

SAFETY DATA SHEET

Version 6.7 Revision Date 25.08.2021 Print Date 18.06.2022

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers

Product name : Formaldehyde solution

Product Number : 252549

Brand : Sigma-Aldrich

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Synthesis of substances

1.3 Details of the supplier of the safety data sheet

Company : MilliporeSigma Canada Ltd

2149 WINSTON PARK DRIVE

OAKVILLE ON L6H 6J8

CANADA

Telephone : +1 905 829-9500 Fax : +1 905 829-9292

1.4 Emergency telephone

Emergency Phone # : 800-424-9300 CHEMTREC (USA)

+1-703-527-3887 CHEMTREC

(International)

24 Hours/day; 7 Days/week

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

GHS Classification in accordance with Hazardous Products Regulations (HPR) (SOR/2015-17)

Flammable liquids (Category 3), H226

Acute toxicity, Oral (Category 3), H301

Acute toxicity, Inhalation (Category 2), H330

Acute toxicity, Dermal (Category 3), H311

Skin corrosion (Category 1B), H314

Serious eye damage (Category 1), H318

Skin sensitization (Category 1), H317

Germ cell mutagenicity (Category 2), H341

Carcinogenicity (Category 1B), H350

Specific target organ toxicity - single exposure (Category 1), Eyes, Central nervous system,

H370

Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335

Sigma-Aldrich - 252549

Page 1 of 15

Short-term (acute) aquatic hazard (Category 2), H401

For the full text of the H-Statements mentioned in this Section, see Section 16.

2.2 GHS Label elements, including precautionary statements

Pictogram	
Signal word	Danger
Hazard statement(s) H226 H301 + H311 H314 H317 H330	Flammable liquid and vapor. Toxic if swallowed or in contact with skin. Causes severe skin burns and eye damage. May cause an allergic skin reaction. Fatal if inhaled.
H335 H341 H350	May cause respiratory irritation. Suspected of causing genetic defects. May cause cancer.
H370 H401	Causes damage to organs (Eyes, Central nervous system). Toxic to aquatic life.
Precautionary statement(s	
P201 P202	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233	Keep container tightly closed.
P240	Ground and bond container and receiving equipment.
P241	Use explosion-proof electrical/ ventilating/ lighting/ equipment.
P242	Use non-sparking tools.
P243	Take action to prevent static discharges.
P260	Do not breathe dust/ fume/ gas/ mist/ vapors/ spray.
P264	Wash skin thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
P272	Contaminated work clothing should not be allowed out of the workplace.
P273	Avoid release to the environment.
P280	Wear protective gloves/ protective clothing/ eye protection/ face protection.
P284 P301 + P310 + P330	Wear respiratory protection. IF SWALLOWED: Immediately call a POISON CENTER/ doctor. Rinse mouth.
P301 + P330 + P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
P304 + P340 + P310	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/ doctor.
P305 + P351 + P338 + P310	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/ doctor.
P308 + P311	IF exposed or concerned: Call a POISON CENTER/ doctor.
P333 + P313	If skin irritation or rash occurs: Get medical advice/ attention.
P361 + P364	Take off immediately all contaminated clothing and wash it

	before reuse.
P370 + P378	In case of fire: Use dry sand, dry chemical or alcohol-resistant
	foam to extinguish.
P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
P403 + P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.
P501	Dispose of contents/ container to an approved waste disposal plant.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

