



SAFETY DATA SHEET

Version 6.14 Revision Date 01/06/2025 Print Date 01/07/2025

SECTION 1. IDENTIFICATION

1.1 Product identifiers

Product name : Naphthalene

Product Number : 147141
Brand : Aldrich
Index-No. : 601-052-00-2

CAS-No. : 91-20-3

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

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

1.4 Emergency telephone

Telephone

Fax

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 solids : Category 2

Aldrich- 147141 Page 1 of 17

Merc

Carcinogenicity : Category 2

Short-term (acute) aquatic hazard

: Category 1

Long-term (chronic)

aquatic hazard

: Category 1

GHS label elements

Hazard pictograms







Signal Word : Warning

Hazard Statements : H228 Flammable solid.

H351 Suspected of causing cancer.

H410 Very toxic to aquatic life with long lasting effects.

Precautionary Statements: **Prevention:**

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have

been read and understood.

P210 Keep away from heat/ sparks/ open flames/ hot

surfaces. No smoking.

P240 Ground/bond container and receiving equipment. P241 Use explosion-proof electrical/ ventilating/ light-

ing/ equipment.

P273 Avoid release to the environment.

P280 Wear protective gloves/ protective clothing/ eye

protection/ face protection.

Response:

P308 + P313 IF exposed or concerned: Get medical

advice/ attention.

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

or alcohol-resistant foam to extinguish.

P391 Collect spillage.

Storage:

P405 Store locked up.

Disposal:

P501 Dispose of contents/ container to an approved

waste disposal plant.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Aldrich- 147141 Page 2 of 17 Substance / Mixture : Substance

Components

Chemical name	CAS-No.	Concentration (% w/w)
Naphthalene	91-20-3	>= 90 - <= 100

Actual concentration is withheld as a trade secret

SECTION 4. FIRST AID MEASURES

General advice : Show this material safety data sheet to the doctor in

attendance.

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

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

taminated clothing. Rinse skin with water/ shower.

Consult a physician.

In case of eye contact : After eye contact: rinse out with plenty of water.

Call in ophthalmologist. Remove contact lenses.

If swallowed : After swallowing: immediately make victim drink wa-

ter (two glasses at most).

Consult a physician.

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.

Notes to physician : No data available

SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing

media

: Water

Foam

Carbon dioxide (CO2)

Dry powder

Unsuitable extinguishing

media

Aldrich- 147141

: For this substance/mixture no limitations of extin-

guishing agents are given.

Specific hazards during

fire fighting

: Combustible.

Vapors are heavier than air and may spread along

Page 3 of 17



floors.

Forms explosive mixtures with air on intense heating.

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 equip-

ment 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:

Avoid inhalation of dusts. Avoid substance contact. Ensure adequate ventilation.

Keep away from heat and sources of ignition.

Evacuate the danger area, observe emergency proce-

dures, consult an expert.

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

Environmental precau-

tions

: 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 dry. Dispose of properly. Clean up affected

area. Avoid generation of dusts.

SECTION 7. HANDLING AND STORAGE

Aldrich- 147141 Page 4 of 17

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.

Advice on safe handling : Work under hood. Do not inhale substance/mixture.

Further information on

: Tightly closed.

storage conditions

Keep away from heat and sources of ignition.

Storage class : 4.1B, Flammable solid hazardous materials

Recommended storage

temperature

: Recommended storage temperature see product label.

Packaging material : Suitable material: Amber Glass Bottle/Jar, Foil Bag

inside Fiber 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
Naphthalene	91-20-3	TWA	10 ppm	ACGIH
		TWA	10 ppm 50 mg/m3	NIOSH REL
		ST	15 ppm 75 mg/m3	NIOSH REL
		TWA	10 ppm 50 mg/m3	OSHA Z-1

Engineering measures : No data available

Personal protective equipment

Respiratory protection : required when dusts 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 A-(P3)

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

Aldrich- 147141 Page 5 of 17

documented.

