

SAFETY DATA SHEET

Version 6.17 Revision Date 05/20/2025 Print Date 05/21/2025

SECTION 1. IDENTIFICATION

1.1 Product identifiers

Product name : Acetic acid

Product Number : A6283
Brand : SIGALD
Index-No. : 607-002-00-6
CAS-No. : 64-19-7

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

Identified uses : Laboratory chemicals, Synthesis of substances

Uses advised against : The product is being supplied under the TSCA R&D Exemption

(40 CFR Section 720.36). It is the recipient's responsibility to comply with the requirements of the R&D exemption. The

product may not be used for a non-exempt commercial purpose under TSCA unless appropriate consent is granted in writing by

MilliporeSigma.

1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich Inc.

3050 SPRUCE ST ST. LOUIS MO 63103 UNITED STATES

Telephone : +1 314 771-5765 Fax : +1 800 325-5052

1.4 Emergency telephone number

Emergency Phone # : 800-424-9300 CHEMTREC (USA) +1-703-

527-3887 CHEMTREC (International) 24

Hours/day; 7 Days/week

SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200)

Flammable liquids : Category 3

Skin corrosion : Sub-category 1A

SIGALD - A6283

Page 1 of 17



Serious eye damage : Category 1

Other hazards

Lachrymator.

GHS label elements

Hazard pictograms





Signal Word : Danger

Hazard Statements : H226 Flammable liquid and vapour.

H314 Causes severe skin burns and eye damage.

Precautionary statements : **Prevention:**

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. P264 Wash skin thoroughly after handling.

P280 Wear protective gloves, protective clothing, eye

protection and face protection.

Response:

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/ shower.

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. P363 Wash contaminated clothing before reuse.

P370 + P378 In case of fire: Use dry sand, dry chemical

or alcohol-resistant foam to extinguish.

Storage:

P403 + P235 Store in a well-ventilated place. Keep cool.

P405 Store locked up.

SIGALD - A6283 Page 2 of 17

Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Substance

Components

Chemical name	CAS No./Unique ID	Concentration (% w/w)	Trade secret
acetic acid	64-19-7*	>= 80 - <= 100	TSC

^{*} Indicates that the identifier is a CAS No.

TSC- the actual concentration or concentration range is withheld as a trade secret

SECTION 4. FIRST AID MEASURES

General advice : First aiders need to protect themselves.

Show this safety data sheet to the doctor in

attendance.

If inhaled : After inhalation: fresh air. Call in physician.

: In case of skin contact: Take off immediately all In case of skin contact

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: make victim drink water (two

glasses at most), avoid vomiting (risk of perforation).

Call a physician immediately. Do not attempt to neutralise.

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

Protection of first-aiders : For personal protection see section 8.

: No data available Notes to physician

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing : Water

SIGALD - A6283

Page 3 of 17



media Foam

Carbon dioxide (CO2)

Dry powder

Unsuitable extinguishing

media

: For this substance/mixture no limitations of

extinguishing agents are given.

Specific hazards during

fire fighting

: Combustible.

Vapours 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.

Hazardous combustion

products

: Carbon oxides

Specific extinguishing

methods

: No data available

Further information : Remove container from danger zone and cool with

water.

Prevent fire extinguishing water from contaminating

surface water or the ground water system.

Special protective equipment for fire-

fighters

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

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures Advice for non-emergency personnel: Do not breathe vapours, 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.

SIGALD - A6283 Page 4 of 17



Advice for emergency responders: For personal protection see section 8.

Environmental precautions

: Do not let product enter drains.

Risk of explosion.

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 with liquid-absorbent and neutralising material (e.g. Chemizorb® H⁺, Merck Art. No.

101595). Dispose of properly. Clean up affected area.

SECTION 7. HANDLING AND STORAGE

For precautions see section 2.2.

Advice on protection against fire and explosion

: Keep away from open flames, hot surfaces and

sources of ignition.

Take precautionary measures against static discharge.

Further information on storage conditions

: Keep container tightly closed in a dry and well-

ventilated place.

Keep away from heat and sources of ignition.

Storage class : 3, Flammable liquids

Recommended storage

temperature

: Recommended storage temperature see product label.

Further information on

storage stability

: Moisture sensitive.

