

Safety Data Sheet (SDS) According to the REACH Regulation (EC) No. 1907/2006

Issuing Date: 2017-08-20

Version: 1

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

1.1. Product identifier

Product No	12776
Product name	Malachite Green Phosphate Detection Kit
Kit Component	Malachite Green Reagent Phosphate Standard (1mM)
Reach registration number	This substance/mixture contains only ingredients which have been registered, or are exempt from registration, according to Regulation (EC) No. 1907/2006.

Contains

Chemical Name	Index No.	CAS No
sulfuric acid (0 - 10%)	016-020-00-8	7664-93-9

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

Identified uses For research use only

1.3. Details of the supplier of the safety data sheet

Importer (Applicable in EU only)	Manufacturer
Cell Signaling Technology Europe B.V. Schuttersveld 2 2316 ZA Leiden The Netherlands TEL: +31 (0)71 7200 200 FAX: +31 (0)71 891 0098	Cell Signaling Technology, Inc. 3 Trask Lane Danvers, MA 01923 United States TEL: +1 978 867 2300 FAX: +1 978 867 2400

Website	www.cellsignal.com
E-mail Address	info@cellsignal.eu

1.4. Emergency telephone number

CHEMTREC 24 hours a day, 7 days a week, 365 days a year
+1 703 527 3887 (INTERNATIONAL) +1 800 424 9300 (NORTH AMERICA)

Europe 112

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008

Classification and label elements described below are inclusive of all hazards of the combined kit. The most severe classifications are listed for each endpoint. Refer to individual kit component SDS for classification and label elements for each component present in the kit.

Skin corrosion/irritation	Category 2 - (H315)
Serious eye damage/eye irritation	Category 2 - (H319)

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Corrosive to metals

Category 1 - (H290)

2.2. Label elements



Signal word

Warning

Hazard statement(s)

H315 - Causes skin irritation

H319 - Causes serious eye irritation

H290 - May be corrosive to metals

Precautionary statement(s)

P234 - Keep only in original container

P264 - Wash face, hands and any exposed skin thoroughly after handling

P280 - Wear protective gloves/protective clothing/eye protection/face protection

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P337 + P313 - If eye irritation persists: Get medical advice/attention

P406 - Store in corrosive resistant aluminum container with a resistant inliner

2.3. Other hazards

0 % of the mixture consists of ingredient(s) of unknown acute toxicity.

None under normal use conditions.

SECTION 3. Composition/information on ingredients

Kit Component Name Malachite Green Reagent

Chemical Name	CAS No	Weight %	EC No	Classification (1272/2008)	REACH Registration Number
sulfuric acid	7664-93-9	7.5	231-639-5	Skin Corr. 1A (H314) Met. Corr. 1 (H290)	no data available

Kit Component Name Phosphate Standard (1mM)

This substance/mixture does not meet the criteria for classification in accordance with Regulation (EC) No. 1272/2008 The product contains no substances which at their given concentration, are considered to be hazardous to health

SECTION 4: First aid measures

4.1. Description of first aid measures

General advice

Show this safety data sheet to the doctor in attendance.

Inhalation

IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.

Get medical attention immediately if symptoms occur. If breathing is difficult, give oxygen. If not breathing, give artificial respiration.

Skin contact

Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. If skin irritation occurs, get medical advice/attention.

Eye contact

In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Keep eye wide open while rinsing.

Ingestion

Get medical attention. Do NOT induce vomiting. Clean mouth with water. Drink plenty of

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water. Never give anything by mouth to an unconscious person.

Protection of first-aiders Use personal protective equipment. Avoid contact with skin, eyes and clothing.

4.2. Most important symptoms and effects, both acute and delayed

Contains kit components which may cause the following effects, refer to individual component SDSs for full information on symptoms:

, Irritating to eyes and skin. Significant esophageal or gastrointestinal tract irritation or burns may occur following ingestion.

4.3. Indication of any immediate medical attention and special treatment needed

Notes to physician Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable Extinguishing Media Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media No information available.

