Printing date 05/23/2024 Reviewed on 05/23/2024

1 Identification

· Product identifier

• Trade name: Potassium Chromate 5% w/v AF Grade with Methanol

· Article number: ND420

· 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



GHS02 Flame

Flammable Liquids 2 H225 Highly flammable liquid and vapor.



GHS08 Health hazard

Germ Cell Mutagenicity 1B H340 May cause genetic defects.

Carcinogenicity 1A H350 May cause cancer.

Specific Target Organ Toxicity - Single Exposure 1 H370 Causes damage to the central nervous system and the visual organs.



Acute Toxicity - Oral 4

Acute Toxicity - Dermal 4

Acute Toxicity - Inhalation 4

Sensitization - Skin 1

H302 Harmful if swallowed.

H312 Harmful in contact with skin.

H332 Harmful if inhaled.

H317 May cause an allergic skin reaction.

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







GHS02

GHS07

GHS08

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Trade name: Potassium Chromate 5% w/v AF Grade with Methanol

(Contd. of page 1)

· Signal word Danger

· Hazard-determining components of labeling:

Methanol

Potassium Chromate

· Hazard statements

Highly flammable liquid and vapor.

Harmful if swallowed, in contact with skin or if inhaled.

May cause an allergic skin reaction.

May cause genetic defects.

May cause cancer.

Causes damage to the central nervous system and the visual organs.

· Precautionary statements

Obtain special instructions before use.

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

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

Keep container tightly closed.

Ground/bond container and receiving equipment.

Use explosion-proof electrical/ventilating/lighting/equipment.

Use only non-sparking tools.

Take precautionary measures against static discharge.

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.

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

Rinse mouth.

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

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

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 or rash occurs: Get medical advice/attention.

Wash contaminated clothing before reuse.

In case of fire: Use CO2, powder or water spray to extinguish.

Store in a well-ventilated place. Keep cool.

Store locked up.

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

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



Health = 2Fire = 3Reactivity = 0

· HMIS-ratings (scale 0 - 4)



Health = 3Fire = 3

(Contd. on page 3)

Printing date 05/23/2024 Reviewed on 05/23/2024

Trade name: Potassium Chromate 5% w/v AF Grade with Methanol

(Contd. of page 2)

- · 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: 67-56-1	Methanol	20.2%		
CAS: 7789-00-6	Potassium Chromate	5.104%		
· Table of Nonhazardous Ingredients				
CAS: 7732-18-5	Water	74.695%		

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.

· After inhalation:

Supply fresh air and to be sure call for a 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.
- · After swallowing: Immediately call a doctor.
- · 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:

CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

- · 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.

Wear protective equipment. Keep unprotected persons away.

(Contd. on page 4)

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Trade name: Potassium Chromate 5% w/v AF Grade with Methanol

(Contd. of page 3)

· Environmental precautions:

Do not allow product to reach sewage system or any water course.

Inform respective authorities in case of seepage into water course or sewage system.

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 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

· PAC-1:				
CAS: 67-56-1	Methanol	530 ppm		
CAS: 7789-00-6	Potassium Chromate	0.56 mg/m^3		
· PAC-2:				
CAS: 67-56-1	Methanol	2,100 ppm		
CAS: 7789-00-6	Potassium Chromate	9.7 mg/m³		
· PAC-3:				
CAS: 67-56-1	Methanol	7200* ppm		
CAS: 7789-00-6	Potassium Chromate	58 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 ignition sources away - Do not smoke.

Protect against electrostatic charges.

Keep respiratory protective device available.

- · Conditions for safe storage, including any incompatibilities
- · Storage:
- · Requirements to be met by storerooms and receptacles: Store in a cool location.
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions:

Keep receptacle tightly sealed.

Store in cool, dry conditions in well sealed receptacles.

· 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.