Packaging material : Suitable material: Poly Drum

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
acetic acid	64-19-7	TWA	10 ppm	ACGIH
		STEL	15 ppm	ACGIH
		TWA	10 ppm 25 mg/m3	NIOSH REL
		ST	15 ppm 37 mg/m3	NIOSH REL
		TWA	10 ppm 25 mg/m3	OSHA Z-1

SIGALD - A6283 Page 5 of 17



Engineering measures : No data available

Personal protective equipment

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.

Recommended Filter

type:

: filter E-(P2)

The entrepeneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.

Hand protection

Material : butyl-rubber
Break through time : 480 min
Glove thickness : 0.7 mm
Protective index : Full contact

Manufacturer : Butoject® (KCL 898)

Material : Latex gloves
Break through time : 30 min
Glove thickness : 0.6 mm

Protective index : Splash contact

Manufacturer : Lapren® (KCL 706 / Aldrich Z677558, Size M)

Remarks : This recommendation applies only to the product

stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN 16523-1 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-

36124 Eichenzell, Internet: www.kcl.de).

Eye 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 and body protection : Flame retardant antistatic protective clothing.

Hygiene measures : Immediately change contaminated clothing. Apply

preventive skin protection. Wash hands and face

SIGALD - A6283 Page 6 of 17

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : liquid

Color : colourless

Odor : stinging

Odor Threshold : 0.2 ppm

: 2.5 (68 °F / 20 °C) рΗ

Concentration: 50 g/l

Melting point/ range : 61.2 °F / 16.2 °C

Method: lit.

Boiling point/boiling range : 243 - 244 °F / 117 - 118 °C

Method: lit.

Flash point : 102 °F / 39 °C

(1,013 hPa)

Method: closed cup, closed cup

Evaporation rate : No data available

Flammability (solid, gas) : No data available

: No data available Flammability (liquids)

Burning rate : No data available

: 865 °F / 463 °C Self-ignition

Upper explosion limit /

Upper flammability limit

: Upper explosion limit

19.9 %(V)

(138.2 °F / 59.0 °C) : Lower explosion limit

Lower explosion limit /

Lower flammability limit 4 %(V)

: 20.79 hPa (77 °F / 25 °C) Vapor pressure

Relative vapour density : 2.07

Relative density : No data available

: 1.049 g/cm3 (77 °F / 25 °C) Density

SIGALD - A6283

Method: lit.

Solubility(ies)

Water solubility : 602.9 g/l completely soluble (77 °F / 25 °C, 1,013

> hPa) pH: 7

Partition coefficient: n-

octanol/water

: log Pow: -0.17 (77 °F / 25 °C)

pH: 7

Method: (experimental)

Bioaccumulation is not expected. (ECHA)

: 865 °F / 463 °C Autoignition temperature

Decomposition : Distillable in an undecomposed state at normal

temperature

pressure.

Viscosity

Viscosity, dynamic : 1.05 mPa.s (77 °F / 25 °C)

Viscosity, kinematic : 1.17 mm2/s (68 °F / 20 °C)

Flow time : No data available

Explosive properties : Not classified as explosive.

Oxidizing properties : none

Surface tension : 28.8 mN/m, 50.0 °F / 10.0 °C

: 1.37 (68 °F / 20 °C) Refractive index

Molecular weight : 60.05 g/mol

Particle characteristics

Particle size : No data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity : Vapour/air-mixtures are explosive at intense warming.

: The product is chemically stable under standard Chemical stability

ambient conditions (room temperature) .

Possibility of hazardous

reactions

: Risk of explosion with: peroxi compounds

perchloric acid fuming sulfuric acid phosphorus halides hydrogen peroxide

SIGALD - A6283 Page 8 of 17 chromium(VI) oxide potassium permanganate

Peroxides

Strong oxidizing agents

Risk of ignition or formation of inflammable gases or

vapours with:

Iron Zinc

magnesium Mild steel

Possible formation of:

Hydrogen

Violent reactions possible with:

strong alkalis Aldehydes

alkali hydroxides nonmetallic halides ethanolamine Acetaldehyde **Alcohols**

halogen-halogen compounds

chlorosulfonic acid chromosulfuric acid Potassium hydroxide

Nitric acid

Conditions to avoid : Heating.

