

# SAFETY DATA SHEET

Version 6.10  
Revision Date 09/06/2024  
Print Date 09/07/2024

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

### 1.1 Product identifiers

Product name : Gram Staining Kit

Product Number : 77730  
Brand : Sigma-Aldrich

### 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.

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## 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 2), H225  
Eye irritation (Category 2A), H319

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Carcinogenicity (Category 2), H351  
Specific target organ toxicity - single exposure (Category 3), Central nervous system, H336  
Short-term (acute) aquatic hazard (Category 3), H402  
Long-term (chronic) aquatic hazard (Category 3), H412

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

## 2.2 GHS Label elements, including precautionary statements

Pictogram



Signal Word

Danger

Hazard Statements

H225 Highly flammable liquid and vapor.  
H319 Causes serious eye irritation.  
H336 May cause drowsiness or dizziness.  
H351 Suspected of causing cancer.  
H412 Harmful 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.  
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.  
P261 Avoid breathing mist or vapors.  
P264 Wash skin thoroughly after handling.  
P271 Use only outdoors or in a well-ventilated area.  
P273 Avoid release to the environment.  
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.  
P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.  
P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell.  
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P308 + P313 IF exposed or concerned: Get medical advice/ attention.  
P337 + P313 If eye irritation persists: Get medical advice/ attention.  
P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.  
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.  
P501 Dispose of contents/ container to an approved waste disposal plant.

### **2.3 Hazards not otherwise classified (HNOC) or not covered by GHS**

Repeated exposure may cause skin dryness or cracking.

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### **SECTION 3: Composition/information on ingredients**

Refer to component SDS

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### **SECTION 4: First aid measures**

Refer to component SDS

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### **SECTION 5: Firefighting measures**

Refer to component SDS

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### **SECTION 6: Accidental release measures**

Refer to component SDS

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### **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**

Keep container tightly closed in a dry and well-ventilated place. Keep away from heat and sources of ignition.

##### **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

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**SECTION 8: Exposure controls/personal protection**

Refer to component SDS

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**SECTION 9: Physical and chemical properties**

Refer to component SDS

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**SECTION 10: Stability and reactivity**

Refer to component SDS

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**SECTION 11: Toxicological information**

Refer to component SDS

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**SECTION 12: Ecological information**

Refer to component SDS

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**SECTION 13: Disposal considerations**

Refer to component SDS

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**SECTION 14: Transport information****DOT (US)**

UN number: 3316 Class: 9 Packing group: II  
Proper shipping name: Chemical kits  
Reportable Quantity (RQ):  
Poison Inhalation Hazard: No

**IMDG**

UN number: 3316 Class: 9 Packing group: II EMS-No: F-A, S-P  
Proper shipping name: CHEMICAL KIT

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

The logo for MilliporeSigma, featuring the word "MILLIPORE" in a blue, sans-serif font above the word "SIGMA" in a larger, bold, blue, sans-serif font.

**IATA**

UN number: 3316 Class: 9  
 Proper shipping name: Chemical kit

Packing group: II

**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)
Gram's crystal violet solution	Not Assigned	
Gram's iodine solution	Not Assigned	
Gram's decolorizer solution	Not Assigned	
Gram's safranin solution	Not Assigned	

**SARA 311/312 Hazards** : Fire Hazard  
 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.

**US State Regulations****Massachusetts Right To Know**

Gram's safranin solution	Not Assigned
Gram's decolorizer solution	Not Assigned
Gram's crystal violet solution	Not Assigned
Gram's iodine solution	Not Assigned

**Pennsylvania Right To Know**

Gram's decolorizer solution	Not Assigned
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**Maine Chemicals of High Concern**

Gram's safranin solution	Not Assigned
Gram's decolorizer solution	Not Assigned
Gram's crystal violet solution	Not Assigned
Gram's iodine solution	Not Assigned

**Vermont Chemicals of High Concern**

Gram's crystal violet solution	Not Assigned
Gram's iodine solution	Not Assigned
Gram's decolorizer solution	Not Assigned
Gram's safranin solution	Not Assigned

**Washington Chemicals of High Concern**

Gram's crystal violet solution	Not Assigned
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Gram's iodine solution  
Gram's decolorizer solution  
Gram's safranin solution

