Reviewed on 08/12/2024 Printing date 08/12/2024

1 Identification

· Product identifier

· Trade name: Color Solution For EZ7801/EZ7802/ EZ7850/EZ7851 Total Phosphorus Analyzer

· Article number: HAC304

Details of the supplier of the safety data sheet

· Manufacturer/Supplier: Aqua Solutions, Inc. 6913 Highway 225 DEER PARK, TX 77536 USA800-256-2586

· Information department:

Technical Coordinator

Sherman Nelson shermann@aquasolutions.org

· Emergency telephone number:

Chemtrec: 800-424-9300 Canutec: 613-996-6666



2 Hazard(s) identification

· Classification of the substance or mixture



GHS08 Health hazard

Carcinogenicity 1A H350 May cause cancer.



H315 Causes skin irritation. Skin Irritation 2

Eye Irritation 2A H319 Causes serious eye irritation.

- · Label elements
- · GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).
- · Hazard pictograms





GHS07

GHS08

- · Signal word Danger
- · Hazard-determining components of labeling:

Sulfuric Acid 96 - 98%

· Hazard statements

Causes skin irritation.

Causes serious eye irritation.

May cause cancer.

· Precautionary statements

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

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(Contd. of page 1)

Wash thoroughly after handling.

Wear protective gloves/protective clothing/eye protection/face protection.

If on skin: Wash with plenty of water.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

IF exposed or concerned: Get medical advice/attention.

Specific treatment (see on this label).

Take off contaminated clothing and wash it before reuse.

If skin irritation occurs: Get medical advice/attention.

If eye irritation persists: Get medical advice/attention.

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

- · Classification system:
- · NFPA ratings (scale 0 4)



Health = 2 Fire = 0Reactivity = 0

· HMIS-ratings (scale 0 - 4)



- · Other hazards
- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · vPvB: Not applicable.

3 Composition/information on ingredients

- · Chemical characterization: Mixtures
- · **Description:** Mixture of the substances listed below with nonhazardous additions.

· Dangerous comp	onents:		
CAS: 7664-93-9	Sulfuric Acid 96 - 98%	12.982%	
· Table of Nonhaz	· Table of Nonhazardous Ingredients		
CAS: 7732-18-5	Water	86.03%	
CAS: 12054-85-2	Ammonium Molybdate Tetrahydrate ACS Grade	0.941%	
CAS: 28300-74-5	Antimony Potassium Tartrate Sesquihydrate	0.047%	

4 First-aid measures

- · Description of first aid measures
- · General information: Immediately remove any clothing soiled by the product.
- After inhalation: In case of unconsciousness place patient stably in side position for transportation.
- · After skin contact: Immediately wash with water and soap and rinse thoroughly.
- · After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· After swallowing: If symptoms persist consult doctor.

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- · Information for doctor:
- · Most important symptoms and effects, both acute and delayed No further relevant information available.
- Indication of any immediate medical attention and special treatment needed

No further relevant information available.

5 Fire-fighting measures

- · Extinguishing media
- · Suitable extinguishing agents: Use fire fighting measures that suit the environment.
- · Special hazards arising from the substance or mixture No further relevant information available.
- · Advice for firefighters
- · Protective equipment: No special measures required.

6 Accidental release measures

- · Personal precautions, protective equipment and emergency procedures Not required.
- Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- · Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to section 13.

Ensure adequate ventilation.

· Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

Protective Action Criteria for Chemicals

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· PAC-1:		
CAS: 7664-93-9 Sulfuric	Acid 96 - 98%	0.20 mg/m^3
CAS: 12054-85-2 Ammon	ium Molybdate Tetrahydrate ACS Grade	2.8 mg/m³
CAS: 28300-74-5 Antimor	ny Potassium Tartrate Sesquihydrate	4.1 mg/m ³
· PAC-2:		
CAS: 7664-93-9 Sulfuric	Acid 96 - 98%	8.7 mg/m³
CAS: 12054-85-2 Ammon	ium Molybdate Tetrahydrate ACS Grade	30 mg/m³
CAS: 28300-74-5 Antimor	ny Potassium Tartrate Sesquihydrate	37 mg/m³
· PAC-3:		
CAS: 7664-93-9 Sulfuric	Acid 96 - 98%	160 mg/m³
CAS: 12054-85-2 Ammon	ium Molybdate Tetrahydrate ACS Grade	180 mg/m³
CAS: 28300-74-5 Antimor	ny Potassium Tartrate Sesquihydrate	220 mg/m³

7 Handling and storage

- · Handling:
- · Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Open and handle receptacle with care.

