Modified Chromic Acid Solution

Safety Data Sheet

according to the Model Work Health and Safety Regulations

Date of issue: 30/11/2018 Revision date: 30/11/2018 Version: 1.0

SECTION 1: Identification : Product identifier and chemical identity

1.1. Product identifier

Trade name : Modified Chromic Acid Solution

Product code : 38016SS12A

1.2. Other means of identification

No additional information available

1.3. Recommended use of the chemical and restrictions on use

Recommended use : For use with Modified Grocott's Methenamine Silver Stain Kit

Restrictions on use : Other uses

1.4. Supplier's details

Leica Microsystems Pty Ltd

Suite 2, Level 3, Building A, Talavera Road

Macquarie Park - 2113 Australia

1.5. Emergency phone number

Organisation/Company	Emergency number
ChemTrec	800-424-9300
International Calls (call collect)	+1 703-527-3887
Australia 24 Hr Poisons Information Centre	13 11 26

SECTION 2: Hazards identification

2.1. Classification of the hazardous chemical

Classification according to the model Work Health and Safety Regulations (WHS Regulations)

Skin corrosion/irritation, Category 1A H314

2.2. Label elements

Signal word (GHS-AU) : Danger

Hazard statements (GHS-AU) : H314 - Causes severe skin burns and eye damage

Precautionary statements (GHS-AU) : P260 - Do not breathe mist/vapours/spray.
P264 - Wash thoroughly after handling
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P301+P330+P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting
P303+P361+P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
P304+P340 - IF INHALED: remove victim to fresh air and keep at rest in a position comfortable for breathing
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P310 - Immediately call a POISON CENTER or doctor/physician
P321 - Specific treatment (see supplemental first aid instruction on this label)
P363 - Wash contaminated clothing before reuse
P405 - Store locked up
P501 - Dispose of contents/container in accordance with all local/regional/national/international regulations

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

Name	CAS-No.	Compound type	%	Classification according to the model Work Health and Safety Regulations (WHS Regulations)
Sulfuric Acid	7664-93-9		< 15	Not classified
Chromium Trioxide	1333-82-0		< 5	Not classified

Name	CAS-No.	Compound type	%	Classification according to the model Work Health and Safety Regulations (WHS Regulations)
Potassium Dichromate	7778-50-9		< 5	Not classified

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Call a physician immediately.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a poison center or a doctor.

First-aid measures after skin contact : Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Call a physician immediately.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.

First-aid measures after ingestion : Rinse mouth. Do not induce vomiting. Call a physician immediately.

4.2. Symptoms caused by exposure

Symptoms/effects after inhalation : May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Symptoms/effects after skin contact : Burns. May cause an allergic skin reaction.

Symptoms/effects after eye contact : Serious damage to eyes.

Symptoms/effects after ingestion : Burns.

4.3. Indication of any immediate medical attention and special treatment needed

Other medical advice or treatment : Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

5.2. Special hazards arising from the substance or mixture

No additional information available

5.3. Special protective equipment and precautions for fire-fighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Only qualified personnel equipped with suitable protective equipment may intervene. Do not breathe mist/vapours/spray.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment. Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

For containment : Collect spillage.

Methods for cleaning up : Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.

SECTION 7: Handling and storage, including how the chemical may be safely used

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Take all necessary technical measures to avoid or minimize the release of the product on the workplace. Limit quantities of product at the minimum necessary for handling and limit the number of exposed workers. Provide local exhaust or general room ventilation. Wear personal protective equipment. Floors, walls and other surfaces in the hazard area must be cleaned regularly. Do not breathe mist/vapours/spray. Do not get in eyes, on skin, or on clothing.

Hygiene measures : Separate working clothes from town clothes. Launder separately. Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store locked up. Store in a well-ventilated place. Keep cool.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters - exposure standards

Sulfuric Acid (7664-93-9)		
USA - ACGIH	ACGIH TWA (mg/m³)	0.2 mg/m³
USA - ACGIH	Remark (ACGIH)	Pulm func

Chromium Trioxide (1333-82-0)		
USA - ACGIH	ACGIH TWA (mg/m³)	0.05 mg/m³ (Chromium, water-soluble inorgan. Cr VI compounds; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value)

Potassium Dichromate (7778-50-9)		
USA - ACGIH	ACGIH TWA (mg/m³)	0.05 mg/m³ (Chromium, water-soluble inorgan. Cr VI compounds; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value)

Exposure limit values for the other components

8.2. Monitoring

No additional information available

8.3. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.

8.4. Personal protective equipment

Hand protection : Protective gloves

Eye protection : Safety glasses

Skin and body protection : Wear suitable protective clothing

Respiratory protection : Wear respiratory protection

Environmental exposure controls : Avoid release to the environment.

SECTION 9: Physical and chemical properties

Physical state : Liquid

Colour : Colourless

Odour : Sulfur

Odour threshold : No data available

pH : ≤ 1

Relative evaporation rate (butylacetate=1) : No data available

Melting point : Not applicable

Boiling point	:	No data available
Flash point	:	No data available
Auto-ignition temperature	:	No data available
Flammability (solid, gas)	:	No data available
Vapour pressure	:	No data available
Relative density	:	No data available
Solubility	:	No data available
Log Pow	:	No data available
Viscosity	:	No data available
Explosive properties	:	No data available
Explosive limits	:	No data available
Minimum ignition energy	:	No data available
Fat solubility	:	No data available

SECTION 10: Stability and reactivity

Reactivity	:	The product is non-reactive under normal conditions of use, storage and transport.
Chemical stability	:	Stable under normal conditions.
Possibility of hazardous reactions	:	No dangerous reactions known under normal conditions of use.
Conditions to avoid	:	None under recommended storage and handling conditions (see section 7).
Hazardous decomposition products	:	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