(Contd. on page 5)

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Trade name: Potassium Chromate 5% w/v AF Grade with Methanol

(Contd. of page 4)

· Control parameters

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

CAS: 67-56-1 Methanol

PEL Long-term value: 260 mg/m³, 200 ppm REL Short-term value: 325 mg/m³, 250 ppm Long-term value: 260 mg/m³, 200 ppm

Skin

TLV Short-term value: 250 ppm Long-term value: 200 ppm Skin; BEI

CAS: 7789-00-6 Potassium Chromate

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/m³

as Cr; See Pocket Guide Apps. A and C

TLV Short-term value: 0.0005 mg/m³ Long-term value: 0.0002 mg/m³

as Cr(VI); A1; inhalable, Skin; BEI, DSEN, RSEN

· Ingredients with biological limit values:

CAS: 67-56-1 Methanol

BEI 15 mg/L

LD50 Intraperitoneal: urine

Time: end of shift

LD50: Methanol (background, nonspecific)

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)

- · 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.

(Contd. on page 6)

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Trade name: Potassium Chromate 5% w/v AF Grade with Methanol

(Contd. of page 5)

· 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

Information on basic physical and	chemical properties
General Information	
Appearance:	
Form:	Liquid
Color:	Yellow
Odor:	Slight Methanol
Odor threshold:	Not determined.
pH-value:	Not determined.
Change in condition	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	64 °C (147.2 °F)
Flash point:	11 °C (51.8 °F)
Flammability (solid, gaseous):	Highly flammable.
Auto igniting:	455 °C (851 °F)
Decomposition temperature:	Not determined.
Ignition temperature:	Product is not selfigniting.
Danger of explosion:	Product is not explosive. However, formation of explosive air/vap mixtures are possible.
Explosion limits:	
Lower:	5.5 Vol %

(Contd. on page 7)

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Trade name: Potassium Chromate 5% w/v AF Grade with Methanol

	(Contd.	of page
Upper:	44 Vol %	
· Vapor pressure at 20 °C (68 °F):	128 hPa (96 mm Hg)	
· Density at 20 °C (68 °F):	0.97956 g/cm³ (8.17443 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 r): Not determined.	
· Viscosity:		
Dynamic:	Not determined.	
Kinematic:	Not determined.	
Solvent content:		
Organic solvents:	20.2 %	
Water:	74.7 %	
VOC content:	20.20 %	
	197.9 g/l / 1.65 lb/gal	
Solids content:	5.1 %	
· 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:

· LD/LC50	values	that are	relevant	for a	classification
· LD/LC30	vuiues	mui are	reievani	<i>jui</i> c	ıussıjıcano

ATE (Acute Toxicity Estimate)				
Oral	LD50	434 mg/kg		
Dermal	LD50	434 mg/kg 1,485 mg/kg		
Inhalative	LC50/4h	14.9 mg/l		

- · Primary irritant effect:
- · on the skin: No irritant effect.
- · on the eye: No irritating effect.
- · Sensitization: Sensitization possible through skin contact.
- · Additional toxicological information:

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

(Contd. on page 8)

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Trade name: Potassium Chromate 5% w/v AF Grade with Methanol

(Contd. of page 7)

K

Harmful

Irritant

The product can cause inheritable damage.

· Carcinogenic categories

· IARC (International Agency for Research on Cancer)

CAS: 7789-00-6 Potassium Chromate

· NTP (National Toxicology Program)

CAS: 7789-00-6 Potassium Chromate

· 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 2 (Self-assessment): hazardous for water

Do not allow product to reach ground water, water course or sewage system.

Danger to drinking water if even 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.