Information about protection against explosions and fires: Keep respiratory protective device available.

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(Contd. of page 3)

- · Conditions for safe storage, including any incompatibilities
- Storage:
- Requirements to be met by storerooms and receptacles: No special requirements.
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: Keep receptacle tightly sealed.
- · Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

- Additional information about design of technical systems: No further data; see section 7.
- · Control parameters
- · Components with limit values that require monitoring at the workplace:

CAS: 7664-93-9 Sulfuric Acid 96 - 98%

PEL Long-term value: 1 mg/m³ REL Long-term value: 1 mg/m³ TLV Long-term value: 0.2* mg/m³

*as thoracic fraction, A2

- · Additional information: The lists that were valid during the creation were used as basis.
- · Exposure controls
- · Personal protective equipment:
- General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Store protective clothing separately.

Avoid contact with the eyes and skin.

Breathing equipment:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

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(Contd. of page 4)

· Eye protection:



Tightly sealed goggles

· Body protection: Protective work clothing

Color: Cl Odor: Odor Odor threshold: No Change in condition Melting point/Melting range: Un Boiling point/Boiling range: 10 Flash point: No Flammability (solid, gaseous): No Oecomposition temperature: No Ignition temperature: Pr Danger of explosion: Pr Explosion limits: Lower: No Upper: No Vapor pressure at 20 °C (68 °F): 23	quid lear dorless of determined. of determined. of applicable. of determined. of determined. of applicable. of determined. of determined. of applicable. of applicable. of determined.
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Danger of explosion: Pr Explosion limits: Lower: No Upper: No Vapor pressure at 20 °C (68 °F): 23	
Explosion limits: No Lower: No Upper: No Vapor pressure at 20 °C (68 °F): 23	roduct does not present an explosion hazard.
Lower: No Upper: No Vapor pressure at 20 °C (68 °F): 23	
Upper: No Vapor pressure at 20 °C (68 °F): 23	
Vapor pressure at 20 °C (68 °F): 23	ot determined.
	ot determined.
	t hPa (17.3 mm Hg)
Density at 20 °C (68 °F): 1	12389 g/cm³ (9.37886 lbs/gal)
Relative density No.	ot determined.
· ····································	ot determined.
Evaporation rate No.	ot determined.
Solubility in / Miscibility with	
Water: No	ot miscible or difficult to mix.
Partition coefficient (n-octanol/water): Nc	ot determined.
Viscosity:	
- y	ot determined.
Kinematic: No	ot determined.
Solvent content:	
	5.0 %
VOC content: 0.0	00 %

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	(Conta. of page
Solids content:	1.0 %
· Other information	No further relevant information available.
· Other information	No further relevant information available.

10 Stability and reactivity

- · Reactivity No further relevant information available.
- · Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:
- Primary irritant effect:
- on the skin: Irritant to skin and mucous membranes.
- · on the eye: Irritating effect.
- · Sensitization: No sensitizing effects known.
- · Additional toxicological information:

The product shows the following dangers according to internally approved calculation methods for preparations: Irritant

· Carcinogenic categories

· IARC (International Agency for Research on Cancer)	
CAS: 7664-93-9 Sulfuric Acid 96 - 98%	1
· NTP (National Toxicology Program)	
CAS: 7664-93-9 Sulfuric Acid 96 - 98%	K
· OSHA-Ca (Occupational Safety & Health Administration)	
None of the ingredients is listed.	