- none

SECTION 3: Composition/information on ingredients

3.2 Mixtures

: Formalin Synonyms

Component		Classification	Concentration *	
formaldehyde				
CAS-No. EC-No. Index-No. Registration number	50-00-0 200-001-8 605-001-00-5 01-2119488953-20- XXXX	Flam. Liq. 4; Acute Tox. 3; Acute Tox. 2; Acute Tox. 3; Skin Corr. 1B; Eye Dam. 1; Skin Sens. 1; Muta. 2; Carc. 1B; STOT SE 3; Aquatic Acute 2; H227, H301, H330, H311, H314, H318, H317, H341, H350, H335, H401 Concentration limits: >= 25 %: Skin Corr. 1B, H314; 5 - < 25 %: Eye Irrit. 2, H319; >= 5 %: STOT SE 3, H335; >= 0.2 %: Skin Sens. 1, H317; 5 - < 25 %: Skin Irrit. 2, H315; > = 25 %: Skin Corr. 1B, H314; 5 - < 25 %: Skin Irrit. 2, H315; > = 25 %: Skin Corr. 1B, H314; 5 - < 25 %: Skin Irrit. 2, H315; 5 - < 25 %: Eye Irrit. 2, H319; >= 5 %: STOT SE 3, H335; >= 0.2 %: Skin Sens. 1, H317;	>= 30 - < 60 %	
* Weight %				
Methanol	67.56.4	Tel .: 2 4 . = 2	10 00	
CAS-No. EC-No. Index-No. Registration number	67-56-1 200-659-6 603-001-00-X 01-2119433307-44- XXXX	Flam. Liq. 2; Acute Tox. 3; STOT SE 1; H225, H301, H331, H311, H370 Concentration limits: >= 10 %: STOT SE 1, H370; 3 - < 10 %: STOT	>= 10 - < 30 %	
_		>= 10 %: STOT SE 1,	Page 3 o	

Sigma-



	SE 2, H371;	
* Weight %		

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: First aid measures

4.1 Description of first-aid measures

General advice

First aiders need to protect themselves. Show this material safety data sheet to the doctor in attendance.

If inhaled

After inhalation: fresh air. Immediately call in physician. If breathing stops: immediately apply artificial respiration, if necessary also oxygen.

In case of skin contact

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower. Call a physician immediately.

In case of eye contact

After eye contact: rinse out with plenty of water. Immediately call in ophthalmologist. Remove contact lenses.

If swallowed

After swallowing: fresh air. Make victim drink ethanol (e.g. 1 drinking glass of a 40% alcoholic beverage). Call a doctor immediately (mention methanol ingestion). Only in exceptional cases, if no medical care is available within one hour, induce vomiting (only in fully conscious persons) and make victim drink ethanol again (approx. 0.3 ml of a 40% alcoholic beverage/kg body weight/hour). Do not attempt to neutralise.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed No data available

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing media

Water Foam Carbon dioxide (CO2) Dry powder

Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given.

5.2 Special hazards arising from the substance or mixture

Carbon oxides

Carbon oxides

Combustible.

Vapors are heavier than air and may spread along floors.

Forms explosive mixtures with air at elevated temperatures.

Development of hazardous combustion gases or vapours possible in the event of fire.



5.3 Advice for firefighters

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

5.4 Further information

Remove container from danger zone and cool with water. Prevent fire extinguishing water from contaminating surface water or the ground water system.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Do not breathe vapors, aerosols. Avoid substance contact. Ensure adequate ventilation. Keep away from heat and sources of ignition. Evacuate the danger area, observe emergency procedures, consult an expert. For personal protection see section 8.

6.2 Environmental precautions

Do not let product enter drains. Risk of explosion.

6.3 Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up carefully with liquid-absorbent material (e.g. Chemizorb®). Dispose of properly. Clean up affected area.

6.4 Reference to other sections

For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling

Work under hood. Do not inhale substance/mixture. Avoid generation of vapours/aerosols.

Advice on protection against fire and explosion

Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharge.

Hygiene measures

Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

Keep container tightly closed in a dry and well-ventilated place. Keep away from heat and sources of ignition. Keep locked up or in an area accessible only to qualified or authorized persons.

Storage class

Storage class (TRGS 510): 3: Flammable liquids

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated



SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Components with workplace control parameters

Components wi Components	CAS-No.	Value	Control	Basis	
•			parameters		
formaldehyde	50-00-0	TWA	0.75 ppm 0.9 mg/m3	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)	
Remarks	Suspected Human Carcinogen (means that the human data are accepted as adequate in quality but are conflicting or insufficient to classify the agent as A1)				
		(c)	1 ppm 1.3 mg/m3	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)	
	Suspected Human Carcinogen (means that the human data are accepted as adequate in quality but are conflicting or insufficient to classify the agent as A1)				
		TWA	0.1 ppm	Canada. British Columbia OEL	
	Substance with specific evidence of sensitization by dermal route Substance with specific evidence of sensitization by respiratory route IARC '1' applies to substances categorized as carcinogenic to humans, and used when there is sufficient evidence of carcinogenicity in humans. ACGIH 'A1' applies to those substances confirmed as human carcinogens based on the weight of evidence from epidemiological studies				
		STEL	0.3 ppm	Canada. British Columbia OEL	
	Substance with specific evidence of sensitization by dermal route Substance with specific evidence of sensitization by respiratory route IARC '1' applies to substances categorized as carcinogenic to humans, used when there is sufficient evidence of carcinogenicity in humans. ACGIH 'A1' applies to those substances confirmed as human carcinoge on the weight of evidence from epidemiological studies				
		STEL	1 ppm	Ontario Table of Occupational Exposure Limits made under the Occupational Health and Safety Act.	
		С	1.5 ppm	Ontario Table of Occupational Exposure Limits made under the Occupational Health and Safety Act.	
		С	2 ppm 3 mg/m3	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants	
	Carcinogen	ic effect s	uspected in huma	ans	



