Printing date 01/12/2018 Reviewed on 01/12/2018

#### 1 Identification

· Product identifier

· Trade name: Potassium Chromate Indicator Solution W/AF

· Article number: 215-01-1

· Details of the supplier of the safety data sheet

· Manufacturer/Supplier: OFI Testing Equipment Inc. 11302 Steeplecrest Dr. Houston, TX 77065 (877) 837-8683

· Information department: techservices@ofite.com

· Emergency telephone number:

INFOTRAC USA - CANADA: 1-800-535-5053

INTERNATIONAL: 1-352-323-3500



### 2 Hazard(s) identification

· Classification of the substance or mixture



GHS02 Flame

Flam. Liq. 3 H226 Flammable liquid and vapor.



GHS08 Health hazard

Muta. 1B H340 May cause genetic defects.

Carc. 1A H350 May cause cancer.

STOT SE 1 H370 Causes damage to organs.



GHS07

Acute Tox. 4 H302 Harmful if swallowed.

Skin Sens. 1 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

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

Methanol (Methyl Alcohol)

Potassium Chromate

· Hazard statements

Flammable liquid and vapor.

(Contd. on page 2)

Printing date 01/12/2018 Reviewed on 01/12/2018

Trade name: Potassium Chromate Indicator Solution W/AF

(Contd. of page 1)

Harmful if swallowed.

May cause an allergic skin reaction.

May cause genetic defects.

May cause cancer.

Causes damage to 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.

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.

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

IF exposed or concerned: Get medical advice/attention.

Specific treatment (see on this label).

Rinse mouth.

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

Wash contaminated clothing before reuse.

*In case of fire: Use for extinction: CO2, powder or water spray.* 

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 = 1Reactivity = 0

· HMIS-ratings (scale 0 - 4)



Health = 3Fire = 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.

(Contd. on page 3)

Printing date 01/12/2018 Reviewed on 01/12/2018

Trade name: Potassium Chromate
Indicator Solution W/AF

		(Contd. of page 2)
· Dangerous comp	onents:	
CAS: 67-56-1	Methanol (Methyl Alcohol)	28.909%
CAS: 7789-00-6	Potassium Chromate	5.214%
· ·	ardous Ingredients	
CAS: 7732-18-5	Water	65.877%

#### 4 First-aid measures

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

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.
- $\cdot \textit{Indication of any immediate medical attention and special treatment needed}$

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

Wear protective equipment. Keep unprotected persons away.

· 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.

(Contd. on page 4)

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Trade name: Potassium Chromate
Indicator Solution W/AF

· Protective Action	a Criteria for Chemicals	(Contd. of page 3)
· PAC-1:		
CAS: 67-56-1	Methanol (Methyl Alcohol)	530 ppm
CAS: 7789-00-6	Potassium Chromate	0.56 mg/m <sup>3</sup>
· PAC-2:		
CAS: 67-56-1	Methanol (Methyl Alcohol)	2,100 ppm
CAS: 7789-00-6	Potassium Chromate	9.7 mg/m³
· <i>PAC-3:</i>		
CAS: 67-56-1	Methanol (Methyl Alcohol)	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.
- · Information about protection against explosions and fires:

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

- · 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.

11000	to your manager of the manager of th	
· Cont	rol parameters	
· Com	· Components with limit values that require monitoring at the workplace:	
CAS	: 67-56-1 Methanol (Methyl Alcohol)	
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: 328 mg/m³, 250 ppm Long-term value: 262 mg/m³, 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	
	(Contd on page 5)	

(Contd. on page 5)

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Trade name: Potassium Chromate
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(Contd. of page 4)

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

as Cr; See Pocket Guide Apps. A and C

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

Long-term value: (0.05) NIC-0.0002\* mg/m<sup>3</sup> as Cr; \*inhalable, BEI, NIC-Skin, DSEN, RSEN

#### · Ingredients with biological limit values:

#### CAS: 67-56-1 Methanol (Methyl Alcohol)

#### 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.

#### · 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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Trade name: Potassium Chromate
Indicator Solution W/AF

(Contd. of page 5)

· Eye protection:



Tightly sealed goggles

· Body protection: Protective work clothing

Information on basic physical and o	chemical properties	
General Information	• •	
Appearance:		
Form:	Liquid	
Color:	Clear to pale yellow	
Odor:	Alcohol	
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.	
Ignition temperature:	455 °C (851 °F)	
Decomposition temperature:	Not determined.	
Auto igniting:	Product is not selfigniting.	
Danger of explosion:	Not determined.	
Explosion limits:		
Lower:	5.5 Vol %	
Upper:	44 Vol %	
Vapor pressure at 20 °C (68 °F):	128 hPa (96 mm Hg)	
Density at 20 °C (68 °F):	1.0025 g/cm³ (8.36586 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	er): Not determined.	
Viscosity:		
Dynamic:	Not determined.	
Kinematic:	Not determined.	