12 Ecological information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- · Additional ecological information:
- · General notes:

Water hazard class 1 (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.

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- · vPvB: Not applicable.
- · Other adverse effects No further relevant information available.

13 Disposal considerations

- · Waste treatment methods
- · Recommendation:

· Stowage Category · Stowage Code

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

- · Uncleaned packagings:
- · Recommendation: Disposal must be made according to official regulations.

· UN-Number · DOT, IMDG, IATA	UN3264
UN proper shipping name	
DOT	Corrosive liquid, acidic, inorganic, n.o.s. (Sulfuric Acid)
IMDG, IATA	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Sul, Acid)
Transport hazard class(es)	
DOT	
· Class	8 Corrosive substances 8
· IMDG, IATA	
Class	8 Corrosive substances
Label	8
Packing group	
DOT, IMDG, IATA	II
Environmental hazards:	Not applicable.
Special precautions for user	Warning: Corrosive substances
· Hazard identification number (Kemle	r code) · 80

SW2 Clear of living quarters.

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EZ7850/EZ7851 Total Phosphorus Analyzer

	(Contd. of page
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
Transport/Additional information:	
· DOT	
· Quantity limitations	On passenger aircraft/rail: 1 L
- ,	On cargo aircraft only: 30 L
· IMDG	
· Limited quantities (LQ)	IL
· Excepted quantities (EQ)	Code: E2
	Maximum net quantity per inner packaging: 30 ml
	Maximum net quantity per outer packaging: 500 ml
· UN "Model Regulation":	UN 3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O. (SULFURIC ACID), 8, II

5 Regulatory inf	ormation	
· Safety, health and · Sara	environmental regulations/legislation specific for the substance or mixture	
· Section 355 (extre	mely hazardous substances):	
CAS: 7664-93-9	'ulfuric Acid 96 - 98%	
· Section 313 (Spec	ific toxic chemical listings):	
CAS: 7664-93-9	Sulfuric Acid 96 - 98%	
CAS: 28300-74-5	Antimony Potassium Tartrate Sesquihydrate	
· TSCA (Toxic Sub	stances Control Act):	
Water		ACTIVE
Sulfuric Acid 96 -	98%	ACTIVE

- · Hazardous Air Pollutants
- CAS: 28300-74-5 Antimony Potassium Tartrate Sesquihydrate
- · Proposition 65
- · Chemicals known to cause cancer:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

- · Carcinogenic categories
- · EPA (Environmental Protection Agency)

None of the ingredients is listed.

· TLV (Threshold Limit Value)

CAS: 7664-93-9 Sulfuric Acid 96 - 98%

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· NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

- · GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).
- · Hazard pictograms





GHS07

· Signal word Danger

· Hazard-determining components of labeling:

Sulfuric Acid 96 - 98%

· Hazard statements

Causes skin irritation.

Causes serious eye irritation.

May cause cancer.

· Precautionary statements

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Wash thoroughly after handling.

Wear protective gloves/protective clothing/eye protection/face protection.

If on skin: Wash with plenty of water.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

IF exposed or concerned: Get medical advice/attention.

Specific treatment (see on this label).

Take off contaminated clothing and wash it before reuse.

If skin irritation occurs: Get medical advice/attention.

If eye irritation persists: Get medical advice/attention.

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

· National regulations:

· Information about limitation of use:

Workers are not allowed to be exposed to the hazardous carcinogenic materials contained in this preparation. Exceptions can be made by the authorities in certain cases.

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- · **Department issuing SDS:** Environment protection department.
- · Contact:

Date of Preparation / Last Revision:

· Date of preparation / last revision

Revision 1.2, 08-12-2024: Reviewed SDS for accuracy. STN/GW 08/12/2024 / -

· Abbreviations and acronyms:

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

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IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, EU) PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

Skin Irritation 2: Skin corrosion/irritation – Category 2

Eye Irritation 2A: Serious eye damage/eye irritation – Category 2A

Carcinogenicity 1A: Carcinogenicity - Category 1A

* * Data compared to the previous version altered.

HIC