Printing date 12/02/2021 Reviewed on 12/02/2021

### 1 Identification

· Product identifier

· Trade name: Acid Wash Color Std. #12 Prepared to ASTM D848-18

· Article number: 015012

· Details of the supplier of the safety data sheet

· Manufacturer/Supplier: Aqua Solutions, Inc. 6913 Highway 225 DEER PARK, TX 77536 USA 800-256-2586

· 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



GHS06 Skull and crossbones

Acute Tox. 3 H331 Toxic if inhaled.



#### GHS08 Health hazard

Resp. Sens. 1 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Muta. 1B H340 May cause genetic defects.

Carc. 1B H350 May cause cancer.

Repr. 1B H360 May damage fertility or the unborn child.

STOT RE 1 H372 Causes damage to the respiratory system through prolonged or repeated exposure.



#### GHS07

Acute Tox. 4 H302 Harmful if swallowed.

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2A H319 Causes serious eye irritation.

Skin Sens. 1 H317 May cause an allergic skin reaction.

STOT SE 3 H335 May cause respiratory irritation.

· Label elements

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

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Trade name: Acid Wash Color Std. #12 Prepared to ASTM D848-18

(Contd. of page 1)

### · Hazard pictograms







GHS06

GHS07

### · Hazard-determining components of labeling:

Potassium Chromate

· Signal word Danger

Potassium Dichromate

#### · Hazard statements

Harmful if swallowed.

Toxic if inhaled.

Causes skin irritation.

Causes serious eye irritation.

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

May cause an allergic skin reaction.

May cause genetic defects.

May cause cancer.

May damage fertility or the unborn child.

May cause respiratory irritation.

Causes damage to the respiratory system through prolonged or repeated exposure.

#### · Precautionary statements

Obtain special instructions before use.

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

Do not breathe dust/fume/gas/mist/vapors/spray.

Wash thoroughly after handling.

Do not eat, drink or smoke when using this product.

*Use only outdoors or in a well-ventilated area.* 

Contaminated work clothing must not be allowed out of the workplace.

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

[In case of inadequate ventilation] wear respiratory protection.

If swallowed: Call a poison center/doctor if you feel unwell.

Rinse mouth.

If on skin: Wash with plenty of water.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

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).

Get medical advice/attention if you feel unwell.

Take off contaminated clothing and wash it before reuse.

If skin irritation or rash occurs: Get medical advice/attention.

*If eye irritation persists: Get medical advice/attention.* 

If experiencing respiratory symptoms: Call a poison center/doctor.

Wash contaminated clothing before reuse.

Store in a well-ventilated place. Keep container tightly closed.

Store locked up.

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

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Trade name: Acid Wash Color Std. #12 Prepared to ASTM D848-18

(Contd. of page 2)

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



The substance possesses oxidizing properties.

· 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 components:				
CAS: 7789-00-6 Potassium Chromate	26.604%			
CAS: 7778-50-9 Potassium Dichromate	2.047%			
· Table of Nonhazardous Ingredients				
CAS: 7732-18-5   Water	71.349%			

### 4 First-aid measures

- · Description of first aid measures
- · General information:

*Immediately remove any clothing soiled by the product.* 

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

Remove breathing apparatus only after contaminated clothing have been completely removed.

In case of irregular breathing or respiratory arrest provide artificial respiration.

· After inhalation:

Supply fresh air or oxygen; call for doctor.

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: Immediately call a doctor.
- · Information for doctor:
- · Most important symptoms and effects, both acute and delayed No further relevant information available.

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(Contd. of page 3)

· 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

During heating or in case of fire poisonous gases are produced.

- · Advice for firefighters
- · Protective equipment: Mouth respiratory protective device.

### 6 Accidental release measures

- · Personal precautions, protective equipment and emergency procedures Mount respiratory protective device.
- · Environmental precautions:

Dilute with plenty of water.