: No data available Incompatible materials

products

Hazardous decomposition : In the event of fire: see section 5

SECTION 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

LD50 Oral - Rat - 3,310 mg/kg

Remarks: (RTECS)

LC50 Inhalation - Mouse - 4 h - 2,819 mg/l - vapour

Remarks: (RTECS)

Dermal: No data available Skin corrosion/irritation

Skin - Rabbit

Result: Causes burns. - 4 h (OECD Test Guideline 404)

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

Serious eye damage/eye irritation

Eyes - Rabbit

Result: Causes burns. - 4 h

SIGALD - A6283

Page 9 of 17



(OECD Test Guideline 405)

Remarks: (IUCLID)

Remarks: Causes serious eye damage.

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

Test Type: Ames test

Test system: Salmonella typhimurium

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 471

Result: negative

Test Type: Mutagenicity (mammal cell test): chromosome aberration.

Test system: Chinese hamster ovary cells

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 473

Result: negative

Test Type: Micronucleus test

Species: Rat

Cell type: Bone marrow

Application Route: inhalation (vapour)
Method: Mutagenicity (micronucleus test)

Result: negative

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is

identified as probable, possible or confirmed human carcinogen by IARC.

NTP: No component of this product present at levels greater than or equal to 0.1% is

identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is

on OSHA's list of regulated carcinogens.

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

11.2 Additional Information

RTECS: AF1225000

Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., spasm, inflammation and edema of the larynx, spasm, inflammation and edema of the bronchi, pneumonitis, pulmonary edema, burning sensation, Cough, wheezing, laryngitis, Shortness of breath, Headache, Nausea, Vomiting, Ingestion or inhalation of concentrated acetic acid causes damage to tissues of the respiratory and digestive tracts. Symptoms include: hematemesis, bloody diarrhea, edema and/or

SIGALD - A6283

Page 10 of 17



perforation of the esophagus and pylorus, pancreatitis, hematuria, anuria, uremia, albuminuria, hemolysis, convulsions, bronchitis, pulmonary edema, pneumonia, cardiovascular collapse, shock, and death. Direct contact or exposure to high concentrations of vapor with skin or eyes can cause: erythema, blisters, tissue destruction with slow healing, skin blackening, hyperkeratosis, fissures, corneal erosion, opacification, iritis, conjunctivitis, and possible blindness.

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Stomach - Irregularities - Based on Human Evidence

Stomach - Irregularities - Based on Human Evidence

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Components:

acetic acid:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): >

1,000 mg/l

End point: mortality Exposure time: 96 h Test Type: semi-static test Method: OECD Test Guideline 203

GLP: yes

Toxicity to daphnia and

other aquatic invertebrates

: EC50 (Daphnia magna (Water flea)): > 1,000 mg/l

End point: Immobilization Exposure time: 48 h Test Type: static test Analytical monitoring: yes

Method: OECD Test Guideline 202

GLP: yes

Toxicity to algae/aquatic

plants

: EC50 (Skeletonema costatum): > 1,000 mg/l

Exposure time: 72 h Test Type: static test Method: ISO 10253

GLP: yes

Toxicity to : EC5 (Pseudomonas putida): 2,850 mg/l

microorganisms Exposure time: 16 h
Remarks: neutral

(maximum permissible toxic concentration)

(Lit.)

EC50 (Photobacterium phosphoreum): 11 mg/l

Exposure time: 15 min

SIGALD - A6283 Page 11 of 17

Test Type: microtox test Remarks: (IUCLID)

Persistence and degradability

Components:

acetic acid:

Biodegradability : Result: Readily biodegradable.

Biodegradation: 99 % Exposure time: 30 d

Method: OECD Test Guideline 301D

Remarks: (HSDB)

Result: Readily eliminated from water

Biodegradation: 95 % Exposure time: 5 d

Method: OECD Test Guideline 302B

Biochemical Oxygen

Demand (BOD)

: 880 mg/g

Incubation time: 5 d Remarks: (Lit.)

BOD/ThOD : 76 %

Remarks: (IUCLID)

Bioaccumulative potential

Components:

acetic acid:

Partition coefficient: n-

: log Pow: -0.17 (77 °F / 25 °C)

octanol/water pH: 7

Method: (experimental)

Remarks: Bioaccumulation is not expected.

(ECHA)

Mobility in soil

No data available

Other adverse effects

Product:

Ozone-Depletion Potential: Regulation: 40 CFR Protection of Environment; Part

82 Protection of Stratospheric Ozone - CAA Section

602 Class I Substances

Remarks: This product neither contains, nor was manufactured with a Class I or Class II ODS as

defined by the U.S. Clean Air Act Section 602 (40 CFR

82, Subpt. A, App.A + B).