Hand protection

Material : Nitrile rubber
Break through time : 480 min
Glove thickness : 0.11 mm
Protective index : Full contact

Manufacturer : KCL 741 Dermatril® L

Material : Nitrile rubber
Break through time : 480 min
Glove thickness : 0.11 mm
Protective index : Splash contact

Manufacturer : KCL 741 Dermatril® L

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 ap-

proved under appropriate government standards such

as NIOSH (US) or EN 166(EU).

Safety glasses

Skin and body protection : Flame retardant antistatic protective clothing.

Hygiene measures : Immediately change contaminated clothing. Apply

preventive skin protection. Wash hands and face af-

ter working with substance.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : flakes, granules

Color : white

Odor : aromatic

Odor Threshold : No data available pH : No data available

Melting point/ range : 176 - 180 °F / 80 - 82 °C

Aldrich- 147141 Page 6 of 17



Method: lit.

Boiling point/boiling range : 424 °F / 218 °C

Method: lit.

Flash point : 173.3 °F / 78.5 °C

(990 hPa)

Method: ISO 2719, closed cup

Evaporation rate : No data available

: The substance or mixture is a flammable solid with Flammability (solid, gas)

the category 2.

Method: Flammability (solids)

: No data available Burning rate

Self-ignition : 979 - 1089 °F / 526 - 587 °C

1,013 hPa

Method: DIN 51794

Upper explosion limit / Upper flammability limit

: Upper explosion limit

5.9 %(V)

Lower explosion limit / Lower flammability limit : Lower explosion limit

0.9 %(V)

: 0.072 hPa (68 °F / 20 °C) Vapor pressure

Method: OECD Test Guideline 104

Relative vapor density : No data available

Relative density : No data available

: 1.08 g/cm3 (76.5 °F / 24.7 °C) Density

Method: OECD Test Guideline 109

Solubility(ies)

Water solubility : 0.0308 g/l slightly soluble (77 °F / 25 °C)

pH: 7 - 7.5

Method: OECD Test Guideline 105

Partition coefficient: n-

octanol/water

: log Pow: 3.4 (77 °F / 25 °C)

pH: 7 - 7.5

Method: OECD Test Guideline 107 Bioaccumulation is not expected.

Autoignition temperature : 979 °F / 526 °C

Decomposition tempera- : No data available

ture

Aldrich- 147141

Viscosity, dynamic : No data available

The life science business of Merck operates as MilliporeSigma in the US and Canada



Page 7 of 17

Viscosity, kinematic : No data available

Flow time : No data available

Explosive properties : Not classified as explosive.

Oxidizing properties : none

Surface tension : 31.8 mN/m, 212.0 °F / 100.0 °C

Molecular weight : 128.17 g/mol

Particle characteristics

Particle size : No data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity : Forms explosive mixtures with air on intense heating.

A range from approx. 15 Kelvin below the flash point

is to be rated as critical.

The following applies in general to flammable organic substances and mixtures: in correspondingly fine distribution, when whirled up a dust explosion potential

may generally be assumed.

: The product is chemically stable under standard ambi-Chemical stability

ent conditions (room temperature).

Possibility of hazardous

reactions

: Violent reactions possible with:

Oxidizing agents chromium(VI) oxide benzoyl chloride aluminium chloride Risk of explosion with:

nitrogen oxides

Conditions to avoid : Heat, flames and sparks.

Strong heating.