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 item 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

· PAC-1:		
CAS: 7789-00-6	Potassium Chromate	$0.56 \text{ mg/m}^3$
CAS: 7778-50-9	Potassium Dichromate	$0.42 \ mg/m^3$
· PAC-2:		
CAS: 7789-00-6	Potassium Chromate	$9.7  mg/m^3$
CAS: 7778-50-9	Potassium Dichromate	$7.4 \text{ mg/m}^3$
· PAC-3:		
CAS: 7789-00-6	Potassium Chromate	58 mg/m³
CAS: 7778-50-9	Potassium Dichromate	44 mg/m³

### 7 Handling and storage

- · Handling:
- · Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Open and handle receptacle with care.

Prevent formation of aerosols.

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

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(Contd. of page 4)

- · 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 item 7.
- · Control parameters

### · Components with limit values that require monitoring at the workplace:

#### CAS: 7789-00-6 Potassium Chromate

PEL Long-term value: 0.005\* mg/m<sup>3</sup>

Ceiling limit value: 0.1\*\* mg/m³

\*as Cr(VI) \*\*as CrO3; see 29 CFR 1910.1026

REL Long-term value: 0.0002 mg/m<sup>3</sup>

as Cr; See Pocket Guide Apps. A and C

TLV Short-term value: 0.0005 mg/m<sup>3</sup>

Long-term value: 0.0002 mg/m<sup>3</sup>

as Cr(VI); inhalable, Skin; BEI, DSEN, RSEN

#### CAS: 7778-50-9 Potassium Dichromate

PEL Long-term value: 0.005\* mg/m³

Ceiling limit value: 0.1\*\* mg/m³

\*as Cr(VI) \*\*as CrO3; see 29 CFR 1910.1026

REL Long-term value: 0.0002 mg/m<sup>3</sup>

as Cr; See Pocket Guide Apps. A and C

TLV Short-term value: 0.0005 mg/m<sup>3</sup>

Long-term value: 0.0002 mg/m<sup>3</sup>

as Cr(VI); inhalable, Skin; BEI, DSEN, RSEN

### · Ingredients with biological limit values:

### CAS: 7789-00-6 Potassium Chromate

BEI 25 μg/L

LD50 Intraperitoneal: urine

Time: end of shift at end of workweek

LD50: Total chromium (fume)

10 μg/L

LD50 Intraperitoneal: urine

Time: increase during shift

LD50: Total chromium (fume)

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#### CAS: 7778-50-9 Potassium Dichromate

BEI 25 μg/L

LD50 Intraperitoneal: urine

Time: end of shift at end of workweek

LD50: Total chromium (fume)

10 μg/L

LD50 Intraperitoneal: urine Time: increase during shift LD50: Total chromium (fume)

- · 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.

· Eye protection:



Tightly sealed goggles

· Body protection: Protective work clothing

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9 Physical and chemical propert	ties	
· Information on basic physical and c	hemical properties	
General Information	nemicui properties	
· Appearance:		
Form:	Liquid	
Color:	Yellow-orange	
· Odor:	Odorless	
· Odor threshold:	Not determined.	
· pH-value:	Not determined.	
· Change in condition		
Melting point/Melting range:	Undetermined.	
Boiling point/Boiling range:	100 °C (212 °F)	
· Flash point:	Not applicable.	
· Flammability (solid, gaseous):	Not applicable.	
· Decomposition temperature:	Not determined.	
· Auto igniting:	Product is not selfigniting.	
· Danger of explosion:	Product does not present an explosion hazard.	
· Explosion limits:		
Lower:	Not determined.	
Upper:	Not determined.	
· Vapor pressure at 20 °C (68 °F):	23 hPa (17.3 mm Hg)	
· Density at 20 °C (68 °F):	1.22161 g/cm³ (10.19434 lbs/gal)	
· Relative density	Not determined.	
· Vapor density	Not determined.	
· Evaporation rate	Not determined.	
· Solubility in / Miscibility with		
Water:	Fully miscible.	
· Partition coefficient (n-octanol/wate	e <b>r</b> ): Not determined.	
· Viscosity:		
Dynamic:	Not determined.	
Kinematic:	Not determined.	
· Solvent content:		
Water:	71.3 %	
VOC content:	0.00 %	
	0.0 g/l / 0.00 lb/gal	
Solids content:	28.7 %	
Other information	No further relevant information available.	

