

Hazard Overview

Version 9.1
Revision Date 08/11/2026
Print Date 08/12/2026

SECTION 1. IDENTIFICATION

1.1 Product identifiers

Product name : Phosphate Colorimetric Kit

Product Number : MAK030

Brand : Sigma

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

Identified uses : Laboratory chemicals, Synthesis of substances

Restrictions on use : 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.
SPRUCE ST 3050
63103 St. Louis

Telephone : (314) 771-5765

Telefax: (800) 325-5052

1.4 Emergency telephone number

Emergency Phone # : 800 424 9300 (CHEMTREC) 24/7
+1 703 527 3887 (CHEMTREC) 24/7

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

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
Skin irritation	: Category 2
Eye irritation	: Category 2A
Reproductive toxicity	: Category 2
Short-term (acute) aquatic hazard	: Category 3
Long-term (chronic) aquatic hazard	: Category 3

Other hazards

None known.

GHS label elements

Hazard pictograms :



Signal word : Warning

Hazard statements : H290 May be corrosive to metals.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H361 Suspected of damaging fertility or the unborn child.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statements : **Prevention:**
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P234 Keep only in original packaging.
P264 Wash skin thoroughly after handling.
P273 Avoid release to the environment.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response:

P302 + P352 IF ON SKIN: Wash with plenty of water.
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.
P332 + P313 If skin irritation occurs: Get medical advice/ attention.
P337 + P313 If eye irritation persists: Get medical advice/ attention.
P390 Absorb spillage to prevent material damage.

Storage:

P405 Store locked up.
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

Please refer to component Safety Data Sheet and/or to Section 16 Kit components

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 GHS label elements

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.

Storage class : 10, Combustible liquids

Recommended storage temperature : Recommended storage temperature see product label.

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

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

Not regulated as a dangerous good

IMDG-Code

Not regulated as a dangerous good

Transport in bulk according to IMO instruments

Not applicable for product as supplied.

National Regulations

49 CFR

Not regulated as a dangerous good

Poison Inhalation Hazard : No

Special precautions for user

Remarks : Not classified as dangerous in the meaning of transport regulations.

SECTION 15. REGULATORY INFORMATION

CERCLA Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
Phosphate Reagent	Not Assigned	7692	7692

SARA 304 Extremely Hazardous Substances Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
Phosphate Reagent	Not Assigned	7692	7692

SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

Components	CAS-No.	Component TPQ (lbs)
Phosphate Reagent	Not Assigned	
Phosphate Standard	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 Phosphate Reagent, 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

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):

Phosphate Reagent Not Assigned $\geq 90 - \leq 100$ %

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

Phosphate Reagent Not Assigned $\geq 90 - \leq 100$ %

Clean Water Act

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

Phosphate Reagent Not Assigned $\geq 90 - \leq 100$ %

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

Phosphate Reagent	Not Assigned	>= 90 - <= 100 %
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This product contains the following toxic pollutants listed under the U.S. Clean Water Act Section 307

Phosphate Reagent	Not Assigned	>= 90 - <= 100 %
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This product contains the following priority pollutants related to the U.S. Clean Water Act:

Phosphate Reagent	Not Assigned	>= 90 - <= 100 %
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US State Regulations

Massachusetts Right To Know

Phosphate Reagent	Not Assigned
Phosphate Standard	Not Assigned

Pennsylvania Right To Know

Phosphate Reagent	Not Assigned
Phosphate Standard	Not Assigned

Maine Chemicals of High Concern

Phosphate Reagent	Not Assigned
Phosphate Standard	Not Assigned

Vermont Chemicals of High Concern

Phosphate Reagent	Not Assigned
Phosphate Standard	Not Assigned

Washington Chemicals of High Concern

Phosphate Reagent	Not Assigned
Phosphate Standard	Not Assigned

The components of this product are reported in the following inventories:

US 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:

Phosphate Reagent	Not Assigned
Phosphate Standard	Not Assigned

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

Phosphate Reagent	Not Assigned
Phosphate Standard	Not Assigned

SECTION 16. OTHER INFORMATION

Kit Components:

Phosphate Reagent	Sigma	MAK030A
Phosphate Standard	Sigma	MAK030B

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,

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

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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); LSPN - List of Hazardous Notified Substances (Chile); 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

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Revision Date : 08/11/2026

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US / EN

Kit Components:

Phosphate Reagent					
Product identifier	Pictogram	Signal word	Hazard statements	Precautionary statements	Supplemental information
Sigma - MAK030A		Warning	May be corrosive to metals. Causes skin irritation. Causes serious eye irritation. Suspected of damaging fertility or the unborn child. Harmful to aquatic life with long lasting effects.	Obtain special instructions before use. IF ON SKIN: Wash with plenty of water. Store locked up. 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 in a corrosion resistant container with a resistant inner liner. Keep only in original packaging. IF exposed or concerned: Get medical advice/ attention. Wash skin thoroughly after handling. If skin	

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				irritation occurs: Get medical advice/ attention. Avoid release to the environment. If eye irritation persists: Get medical advice/ attention. Wear protective gloves/ protective clothing/ eye protection/ face protection. Absorb spillage to prevent material damage.	
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Phosphate Standard					
Product identifier	Pictogram	Signal word	Hazard statements	Precautionary statements	Supplemental information
Sigma - MAK030B					Not a hazardous substance or mixture.