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

DOT (US)

UN number: 3316 Packing group: II Class: 9

Proper shipping name: Chemical kits Reportable Quantity (RQ): 10 lbs

Poison Inhalation Hazard: No

IMDG

Packing group: II UN number: 3316 Class: 9 EMS-No: F-A, S-P

Proper shipping name: CHEMICAL KIT

IATA

UN number: 3316 Class: 9 Packing group: II

Proper shipping name: Chemical kit

SECTION 15: Regulatory information

Refer to component SDS

SECTION 16: Other information

Kit Components:

ProteoSilver™ Silver Sigma P3739 Met. Corr. 1; Skin Corr. 1A; Eye

Solution

Dam. 1; Repr. 1B; Aquatic Acute

1; Aquatic Chronic 1; H290,

H314, H360, H410

ProteoSilver™ Sensitizer Sigma P3614 Eye Irrit. 2A; STOT SE 3; H319,

H335

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



ProteoSilver™ Deve 1	eloper Sigma	P3864	Eye Irrit. 2A; H319
ProteoSilver™ Deve 2	eloper Sigma	P3989	Flam. Liq. 3; Acute Tox. 3; Acute Tox. 2; Acute Tox. 3; Skin Corr. 1B; Eye Dam. 1; Skin Sens. 1; Muta. 2; Carc. 1B; STOT SE 2; STOT SE 3; Aquatic Acute 2; H226, H301 + H311, H314, H317, H330, H335, H341, H350, H371, H401
ProteoSilver™ Stop Solution	Sigma	P4114	Eye Irrit. 2A; STOT SE 3; H319, H335

Further information

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.

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Kit Components:

Product	r™ Silver Solu Pictogram	Signal	Hazard	Precautionary	Supplemental
dentifier	rictogram	Word	Statements	Statements	information
Sigma -		Danger	May be	Obtain special	IIIIOIIIIacioii
3739		Dange.	corrosive to	instructions	
3733	X		metals.	before use. IF	
	<u> </u>		Causes severe	SWALLOWED:	
	X		skin burns and	Rinse mouth. Do	
	***		eye damage.	NOT induce	
			May damage	vomiting. Store	
			fertility or the	locked up.	
			unborn child.	Dispose of	
			Very toxic to	contents/	
			aquatic life with	container to an	
			long lasting	approved waste	
			effects.	disposal plant.	
				Do not handle	
				until all safety	
				precautions	
				have been read	
				and understood.	
				IF ON SKIN (or	
				hair): Take off	
				immediately all	
				contaminated	
				clothing. Rinse	
				skin with water/	
				shower. Store in	
				corrosive resistant	
				container with a	
				resistant inner	
				liner. Keep	
				only in original	
				container. IF	
				INHALED:	
				Remove person	
				to fresh air and	
				keep	
				comfortable for	
				breathing.	
				Immediately call	
				a POISON	
				CENTER/ doctor.	

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Wash skin
thoroughly after
handling. IF IN
EYES: Rinse
cautiously with
water for
several minutes.
Remove contact
lenses, if
present and
easy to do.
Continue
rinsing.
Immediately call
a POISON
CENTER/ doctor.
Avoid release to
the
environment. IF
exposed or
concerned: Get
medical advice/
attention.
Wear protective
gloves/
protective
clothing/ eye
protection/ face
protection.
Wash
contaminated
clothing before
reuse. Absorb
spillage to
prevent material
damage.
Collect spillage.
Collect Spillage.

ProteoSilver™	ProteoSilver™ Sensitizer					
Product	Pictogram	Signal	Hazard	Precautionary	Supplemental	
identifier		Word	Statements	Statements	information	
Sigma -		Warning	Causes serious	Avoid breathing		
P3614	•		eye irritation.	mist or vapors.		
	•		May cause	IF INHALED:		
			respiratory	Remove person		
			irritation.	to fresh air and		
				keep		
				comfortable for		
				breathing. Call a		
				POISON		
				CENTER/ doctor		
				if you feel		

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unwell. Store in
a well-ventilated
place. Keep
container tightly
closed. Dispose
of contents/
container to an
approved waste
disposal plant.
Wash skin
thoroughly after
handling. IF IN
EYES: Rinse
cautiously with
water for
several minutes.
Remove contact
lenses, if
present and
easy to do.
Continue
rinsing. Store
locked up. Use
only outdoors or
in a well-
ventilated area.
If eye irritation
persists: Get
medical advice/
attention.
Wear eye
protection/ face
protection.