		TWA	0.1 ppm	USA. ACGIH Threshold Limit Values (TLV)		
		STEL	0.3 ppm	USA. ACGIH Threshold Limit Values (TLV)		
Methanol	67-56-1	TWA	200 ppm 262 mg/m3	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)		
Remarks	Substance	Substance may be readily absorbed through intact skin				
		STEL	250 ppm 328 mg/m3	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)		
	Substance	Substance may be readily absorbed through intact skin				
		TWA	200 ppm	Canada. British Columbia OEL		
	Contribute	s significan	itly to the overal	Il exposure by the skin route.		
		STEL	250 ppm	Canada. British Columbia OEL		
	Contribute	Contributes significantly to the overall exposure by the skin route.				
		STEV	250 ppm 328 mg/m3	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants		
	Skin (percutaneous)					
		TWAEV	200 ppm 262 mg/m3	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants		
	Skin (percutaneous)					
		TWA	200 ppm	USA. ACGIH Threshold Limit Values (TLV)		
		STEL	250 ppm	USA. ACGIH Threshold Limit Values (TLV)		

8.2 Exposure controls

Appropriate engineering controls

Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.



Personal protective equipment

Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Tightly fitting safety goggles

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Full contact

Material: Nitrile rubber

Minimum layer thickness: 0.4 mm Break through time: 480 min

Material tested: Camatril® (KCL 730 / Aldrich Z677442, Size M)

Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0.2 mm Break through time: 60 min

Material tested:Dermatril® P (KCL 743 / Aldrich Z677388, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail

sales@kcl.de, test method: EN374

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the EC approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

Body Protection

Flame retardant antistatic protective clothing.

Respiratory protection

required when vapours/aerosols are generated.

Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.

Control of environmental exposure

Do not let product enter drains. Risk of explosion.

SECTION 9: Physical and chemical properties

.1 Information on basic physical and chemical properties

a) Appearance Form: liquid, clear Color: colorless

b) Odor pungent

c) Odor Threshold No data availabled) pH No data availablee) Melting No data available



point/freezing point

f) Initial boiling point and boiling range

100 °C 212 °F

g) Flash point

56 °C (133 °F) - closed cup

h) Evaporation rate

Flammability (solid,

gas)

Upper/lower j) flammability or explosive limits No data available

Upper explosion limit: 70 %(V) Lower explosion limit: 7 %(V)

k) Vapor pressure 53 hPa at 39 °C (102 °F)

1

Vapor density 1.04 - (Air = 1.0)

1.09 g/cm3 at 25 °C (77 °F) - lit. m) Density

Relative density No data available

n) Water solubility completely solublesoluble

o) Partition coefficient: log Pow: 0.35 n-octanol/water

p) Autoignition temperature No data available

q) Decomposition temperature

No data available

No data available r) Viscosity

s) Explosive properties Not classified as explosive.

t) Oxidizing properties

9.2 Other safety information

Relative vapor density

1.04 - (Air = 1.0)

SECTION 10: Stability and reactivity

10.1 Reactivity

Vapor/air-mixtures are explosive at intense warming.

10.2 Chemical stability

The product is chemically stable under standard ambient conditions (room temperature). Contains the following stabilizer(s):

Methanol (>=10 - <1512 %)

10.3 Possibility of hazardous reactions

No data available

10.4 Conditions to avoid

Heating.