Acute toxicity (oral)	:	Not classified
Acute toxicity (dermal)	:	Not classified
Acute toxicity (inhalation)	:	Not classified

Chromium Trioxide (1333-82-0)	
LD50 oral rat	50 mg/kg (Rat)
LD50 dermal rat	55 mg/kg (Rat)
LD50 dermal rabbit	57 mg/kg (Rabbit)
LC50 inhalation rat (mg/l)	0.217 mg/l/4h (Rat)

Potassium Dichromate (7778-50-9)	
LD50 oral rat	57 mg/kg (Rat; Equivalent or similar to OECD 401; Experimental value; 168 mg/kg bodyweight; Rat; Equivalent or similar to OECD 401; Experimental value; 90.5 mg/kg bodyweight; Rat)
LD50 dermal rabbit	403 - 490 mg/kg (Rabbit)
LC50 inhalation rat (mg/l)	0.094 mg/l/4h (Rat)

Skin corrosion/irritation	:	Causes severe skin burns and eye damage. pH: ≤ 1
Serious eye damage/irritation	:	pH: ≤ 1
Respiratory or skin sensitisation	:	Not classified
Germ cell mutagenicity	:	Not classified
Carcinogenicity	:	Not classified
Reproductive toxicity	:	Not classified
STOT-single exposure	:	Not classified
STOT-repeated exposure	:	Not classified
Aspiration hazard	:	Not classified

SECTION 12: Ecological information

According to the National Code of Practice for the Preparation of Material Safety Data Sheets, Environmental classification information is not mandatory. Information relevant for GHS classification is available on request

12.1. Ecotoxicity

Ecology - general : Toxic to aquatic life with long lasting effects. Very toxic to aquatic life.
Acute aquatic toxicity : Not classified
Chronic aquatic toxicity : Not classified

12.2. Persistence and degradability

Chromium Trioxide (1333-82-0)	
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable

Potassium Dichromate (7778-50-9)	
Persistence and degradability	Biodegradability: not applicable. Adsorbs into the soil.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable

12.3. Bioaccumulative potential

Chromium Trioxide (1333-82-0)	
BCF fish 1	See section 12.1 on ecotoxicology
BCF fish 2	See section 12.1 on ecotoxicology
BCF other aquatic organisms 1	See section 12.1 on ecotoxicology
BCF other aquatic organisms 2	See section 12.1 on ecotoxicology
Bioaccumulative potential	Not bioaccumulative.

Potassium Dichromate (7778-50-9)	
BCF fish 1	See section 12.1 on ecotoxicology
BCF other aquatic organisms 1	See section 12.1 on ecotoxicology
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Ozone : Not classified
Other adverse effects : No additional information available

SECTION 13: Disposal considerations

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

SECTION 14: Transport information

14.1. UN number

UN-No. (IMDG) : 1755
UN-No. (IATA) : 1755

14.2. Proper Shipping Name - Addition

Proper Shipping Name (IMDG) : CHROMIC ACID SOLUTION
Proper Shipping Name (IATA) : Chromic acid solution

14.3. Transport hazard class(es)

IMDG

Transport hazard class(es) (IMDG) : 8
Danger labels (IMDG) : 8
:

IATA

Transport hazard class(es) (IATA)	:	8
Hazard labels (IATA)	:	8
	:	

14.4. Packing group

Packing group (IMDG)	:	II
Packing group (IATA)	:	II

14.5. Environmental hazards

Marine pollutant	:	No

14.6. Special precautions for user

Specific storage requirement	:	No data available
Shock sensitivity	:	No data available

14.7. Additional information

Other information	:	No supplementary information available

Transport by road and rail

Not applicable

Transport by sea

UN-No. (IMDG)	:	1755
Limited quantities (IMDG)	:	1 L
Excepted quantities (IMDG)	:	E2
Packing instructions (IMDG)	:	P001
IBC packing instructions (IMDG)	:	IBC02
IBC special provisions (IMDG)	:	B20
Tank instructions (IMDG)	:	T8
Tank special provisions (IMDG)	:	TP2
EmS-No. (Fire)	:	F-A - FIRE SCHEDULE Alfa - GENERAL FIRE SCHEDULE
EmS-No. (Spillage)	:	S-B - SPILLAGE SCHEDULE Bravo - CORROSIVE SUBSTANCES
Stowage category (IMDG)	:	C
Properties and observations (IMDG)	:	Orange liquid. Powerful oxidant. May cause fire in contact with organic materials such as wood, cotton or straw. Highly corrosive to most metals. Causes burns to skin, eyes and mucous membranes.

Air transport

UN-No. (IATA)	:	1755
PCA Excepted quantities (IATA)	:	E2
PCA Limited quantities (IATA)	:	Y840
PCA limited quantity max net quantity (IATA)	:	0.5L
PCA packing instructions (IATA)	:	851
PCA max net quantity (IATA)	:	1L
CAO packing instructions (IATA)	:	855
CAO max net quantity (IATA)	:	30L
Special provisions (IATA)	:	A3
ERG code (IATA)	:	8L

14.8. Hazchem or Emergency Action Code

Hazchemcode	:	Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

No additional information available

15.2. International agreements

No additional information available

SECTION 16: Any other relevant information

Revision date : 30/11/2018

Classification:

Skin Corr. 1A	H314

Full text of H-statements:

Skin Corr. 1A	Skin corrosion/irritation, Category 1A
H314	Causes severe skin burns and eye damage

SDS Australia Leica

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product