ProteoSilver™ Developer 1					
Product identifier	Pictogram	Signal Word	Hazard Statements	Precautionary Statements	Supplemental information
Sigma - P3864	1	Warning	Causes serious eye irritation.	Wash skin thoroughly after handling. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Wear eye protection/ face protection.	

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If eye irritation persists: Get
medical advice/
attention.

ProteoSilver	[™] Developer	2			
Product	Pictogram	Signal	Hazard	Precautionary	Supplemental
identifier		Word	Statements	Statements	information
identifier Sigma - P3989		Word Danger	Statements Flammable liquid and vapor. Toxic if swallowed or in contact with skin. Causes severe skin burns and eye damage. May cause an allergic skin reaction. Fatal if inhaled. May cause respiratory irritation. Suspected of causing genetic defects. May cause cancer. May cause damage to organs (Eyes, Central nervous system). Toxic to aquatic life.	Obtain special instructions before use. IF SWALLOWED: Immediately call a POISON CENTER/ doctor. Rinse mouth. Store in a well-ventilated place. Keep container tightly closed. Dispose of contents/ container to an approved waste disposal plant. Do not handle until all safety precautions have been read and understood. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Store in a well-ventilated place. Keep cool. Keep away from heat/ sparks/ open flames/ hot surfaces. No smoking. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower. Store locked up. Keep container	information

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		INHALED:	
		Remove person	
		to fresh air and	
		keep	
		comfortable for	
		breathing.	
		Immediately call	
		a POISON	
		CENTER/ doctor.	
		Ground/bond	
		container and	
		receiving	
		equipment. IF	
		IN EYES: Rinse	
		cautiously with	
		water for	
		several minutes.	
		Remove contact	
		lenses, if	
		present and	
		easy to do.	
		Continue	
		rinsing.	
		Immediately call	
		a POISON	
		CENTER/ doctor.	
		Use explosion-	
		proof electrical/	
		ventilating/	
		lighting/	
		equipment. IF	
		exposed or	
		concerned: Call	
		a POISON	
		CENTER/ doctor.	
		Use only non-	
		sparking tools.	
		IF exposed or	
		concerned: Get	
		medical advice/	
		attention.	
		Take	
		precautionary	
		measures	
		against static	
		discharge. If	
		skin irritation or	
		rash occurs: Get	
		medical advice/	
		attention. Do	
		not breathe mist	
		or vapors. Take	
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off contaminated
clothing and
wash before
reuse. Wash
skin thoroughly
after handling.
In case of fire:
Use dry sand,
dry chemical or
alcohol-resistant
foam to
extinguish. Do
not eat, drink or
smoke when
using this
product. Use
only outdoors or
in a well-
ventilated area.
Contaminated
work clothing
must not be
allowed out of
the workplace.
Avoid release to
the
environment.
Wear protective
gloves/
protective
clothing/ eye
protection/ face
protection.
Wear respiratory
protection.
proceedion:

ProteoSilver™ Stop Solution						
Product identifier	Pictogram	Signal Word	Hazard Statements	Precautionary Statements	Supplemental information	
Sigma - P4114		Warning	Causes serious eye irritation. May cause respiratory irritation.	Avoid breathing mist or vapors. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell. Store in a well-ventilated		

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place. Keep	
container tightly	
closed. Dispose	
of contents/	
container to an	
approved waste	
disposal plant.	
Wash skin	
thoroughly after	
handling. IF IN	
EYES: Rinse	
cautiously with	
water for	
several minutes.	
Remove contact	
lenses, if	
present and	
easy to do.	
Continue	
rinsing. Store	
locked up. Use	
only outdoors or	
in a well-	
ventilated area.	
If eye irritation	
persists: Get	
medical advice/	
attention.	
Wear eye	
protection/ face	
protection.	

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