### 10 Stability and reactivity

- $\cdot \textit{Reactivity No further relevant information available}.$
- · Chemical stability
- · Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

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- · 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:

· LD/LC50 values that are relevant for classification:		
ATE (Acu	te Toxicity	Estimate)
Oral	LD50	594 mg/kg
Dermal	LD50	53,750 mg/kg
Inhalative	LC50/4h	2.44 mg/l
CAS: 7789	0-00-6 Pot	assium Chromate
Oral	LD50	100 mg/kg (ATE)
CAS: 7778	3-50-9 Pot	assium Dichromate
Oral	LD50	100 mg/kg (ATE)
Dermal	<i>LD50</i>	1,100 mg/kg (ATE)
Inhalative	LC50/4h	0.05  mg/l  (ATE)

- · Primary irritant effect:
- · on the skin: Irritant to skin and mucous membranes.
- · on the eye: Irritating effect.
- · Sensitization:

Sensitization possible through inhalation.

Sensitization possible through skin contact.

· Additional toxicological information:

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

Harmful

Irritant

The product can cause inheritable damage.

· Carcinogenic categories

· IARC (Internation	onal Agency for Research on Cancer)	
CAS: 7789-00-6	Potassium Chromate	1
CAS: 7778-50-9	Potassium Dichromate	1
· NTP (National T	Toxicology Program)	
CAS: 7789-00-6	Potassium Chromate	K
CAS: 7778-50-9	Potassium Dichromate	K
· OSHA-Ca (Occu	pational Safety & Health Administration)	
None of the ingre	edients is listed.	

US -

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### 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 3 (Self-assessment): extremely hazardous for water

Do not allow product to reach ground water, water course or sewage system, even in small quantities.

Danger to drinking water if even extremely small quantities leak into the ground.

- · Results of PBT and vPvB assessment
- · **PBT**: Not applicable.
- · vPvB: Not applicable.
- · Other adverse effects No further relevant information available.

### 13 Disposal considerations

- · Waste treatment methods
- · Recommendation:

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.
- · Recommended cleansing agent: Water, if necessary with cleansing agents.

ransport		

· UN-Number · DOT, IMDG, IATA	UN3139
· UN proper shipping name	
$\cdot DOT$	Oxidizing liquid, n.o.s. (Potassium Chromate, Potassium
	Dichromate)
· IMDG	OXIDIZING LIQUID, N.O.S. (Potassium Chromate, Potassium
	Dichromate), MARINE POLLUTANT
· IATA	OXIDIZING LIQUID, N.O.S. (Potassium Chromate, Potassium
	Dichromate)

- · Transport hazard class(es)
- $\cdot DOT$



· Class 5.1 Oxidizing substances

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	(Contd. of page
Label	5.1
IMDG ¥2	
Class Label	5.1 Oxidizing substances 5.1
IATA  Class	5.1 Oxidizing substances
Label	5.1
Packing group DOT, IMDG, IATA	III
Environmental hazards:	Product contains environmentally hazardous substance Potassium Chromate
Marine pollutant:	Yes Symbol (fish and tree)
Special precautions for user Hazard identification number (Kemler code): EMS Number: Stowage Category Segregation Code	Warning: Oxidizing substances  51 F-A,S-Q B SG38 Stow "separated from" SGG2-ammonium compounds. SG49 Stow "separated from" SGG6-cyanides SG60 Stow "separated from" SGG16-peroxides
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
Transport/Additional information:	
IMDG Limited quantities (LQ) Excepted quantities (EQ)	5L Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
UN ''Model Regulation'':	UN 3139 OXIDIZING LIQUID, N.O.S. (POTASSIU CHROMATE, POTASSIUM DICHROMATE), 5.1, III

## 15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Sara
- · Section 355 (extremely hazardous substances):

None of the ingredients is listed.