10.5 Incompatible materials

Strong oxidizing agents, Aniline, Phenol, Isocyanates, Acid anhydrides, Strong acids, Strong bases, Amines, Peroxides, Acid chlorides, Alkali metals, Reducing agents

Sigma-Aldrich - 252549

Page 9 of 15



10.6 Hazardous decomposition products

In the event of fire: see section 5

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Mixture

Acute toxicity

Oral: No data available

Acute toxicity estimate Oral - 204.13 mg/kg

(Calculation method)

Symptoms: If ingested, severe burns of the mouth and throat, as well as a danger of

perforation of the esophagus and the stomach.

Inhalation: No data available Dermal: No data available

No data available

Skin corrosion/irritation

No data available

Mixture causes burns.

Serious eye damage/eye irritation

No data available

Mixture causes serious eye damage. Risk of blindness!

Respiratory or skin sensitization

May cause sensitization by skin contact. Mixture may cause an allergic skin reaction.

Germ cell mutagenicity

No data available

Evidence of genetic defects.

Carcinogenicity

Possible carcinogen.

Reproductive toxicity

No data available No data available

Specific target organ toxicity - single exposure

Remarks: No data available

Mixture causes damage to organs. - Eyes, Central nervous system

Mixture may cause respiratory irritation.

Specific target organ toxicity - repeated exposure

No data available



Aspiration hazard

No data available

11.2 Additional Information

Warning: contains methanol. May be fatal or cause blindness if swallowed. Cannot be made nonpoisonous., To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Other dangerous properties can not be excluded.

This substance should be handled with particular care.

Handle in accordance with good industrial hygiene and safety practice.

Components

formaldehyde

Acute toxicity

LD50 Oral - Rat - 100 mg/kg

Remarks: (Lit.)

LC50 Inhalation - Rat - male and female - 4 h - < 0.57 mg/l

(OECD Test Guideline 403)

LD50 Dermal - Rabbit - 270 mg/kg

Remarks: (RTECS) No data available

Skin corrosion/irritation

Skin - Rabbit

Result: Causes burns. - 20 h (OECD Test Guideline 404)

Serious eye damage/eye irritation

Causes serious eye damage.

Respiratory or skin sensitization

Local lymph node assay (LLNA) - Mouse Result: positive (OECD Test Guideline 429)

Germ cell mutagenicity

Suspected of causing genetic defects.

Carcinogenicity

Presumed to have carcinogenic potential for humans

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

May cause respiratory irritation.

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available



Methanol

Acute toxicity

Acute toxicity estimate Oral - 100.1 mg/kg

(Expert judgment)

Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table

3.1/3.2)

Symptoms: Nausea, Vomiting

Acute toxicity estimate Inhalation - 4 h - 3.1 mg/l

(Expert judgment)

Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table

3.1/3.2)

Symptoms: Irritation symptoms in the respiratory tract.

Acute toxicity estimate Dermal - 300.1 mg/kg

(Expert judgment)

Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table

3.1/3.2)

Skin corrosion/irritation

Skin - Rabbit

Result: No skin irritation

Remarks: (ECHA)

Drying-out effect resulting in rough and chapped skin.

Serious eye damage/eye irritation

Eyes - Rabbit

Result: No eye irritation Remarks: (ECHA)

Respiratory or skin sensitization

Sensitisation test: - Guinea pig

Result: negative

(OECD Test Guideline 406)

Germ cell mutagenicity

Based on available data the classification criteria are not met.

Test Type: Ames test

Test system: Salmonella typhimurium

Result: negative

Test Type: In vitro mammalian cell gene mutation test

Test system: Chinese hamster lung cells

Result: negative

Method: OECD Test Guideline 474

Species: Mouse - male and female - Bone marrow

Result: negative Carcinogenicity

Did not show carcinogenic effects in animal experiments.

Reproductive toxicity

Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure

Causes damage to organs. - Eyes, Central nervous system

Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

Acute oral toxicity - Nausea, Vomiting

Acute inhalation toxicity - Irritation symptoms in the respiratory tract.