5.2. Special hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating gases and vapors.

5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective suit. Use personal protective equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Avoid contact with skin, eyes and clothing. Keep people away from and upwind of spill/leak.

For emergency responders Use personal protection recommended in Section 8.

Other information Refer to protective measures listed in Sections 7 and 8.

6.2. Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not allow material to contaminate ground water system. Prevent product from entering drains. Should not be released into the environment. Local authorities should be advised if significant spillages cannot be contained.

6.3. Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Dam up. Soak up with inert absorbent material. Take up mechanically, placing in appropriate containers for disposal. Clean contaminated surface thoroughly. After cleaning, flush away traces with water.

6.4. Reference to other sections

See Sections 8 & 13 for additional information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

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Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Ensure adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. When using, do not eat, drink or smoke. Provide regular cleaning of equipment, work area and clothing. Keep away from food, drink and animal feeding stuffs. Contaminated work clothing should not be allowed out of the workplace. Remove and wash contaminated clothing and gloves, including the inside, before re-use.

7.2. Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place. Keep in properly labeled containers. Keep out of the reach of children. Store in original container.

Packaging material Store in corrosive resistant container with a resistant inner liner.

7.3. Specific end use(s)

Use as a laboratory reagent.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limit values					
Chemical Name	European Union	United Kingdom	France	Spain	Germany
sulfuric acid		TWA 0.05 mg/m ³	TWA 0.05 mg/m ³ STEL 3 mg/m ³	TWA 0.05 mg/m ³	TWA: 0.1 mg/m ³ Skin Ceiling / Peak: 0.1 mg/m ³
Chemical Name	Italy	Portugal	Netherlands	Finland	Denmark
sulfuric acid		TWA 0.2 mg/m ³ C(A2)	TWA 0.05 mg/m ³	TWA 0.05 mg/m ³ STEL 0.1 mg/m ³	TWA 0.05 mg/m ³
Chemical Name	Austria	Switzerland	Poland	Norway	Ireland
sulfuric acid	STEL 0.2 mg/m ³ TWA 0.1 mg/m ³	SS-C** TWA 0.1 mg/m ³ STEL 0.1 mg/m ³	TWA 1 mg/m ³ TWA 0.05 mg/m ³ STEL 3 mg/m ³	TWA 0.1 mg/m ³ K** STEL 0.3 mg/m ³	TWA 1 mg/m ³

8.2. Exposure controls

Appropriate engineering controls

Showers, eyewash stations, and ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection Tightly fitting safety goggles.

Skin protection

Hand protection Impervious gloves.

Other Lightweight protective clothing.

Respiratory protection In case of inadequate ventilation wear respiratory protection.

Environmental Exposure Controls

No information available.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Information on the known physical chemical properties of each component within Kit are given below. If not included, information is either not available or not applicable. Refer to individual kit component SDS for further information.

Kit Component	Malachite Green Reagent
Physical state	Liquid
Color	Yellow

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pH VALUE	1
Kit Component	Phosphate Standard (1mM)
Physical state	Liquid
Color	Colorless

SECTION 10: Stability and reactivity

10.1. Reactivity

No information available.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Hazardous polymerization **Hazardous reactions**

Hazardous polymerization does not occur.
Reacts violently with combustible and reducing materials. Reacts violently with water and organic materials with evolution of heat. Reacts violently with bases and is corrosive to most common metals forming a flammable/explosive gas (hydrogen).

10.4. Conditions to avoid

Exposure to air or moisture over prolonged periods.

10.5. Incompatible materials

Incompatible with strong acids and bases. Incompatible with oxidizing agents. Organic material. Metals.

10.6. Hazardous decomposition products

Thermal decomposition can lead to release of irritating gases and vapors.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Product Information

Refer to kit component SDS for full toxicological information. This material should only be handled by, or under the close supervision of, those properly qualified in the handling and use of potentially hazardous chemicals. It should be borne in mind that the toxicological and physiological properties of this compound is not well defined.

Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
sulfuric acid	-	-	= 347 ppm (Rat) 1 h

Information on likely routes of exposure

Inhalation

Kit Component	Malachite Green Reagent
Inhalation	May cause irritation of respiratory tract

Eye contact

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Kit Component Eye contact	Malachite Green Reagent Severely irritating to eyes
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Skin contact

Kit Component Skin contact	Malachite Green Reagent Expected to be an irritant based on components
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Ingestion

Kit Component Ingestion	Malachite Green Reagent Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea
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Delayed and immediate effects as well as chronic effects from short and long-term exposure

Symptoms	Contains kit components which may cause the following effects, refer to individual component SDSs for full information on symptoms: Irritating to eyes and skin. Significant esophageal or gastrointestinal tract irritation or burns may occur following ingestion.
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Skin and Eye Corrosion/Irritation

Kit Component Skin corrosion/irritation Serious eye damage/eye irritation	Malachite Green Reagent Irritating to skin Causes serious eye irritation
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Sensitization	No information available.
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Mutagenic effects	No information available.
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Carcinogenic effects	No information available.
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Kit Component Carcinogenicity	Malachite Green Reagent Exposure to strong inorganic mists containing sulfuric acid may cause cancer by inhalation
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Reproductive toxicity	No information available.
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Systemic Target Organ Toxicity (STOT)	No information available
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Kit Component Target Organ Effects	Malachite Green Reagent Respiratory system Teeth Eyes Skin
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Aspiration Hazard	No information available.
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SECTION 12: Ecological information

12.1. Toxicity

Product Information	No information available
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No information available.

Component Information

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Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to daphnia and other aquatic invertebrates
sulfuric acid	-	LC50 500 mg/L (Brachydanio rerio) 96 h	EC50 29 mg/L (Daphnia magna) 24 h

12.2. Persistence and degradability

No information available.

12.3. Bioaccumulative potential

No information available.

12.4. Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

No information available.

12.6. Other adverse effects

No information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste from residues / unused products	Dispose of in accordance with local regulations.
Contaminated packaging	Do not re-use empty containers.
Other information	According to the European Waste Catalogue, Waste Codes are not product specific, but application specific. Waste codes should be assigned by the user based on the application for which the product was used.

SECTION 14: Transport information

This material is subject to regulation as a hazardous material for shipping:

IMDG/IMO

14.1 UN number	UN3316
14.2 UN proper shipping name	Chemical Kits
14.3 Transport hazard class(es)	9
14.4 Packing group	III
14.5 Environmental hazards	None
14.6 Special precautions for user	
EmS No.	F-A, S-P
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not regulated

ADR/RID

14.1 UN number	UN3316
14.2 UN proper shipping name	Chemical Kits
14.3 Transport hazard class(es)	9
14.4 Packing group	III
14.5 Environmental hazards	None
14.6 Special precautions for user	
Classification Code	M11

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Tunnel Restriction Code E

IATA

14.1 UN number	UN3316
14.2 UN proper shipping name	Chemical Kits
14.3 Transport hazard class(es)	9
14.4 Packing group	III
14.5 Environmental hazards	None
14.6 Special precautions for user	
Special provisions	A163, A44

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Candidate List of Substances of Very High Concern for Authorization Information

This product does not contain Substances of Very High Concern (SVHC).

SEVESO Directive Information

This product does not contain substances identified in the SEVESO Directive.

International inventories

TSCA 8(b)	-
DSL/NDSL	-
EINECS/ELINCS	-
ENCS	-
IECSC	Complies
KECL	-
PICCS	Complies
AICS	Complies

International inventories legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

15.2. Chemical safety assessment

For this substance a chemical safety assessment has not been carried out

SECTION 16: Other information

Full text of H-Statements referred to under Sections 2 and 3

H314 - Causes severe skin burns and eye damage
H290 - May be corrosive to metals

Classification procedure: Expert judgment and weight of evidence determination.
Issuing Date: 2017-08-20

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