14 Transport information

٠	U_{I}	N-N	lumi	ber
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· DOT, IMDG, IATA UN1993

· UN proper shipping name

• **DOT** Flammable liquids, n.o.s. (Methanol)

· IMDG FLAMMABLE LIQUID, N.O.S. (Methanol, Potassium Chromate),
MARINE POLLUTANT

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Trade name: Potassium Chromate 5% w/v AF Grade with Methanol

LE LIQUID, N.O.S. (Methanol) le liquids le liquids
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le liquids
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le liquids
le liquids
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la liquida
le liquids
ontains environmentally hazardous substance
Chromate
and tree)
lammable liquids
ble.
er aircraft/rail: 5 L
rcraft only: 60 L
rcraft only. 00 L
reraji oniy. 00 L
reragi only. 00 L
et quantity per inner packaging: 30 ml

Printing date 05/23/2024 Reviewed on 05/23/2024

Trade name: Potassium Chromate 5% w/v AF Grade with Methanol

(Contd. of page 9)

· UN "Model Regulation":

UN 1993 FLAMMABLE LIQUID, N.O.S. (METHANOL), 3, II

15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Sara

 Section 355 (extremely hazardous substances): 	· Section	355 (extreme	ly hazardous	s substances).
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None of the ingredients is listed.

· Section 313 (Specific toxic chemical listings):

CAS: 67-56-1 Methanol

CAS: 7789-00-6 Potassium Chromate

· TSCA (Toxic Substances Control Act):

Water	ACTIVE
Methanol	ACTIVE
Potassium Chromate	ACTIVE

· Hazardous Air Pollutants

CAS: 67-56-1 Methanol

CAS: 7789-00-6 Potassium Chromate

- · Proposition 65
- · Chemicals known to cause cancer:

CAS: 7789-00-6 Potassium Chromate

· Chemicals known to cause reproductive toxicity for females:

CAS: 7789-00-6 Potassium Chromate

· Chemicals known to cause reproductive toxicity for males:

CAS: 7789-00-6 Potassium Chromate

· Chemicals known to cause developmental toxicity:

CAS: 67-56-1 *Methanol*

CAS: 7789-00-6 Potassium Chromate

· Carcinogenic categories

EPA (Environmental Protection Agency)

CAS: 7789-00-6 Potassium Chromate

A(inh), D(oral), K/L(inh), CBD(oral)

· TLV (Threshold Limit Value)

CAS: 7789-00-6 Potassium Chromate

A1

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

CAS: 7789-00-6 Potassium Chromate

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







GHS02

GHS07 GHS08

CHICOC

Printing date 05/23/2024 Reviewed on 05/23/2024

Trade name: Potassium Chromate 5% w/v AF Grade with Methanol

(Contd. of page 10)

· Signal word Danger

· Hazard-determining components of labeling:

Methanol

Potassium Chromate

· Hazard statements

Highly flammable liquid and vapor.

Harmful if swallowed, in contact with skin or if inhaled.

May cause an allergic skin reaction.

May cause genetic defects.

May cause cancer.

Causes damage to the central nervous system and the visual organs.

· Precautionary statements

Obtain special instructions before use.

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

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

Keep container tightly closed.

Ground/bond container and receiving equipment.

Use explosion-proof electrical/ventilating/lighting/equipment.

Use only non-sparking tools.

Take precautionary measures against static discharge.

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.

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

Rinse mouth.

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

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

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 or rash occurs: Get medical advice/attention.

Wash contaminated clothing before reuse.

In case of fire: Use CO2, powder or water spray to extinguish.

Store in a well-ventilated place. Keep cool.

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.

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.

(Contd. on page 12)

Printing date 05/23/2024 Reviewed on 05/23/2024

Trade name: Potassium Chromate 5% w/v AF Grade with Methanol

(Contd. of page 11)

· Department issuing SDS: Environment protection department.

· Contact:

Date of Preparation / Last Revision:

· Date of preparation / last revision

Revision 1.2, 05/23/2024: Reviewed SDS for accuracy. MH/STN 05/23/2024

· 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

Flammable Liquids 2: Flammable liquids - Category 2

Acute Toxicity - Oral 4: Acute toxicity - Category 4

Sensitization - Skin 1: Skin sensitisation - Category 1

Germ Cell Mutagenicity 1B: Germ cell mutagenicity – Category 1B

Carcinogenicity 1A: Carcinogenicity - Category 1A

Specific Target Organ Toxicity - Single Exposure 1: Specific target organ toxicity (single exposure) - Category 1

* Data compared to the previous version altered.

-US