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

SECTION 12: Ecological information

12.1 Toxicity

Mixture

No data available

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.6 Other adverse effects

No data available

Components

formaldehyde

Toxicity to fish static test LC50 - Morone saxatilis - 6.7 mg/l - 96 h

Remarks: (ECHA)

Toxicity to daphnia

and other aquatic invertebrates

static test EC50 - Daphnia pulex (Water flea) - 5.8 mg/l - 48 h

semi-static test EC50 - Daphnia magna (Water flea) - 18,260

(OECD Test Guideline 202)

Toxicity to algae static test EC50 - Desmodesmus subspicatus (green algae) -

4.89 mg/l - 72 h

(OECD Test Guideline 201)

Toxicity to bacteria static test EC50 - activated sludge - 19 mg/l - 3 h

(OECD Test Guideline 209)

Methanol

Toxicity to fish flow-through test LC50 - Lepomis macrochirus (Bluegill) -

15,400.0 mg/l - 96 h

(US-EPA)

Toxicity to daphnia and other aquatic

mg/l - 96 h

1119/1 - 90 11

invertebrates (OECD Test Guideline 202)

Toxicity to algae static test ErC50 - Pseudokirchneriella subcapitata (green

algae) - ca. 22,000.0 mg/l - 96 h

Sigma-Aldrich - 252549

Page 13 of 15

(OECD Test Guideline 201)

Toxicity to bacteria static test IC50 - activated sludge - > 1,000 mg/l - 3 h

(OECD Test Guideline 209)

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself. See www.retrologistik.com for processes regarding the return of chemicals and containers, or contact us there if you have further questions.

SECTION 14: Transport information

TDG

UN number: 1198 Class: 3 (8) Packing group: III
Proper shipping name: FORMALDEHYDE SOLUTION, FLAMMABLE

Subsidiary risk : 8

Labels: 3

(8)ERG Code: 132 Marine pollutant: no

IMDG

UN number: 1198 Class: 3 (8) Packing group: III EMS-No: F-E, S-C

Proper shipping name: FORMALDEHYDE SOLUTION, FLAMMABLE

IATA

UN number: 1198 Class: 3 (8) Packing group: III Proper shipping name: Formaldehyde solution, flammable

SECTION 15: Regulatory information

This product has been classified in accordance with the hazard criteria of the Hazardous Products Regulations (HPR) and the SDS contains all the information required by the HPR.

SECTION 16: Other information

Further information

Copyright 2020 Sigma-Aldrich Co. LLC. License granted to make unlimited paper copies for internal use only.

SAFETY NOTICE: In order to provide our customers with the highest quality material and maintain our high standards of safety, the surface temperature of the bubbler may be monitored during the transportation of our products using a tempilabel. Tempilabel is a temperature-monitoring strip which will indicate the temperature during shipment. The strip will turn black at one of the four ratings shown if the temperature is reached (normally a silver centre). If the temperature monitor is changed, please notify an SAFC Hitech representative immediately and we will assist you in the proper measures to be



taken. We ask for your co-operation in our efforts of quality assurance and safety. If you have any questions or comments, please contact an SAFC Hitech representative. We thank you for your co-operation. Your assistance is greatly appreciated.

Information contained in this material safety data sheet is offered without charge for use by technically qualified personnel at their discretion and risk. All statements, technical information and recommendations contained herein are based on tests and data which we believe to be reliable, but the accuracy or completeness thereof is not guaranteed no warranty of any kind is made with respect thereto. This information is not intended as a license to operate under or a recommendation to practice or infringe any patent of this Company or others covering any process, composition of matter or use.

Since the Company shall have no control of the use of the product described herein, the company assumes no liability for loss or damage incurred from the proper or improper use of such product.

The branding on the header and/or footer of this document may temporarily not visually match the product purchased as we transition our branding. However, all of the information in the document regarding the product remains unchanged and matches the product ordered. For further information please contact mlsbranding@sial.com.

Version: 6.7 Revision Date: 25.08.2021 Print Date: 18.06.2022

SAFC Hitech is a member of the Sigma-Aldrich group.

Sigma-Aldrich Company Ltd.
The Old Brickyard
NEW ROAD, GILLINGHAM
Dorset - SP8 4XT
UNITED KINGDOM
Tel: +44 (0)1747 833000

SAFC Hitech 1429 Hilldale Avenue HAVERHILL, MA, 01832-1300, USA Tel: 1 978 374 5200 Fax: 1 978 374 6474

Fax: +44 (0)1747 833313 **Emergency telephone:**

Europe: +44 (0)1747 833100 USA: (800) 424 9300 (CHEMTREC)

Other International Countries: (703) 527 3887 (CHEMTREC)

