

## SAFETY DATA SHEET

Version 8.3  
Revision Date 08/16/2021  
Print Date 10/30/2021**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1 Product identifiers**

Product name : Malachite Green Phosphate Assay Kit

Product Number : MAK307

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**

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

This is a summary MSDS for a kit. For the full MSDS 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  
Skin irritation (Category 2), H315  
Eye irritation (Category 2A), H319  
Specific target organ toxicity - single exposure (Category 1), Eyes, H370

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

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Hazard statement(s)	
H226	Flammable liquid and vapor.
H290	May be corrosive to metals.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H370	Causes damage to organs (Eyes).
Precautionary statement(s)	
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 dust/ fume/ gas/ mist/ vapors/ spray.
P264	Wash skin thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P280	Wear protective gloves/ eye protection/ face protection.
P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P307 + P311	IF exposed: Call a POISON CENTER or doctor/ physician.
P332 + P313	If skin irritation occurs: Get medical advice/ attention.
P337 + P313	If eye irritation persists: 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.
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 - none

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## SECTION 3: Composition/information on ingredients

Refer to component MSDS

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## SECTION 4: First aid measures

Refer to component MSDS

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## **SECTION 5: Firefighting measures**

Refer to component MSDS

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

Refer to component MSDS

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## **SECTION 7: Handling and storage**

### **7.1 Precautions for safe handling**

#### **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.

#### **Storage stability**

Recommended storage temperature

2 - 8 °C

#### **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 MSDS

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## **SECTION 9: Physical and chemical properties**

Refer to component MSDS

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## **SECTION 10: Stability and reactivity**

Refer to component MSDS

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**SECTION 11: Toxicological information**

Refer to component MSDS

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**SECTION 12: Ecological information**

Refer to component MSDS

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**SECTION 13: Disposal considerations**

Refer to component MSDS

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

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

**IMDG**

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

**IATA**

UN number: 3316 Class: 9 Packing group: III  
Proper shipping name: Chemical kit

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**SECTION 15: Regulatory information****SARA 302 Components**

CAS-No.	Revision Date
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**SARA 313 Components**

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.

**SARA 311/312 Hazards**

Acute Health Hazard, Chronic Health Hazard

**Massachusetts Right To Know Components**

No components are subject to the Massachusetts Right to Know Act.

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**SECTION 16: Other information****Kit Components:**

Reagent A	Sigma	MAK307A	Met. Corr. 1; Skin Irrit. 2; Eye Irrit. 2A; H290, H315, H319
Reagent B	Sigma	MAK307B	Flam. Liq. 3; Eye Irrit. 2A; STOT SE 1; H226, H319, H370
STANDARD	Sigma	MAK307C	

**Further information**

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. 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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**Kit Components:**

<b>Reagent A</b>					
Product identifier	Pictogram	Signal word	Hazard Statements	Precautionary Statements	Supplemental information
Sigma - MAK307A		Warning	May be corrosive to metals. Causes skin irritation. Causes serious eye irritation.	Keep only in original container. IF ON SKIN: Wash with plenty of soap and water. Store in corrosive resistant container with a resistant inner liner. 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 protective gloves/ eye protection/ face protection. If skin irritation occurs: Get medical advice/ attention. If eye irritation persists: Get medical advice/ attention. Take off contaminated clothing and wash before reuse. Absorb spillage to prevent material damage.	

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<b>Reagent B</b>					
Product identifier	Pictogram	Signal word	Hazard Statements	Precautionary Statements	Supplemental information
Sigma - MAK307B		Danger	<p>Flammable liquid and vapor. Causes serious eye irritation. Causes damage to organs (/\$/*_ORGAN_SINGLE/\$/).</p>	<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 cool. Dispose of contents/container to an approved waste disposal plant. Keep container tightly closed. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Store locked up. Ground/bond container and receiving equipment. IF exposed: Call a POISON CENTER or doctor/physician. Use explosion-proof electrical/ventilating/lighting/equipment. If eye irritation persists: Get medical advice/attention. Use only non-</p>	

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				sparking tools. In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish. Take precautionary measures against static discharge. Do not breathe dust/ fume/ gas/ mist/ vapors/ spray. Wash skin thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves/ eye protection/ face protection.	
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<b>STANDARD</b>					
Product identifier	Pictogram	Signal word	Hazard Statements	Precautionary Statements	Supplemental information
Sigma - MAK307C					Not a hazardous substance or mixture.