SIGALD - A6283

Page 12 of 17

Components:

acetic acid:

Results of PBT and vPvB

assessment

: Substance does not meet the criteria for PBT or vPvB according to Regulation (EC) No 1907/2006, Annex

XIII.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : 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.

SECTION 14. TRANSPORT INFORMATION

International Regulations

IATA-DGR

UN/ID No. : UN 2789

Proper shipping name : Acetic acid, glacial

Class : 8 Subsidiary risk : 3 Packing group : II

Labels : Class 8 - Corrosive substances, Class 3 - Flammable

liquids

Packing instruction (cargo: 855

aircraft)

Packing instruction : 851

(passenger aircraft)

IMDG-Code

UN number : UN 2789

Proper shipping name : ACETIC ACID, GLACIAL

Class : 8
Subsidiary risk : 3
Packing group : II
Labels : 8 (3)
EmS Code : F-E, S-C
Marine pollutant : no

Transport in bulk according to IMO instruments

Not applicable for product as supplied.

National Regulations

49 CFR Road

UN/ID/NA number : UN 2789

Proper shipping name : Acetic acid, glacial

SIGALD - A6283

Page 13 of 17



Class 8 Subsidiary risk : 3 : II Packing group

Labels : Class 8 - Corrosive substances, Class 3 - Flammable

liquids

ERG Code : 132 Marine pollutant no

Poison Inhalation Hazard : No

Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

SECTION 15. REGULATORY INFORMATION

CERCLA Reportable Quantity

Components	CAS-No.	Component	Calculated product
		RQ (lbs)	RQ (lbs)
acetic acid	64-19-7	5000	5000

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

This material does not contain any components with a section 302 EHS TPQ.

SARA 311/312 : Fire Hazard

Hazards Acute Health Hazard

Chronic Health Hazard

SARA 313 : This material does not contain any chemical

> components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by

SARA Title III, Section 313.

Clean Air Act

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B). This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

The following chemical(s) are listed under the U.S. Clean Air Act Section 111 SOCMI

Intermediate or Final VOC's (40 CFR 60.489):

acetic acid 64-19-7 >= 90 - <= 100 %

SIGALD - A6283

Page 14 of 17

Clean Water Act

The following Hazardous Substances are listed under the U.S. CleanWater Act, Section 311, Table 116.4A:

acetic acid 64-19-7 >= 90 - <= 100 %

The following Hazardous Chemicals are listed under the U.S. CleanWater Act, Section 311,

Table 117.3:

acetic acid 64-19-7 >= 90 - <= 100 %

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

This product does not contain any priority pollutants related to the U.S. Clean Water Act

US State Regulations

Massachusetts Right To Know

acetic acid 64-19-7

Pennsylvania Right To Know

acetic acid 64-19-7

Maine Chemicals of High Concern

Product does not contain any listed chemicals

Vermont Chemicals of High Concern

Product does not contain any listed chemicals

Washington Chemicals of High Concern

Product does not contain any listed chemicals

The components of this product are reported in the following inventories:

TSCA : All substances listed as active on the TSCA inventory

TSCA list

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

SECTION 16. OTHER INFORMATION

Full text of other abbreviations

ACGIH : USA. ACGIH Threshold Limit Values (TLV)
NIOSH REL : USA. NIOSH Recommended Exposure Limits

OSHA Z-1 : USA, Occupational Exposure Limits (OSHA) - Table Z-

1 Limits for Air Contaminants8-hour, time-weighted average

ACGIH / TWA : 8-hour, time-weighted aver ACGIH / STEL : Short-term exposure limit

NIOSH REL / TWA : Time-weighted average concentration for up to a 10-

hour workday during a 40-hour workweek

NIOSH REL / ST : STEL - 15-minute TWA exposure that should not be

exceeded at any time during a workday

OSHA Z-1 / TWA : 8-hour time weighted average

SIGALD - A6283

AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN -Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx -Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA -International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO -International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO -International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA -Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Decomposition Temperature; SARA Superfund Amendments Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

The information is believed to be correct but is not exhaustive and will be used solely as a guideline, which is based on current knowledge of the chemical substance or mixture and is applicable to appropriate safety precautions for the product. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

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

Revision Date : 05/20/2025

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.

SIGALD - A6283 Page 16 of 17



SIGALD - A6283

Page 17 of 17