(Contd. on page 7)

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Trade name: Potassium Chromate
Indicator Solution W/AF

	(Contd. of pa	ige 6
Water: VOC content:	65.9 % 28.91 % 289.8 g/l / 2.42 lb/gl	
Solids content: · Other information	0.0 % 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:

Tiente toxi	cuj.	
· LD/LC50 values that are relevant for classification:		
ATE (Acu	ATE (Acute Toxicity Estimate)	
Oral	LD50	1,875-2,537 mg/kg
Inhalative	LC50/4 h	443 mg/l (rat)
CAS: 67-56-1 Methanol (Methyl Alcohol)		
Oral	LD50	100 mg/kg (ATE)
Dermal	LD50	300 mg/kg (ATE)
Inhalative	LC50/4 h	3 mg/l (ATE)
CAS: 7789-00-6 Potassium Chromate		

- · Primary irritant effect:
- · on the skin: No irritant effect.

LD50

- · on the eye: No irritating effect.
- · Sensitization: Sensitization possible through skin contact.

100 mg/kg (ATE)

· Additional toxicological information:

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

Irritant

Oral

The product can cause inheritable damage.

· Carcinogenic categories

,	onal Agency for Research on Cancer)	
CAS: 7789-00-6	Potassium Chromate	1
· NTP (National T	Toxicology Program)	
CAS: 7789-00-6	Potassium Chromate	K
	(Co	ontd. on page 8)

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Trade name: Potassium Chromate
Indicator Solution W/AF

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· 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

- · UN-Number
- · DOT, IMDG, IATA

UN1993

- · UN proper shipping name
- $\cdot DOT$

Flammable liquids, n.o.s. (Methanol)

· IMDG, IATA

FLAMMABLE LIQUID, N.O.S. (METHANOL)

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



· Class 3 Flammable liquids

(Contd. on page 9)

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Trade name: Potassium Chromate
Indicator Solution W/AF

(Contd. of page 8) · Label 3 · IMDG, IATA 3 Flammable liquids · Class · Label · Packing group · DOT, IMDG, IATA II· Environmental hazards: · Marine pollutant: Yes Warning: Flammable liquids · Special precautions for user · EMS Number: F-E,S-E· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable. UN 1993 FLAMMABLE LIQUIDS, N.O.S. (METHANOL), 3, II · UN "Model Regulation":

### 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.		
· Section 313 (Specific toxic chemical listings):		
CAS: 67-56-1	Methanol (Methyl Alcohol)	
CAS: 7789-00-6	Potassium Chromate	

· TSCA (Toxic Substances Control Act):

Methanol (Methyl Alcohol)

Potassium Chromate

Water

· TSCA new (21st Century Act) (Substances not listed)

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 (Methyl Alcohol)

(Contd. on page 10)

Printing date 01/12/2018 Reviewed on 01/12/2018

Trade name: Potassium Chromate
Indicator Solution W/AF

(Contd. of page 9)

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 established by ACGIH)

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

· **Signal word** Danger

#### · Hazard-determining components of labeling:

Methanol (Methyl Alcohol)

Potassium Chromate

#### · Hazard statements

Flammable liquid and vapor.

Harmful if swallowed.

May cause an allergic skin reaction.

May cause genetic defects.

May cause cancer.

Causes damage to 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.

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

 $We ar \ protective \ gloves/protective \ clothing/eye \ protection/face \ protection.$ 

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

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

IF exposed or concerned: Get medical advice/attention.

Specific treatment (see on this label).

Rinse mouth.

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

Wash contaminated clothing before reuse.

*In case of fire: Use for extinction: CO2, powder or water spray.* 

Store in a well-ventilated place. Keep cool.

(Contd. on page 11)

Printing date 01/12/2018 Reviewed on 01/12/2018

Trade name: Potassium Chromate
Indicator Solution W/AF

(Contd. of page 10)

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.

- · Department issuing SDS: Environment protection department.
- · Contact:
- · Date of preparation / last revision

01-12-2018: review SDS for accuracy. STN

Creation date for SDS 07-16-2014 LS

Revision 0.2 08-05-2016, updated DOT information STN

Revision 0.1, 05-04-2015: revised to correct emergency contact and technical contact information. STN 01/12/2018 / -

· Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

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

Flam. Liq. 3: Flammable liquids – Category 3

Acute Tox. 4: Acute toxicity - Category 4

Skin Sens. 1: Skin sensitisation – Category 1

Muta 18: Commodly mutagonicity. Category 1

 $Muta.\ 1B:\ Germ\ cell\ mutagenicity-Category\ 1B$ 

Carc. 1A: Carcinogenicity - Category 1A

STOT SE 1: Specific target organ toxicity (single exposure) – Category 1

US