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		(Contd	. of page
	cific toxic chemical listings):		
	Potassium Chromate		
	Potassium Dichromate		
`	ostances Control Act):		
Water			ACTIV.
Potassium Chrom			ACTIV
Potassium Dichro	omate		ACTIV.
Hazardous Air Po	ollutants		
CAS: 7789-00-6	Potassium Chromate		
CAS: 7778-50-9	Potassium Dichromate		
Proposition 65			
Chemicals known			
	Potassium Chromate		
CAS: 7778-50-9	Potassium Dichromate		
Chemicals known	to cause reproductive toxicity for fema	les:	
CAS: 7789-00-6	Potassium Chromate		
CAS: 7778-50-9	Potassium Dichromate		
Chemicals known	to cause reproductive toxicity for males	s:	
CAS: 7789-00-6	Potassium Chromate		
CAS: 7778-50-9	Potassium Dichromate		
Chemicals known	to cause developmental toxicity:		
CAS: 7789-00-6	Potassium Chromate		
CAS: 7778-50-9	Potassium Dichromate		
Carcinogenic cat	egories		
EPA (Environme	ntal Protection Agency)		
CAS: 7789-00-6	Potassium Chromate	A(inh), D(oral), K/L(inh), C	BD(ora
CAS: 7778-50-9	Potassium Dichromate	A(inh), D(oral), K/L(inh), C	BD(ora
TLV (Threshold	Limit Value)		
CAS: 7789-00-6	Potassium Chromate		Α
CAS: 7778-50-9	Potassium Dichromate		A
NIOSH-Ca (Nati	onal Institute for Occupational Safety a	nd Health)	
CAS: 7789-00-6	Potassium Chromate		
CAS 7770 50 0	D D. I.		

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





CAS: 7778-50-9 Potassium Dichromate



GHS06

GHS07

GHS08

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

Potassium Chromate

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Potassium Dichromate

#### · Hazard statements

Harmful if swallowed.

Toxic if inhaled.

Causes skin irritation.

Causes serious eve irritation.

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

May cause an allergic skin reaction.

May cause genetic defects.

May cause cancer.

May damage fertility or the unborn child.

May cause respiratory irritation.

Causes damage to the respiratory system through prolonged or repeated exposure.

#### · Precautionary statements

Obtain special instructions before use.

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

Do not breathe dust/fume/gas/mist/vapors/spray.

Wash thoroughly after handling.

Do not eat, drink or smoke when using this product.

Use only outdoors or in a well-ventilated area.

Contaminated work clothing must not be allowed out of the workplace.

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

[In case of inadequate ventilation] wear respiratory protection.

If swallowed: Call a poison center/doctor if you feel unwell.

Rinse mouth.

If on skin: Wash with plenty of water.

*IF INHALED: Remove person to fresh air and keep comfortable for breathing.* 

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).

Get medical advice/attention if you feel unwell.

Take off contaminated clothing and wash it before reuse.

If skin irritation or rash occurs: Get medical advice/attention.

*If eye irritation persists: Get medical advice/attention.* 

If experiencing respiratory symptoms: Call a poison center/doctor.

Wash contaminated clothing before reuse.

Store in a well-ventilated place. Keep container tightly closed.

Store locked up.

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

### · National regulations:

### · Additional classification according to Decree on Hazardous Materials:

Carcinogenic hazardous material group III (dangerous).

### · 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.

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### 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

Revision 1.0, 11-16-2021: Updated product information. STN Creation date for SDS 07-31-2015. STN 12/02/2021 / -

· Abbreviations and acronyms:

IMDG: International Maritime Code for Dangerous Goods

 $DOT: \ US \ Department \ of \ Transportation$ 

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)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

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

BEI: Biological Exposure Limit

Acute Tox. 4: Acute toxicity - Category 4

Acute Tox. 3: Acute toxicity – Category 3

 ${\it Skin Irrit.~2: Skin corrosion/irritation-Category~2}$ 

Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A

Resp. Sens. 1: Respiratory sensitisation – Category 1

Skin Sens. 1: Skin sensitisation – Category 1

Muta. 1B: Germ cell mutagenicity – Category 1B

Carc. 1B: Carcinogenicity - Category 1B

Repr. 1B: Reproductive toxicity – Category 1B

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

STOT RE 1: Specific target organ toxicity (repeated exposure) – Category 1

US