Not Assigned  
Not Assigned  
Not Assigned

**The ingredients of this product are reported in the following inventories:**

TSCA : All substances listed as active on the TSCA inventory

**TSCA list**

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

Gram's crystal violet solution Not Assigned  
Gram's iodine solution Not Assigned  
Gram's decolorizer solution Not Assigned  
Gram's safranin solution Not Assigned

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

Gram's crystal violet solution Not Assigned  
Gram's iodine solution Not Assigned  
Gram's decolorizer solution Not Assigned  
Gram's safranin solution Not Assigned

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**SECTION 16: Other information**

**Kit Components:**

Gram's crystal violet solution	Sigma-Aldrich	94448	Flam. Liq. 3; Eye Irrit. 2A; Carc. 2; Aquatic Acute 3; Aquatic Chronic 3; H226, H319, H351, H412
Gram's iodine solution	Sigma-Aldrich	90107	Aquatic Acute 3; H402
Gram's decolorizer solution	Sigma-Aldrich	75482	Flam. Liq. 2; Eye Irrit. 2A; STOT SE 3; H225, H319, H336
Gram's safranin solution	Sigma-Aldrich	94635	Flam. Liq. 3; H226

**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](http://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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Version: 6.10

Revision Date: 09/06/2024

Print Date: 09/07/2024

## Kit Components:


Gram's crystal violet solution					
Product identifier	Pictogram	Signal Word	Hazard Statements	Precautionary Statements	Supplemental information
Sigma-Aldrich - 94448		Warning	<p>Flammable liquid and vapor.            Causes serious eye irritation.            Suspected of causing cancer.            Harmful to aquatic life with long lasting effects.</p>	<p>Obtain special instructions before use. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Store in a well-ventilated place. Keep cool. Dispose of contents/container to an approved waste disposal plant. Do not handle until all safety precautions have been read and understood. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Store locked up. Keep away from heat/ sparks/ open flames/ hot surfaces. No smoking. IF exposed or concerned: Get medical advice/</p>	

				<p>attention.  Keep container tightly closed. If eye irritation persists: Get medical advice/ attention.  Ground/bond container and receiving equipment. In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.  Use explosion-proof electrical/ ventilating/ lighting/ equipment.  Use only non-sparking tools.  Take precautionary measures against static discharge.  Wash skin thoroughly after handling.  Avoid release to the environment.  Wear protective gloves/ protective clothing/ eye protection/ face protection.</p>	
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<b>Gram's iodine solution</b>					
Product identifier	Pictogram	Signal Word	Hazard Statements	Precautionary Statements	Supplemental information
Sigma-Aldrich - 90107			Harmful to aquatic life.	Avoid release to the environment. Dispose of contents/ container to an approved waste	




				disposal plant.	
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<b>Gram's decolorizer solution</b>					
Product identifier	Pictogram	Signal Word	Hazard Statements	Precautionary Statements	Supplemental information
Sigma-Aldrich - 75482		Danger	Highly flammable liquid and vapor. Causes serious eye irritation. May cause drowsiness or dizziness.	<p>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 in a well-ventilated place. Keep container tightly closed. Dispose of contents/ container to an approved waste disposal plant. Keep container tightly closed. 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 place. Keep cool. Ground/bond container and receiving equipment. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and</p>	

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				<p>easy to do. Continue rinsing. Store locked up. Use explosion-proof electrical/ ventilating/ lighting/ equipment. If eye irritation persists: Get medical advice/ attention. Use only non-sparking tools. In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish. Take precautionary measures against static discharge. Avoid breathing mist or vapors. Wash skin thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear protective gloves/ eye protection/ face protection.</p>	
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<b>Gram's safranin solution</b>					
Product identifier	Pictogram	Signal Word	Hazard Statements	Precautionary Statements	Supplemental information
Sigma-Aldrich - 94635		Warning	Flammable liquid and vapor.	Keep away from heat/ sparks/ open flames/ hot surfaces. No smoking. IF ON SKIN (or hair): Take off immediately all contaminated	

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				<p>clothing. Rinse skin with water/shower. Store in a well-ventilated place. Keep cool. Dispose of contents/container to an approved waste disposal plant. Keep container tightly closed. In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting/equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Wear protective gloves/ eye protection/ face protection.</p>	
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