Incompatible materials : No data available

products

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

Aldrich- 147141 Page 8 of 17

SECTION 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

Oral: No data available

LC50 Inhalation - Rat - male and female - 4 h - > 0.4 mg/l - vapor

(OECD Test Guideline 403)

LD50 Dermal - Rabbit - 20,000 mg/kg

Remarks: (RTECS)

Skin corrosion/irritation

Skin - Rabbit

Result: No skin irritation - 24 h

Remarks: (ECHA)

Serious eye damage/eye irritation

Eyes - Rabbit

Result: No eye irritation - 24 h

Remarks: (ECHA)

Respiratory or skin sensitization

Maximization Test - Guinea pig

Result: negative

(OECD Test Guideline 406)

Germ cell mutagenicity

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

Test system: Chinese hamster ovary cells Metabolic activation: Metabolic activation

Method: OECD Test Guideline 473

Result: positive Test Type: Ames test

Test system: Salmonella typhimurium

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 471

Result: negative

Test Type: unscheduled DNA synthesis assay

Species: Rat

Cell type: Liver cells Application Route: Oral

Method: OECD Test Guideline 486

Result: negative

Test Type: Micronucleus test

Species: Mouse

Cell type: Bone marrow

Application Route: Intraperitoneal

Method: US-EPA Result: negative Remarks: (ECHA)

Carcinogenicity

Suspected of causing cancer.

IARC: 2B - Group 2B: Possibly carcinogenic to humans (Naphthalene)

No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen

by IARC. (Naphthalene)

NTP: RAHC - Reasonably anticipated to be a human carcinogen (Naphthalene)

No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP. (Naph-

thalene)

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

Repeated dose toxicity - Rat - male and female - Oral - 91 Days - NOAEL (No observed adverse effect level) - 200 mg/kg - LOAEL (Lowest observed adverse effect level) - 400 mg/kg

Repeated dose toxicity - Mouse - male and female - Oral - 90 Days - NOAEL (No observed adverse effect level) - 100 mg/kg

Repeated dose toxicity - Rat - male and female - Dermal - 90 Days - NOAEL (No observed adverse effect level) - 1,000 mg/kg

Repeated dose toxicity - Rat - male and female - inhalation (vapor) - 90 Days - NOAEL (No observed adverse effect level) - 300 mg/kg

RTECS: QJ0525000

Absorption into the body leads to the formation of methemoglobin which in sufficient concentration causes cyanosis. Onset may be delayed 2 to 4 hours or longer., Naphthalene is retinotoxic and systemic absorption of its vapors above 15ppm, may result in:, cataracts, optic neuritis, corneal injury, Eye irritation, Ingestion may provoke the following symptoms:, hemolytic anemia, hemoglobinuria, Nausea, Headache, Vomiting, Gastrointestinal disturbance, Convulsions, anemia, Kidney injury may occur., Seizures., Coma.

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

After absorption:

Aldrich- 147141

Page 10 of 17



Headache

Stomach/intestinal disorders

Tremors Convulsions

Changes in the blood count

Other dangerous properties can not be excluded.

This substance should be handled with particular care.

Heart -

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Components:

Naphthalene:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 1.6

mq/l

End point: mortality Exposure time: 96 h

Test Type: flow-through test Analytical monitoring: yes

Method: OECD Test Guideline 203

Toxicity to daphnia and

other aquatic inverte-

brates

: EC50 (Daphnia magna (Water flea)): 2.16 mg/l

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

Method: OECD Test Guideline 202

Toxicity to algae/aquatic

plants

: EC50 (Pseudokirchneriella subcapitata (green algae)):

2.96 mg/l

Exposure time: 4 h Test Type: static test Analytical monitoring: yes

Method: US-EPA Remarks: (ECHA)

Toxicity to fish (Chronic

toxicity)

: LC50 (Oncorhynchus kisutch (coho salmon)): 2.1 mg/l

End point: mortality Exposure time: 96 h

Test Type: flow-through test Analytical monitoring: yes

Remarks: (ECHA)

NOEC (Oncorhynchus kisutch (coho salmon)): 0.37

Aldrich- 147141 Page 11 of 17

mg/l

End point: Growth inhibition Exposure time: 40 Days Test Type: flow-through test Analytical monitoring: yes

Remarks: (ECHA)

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Daphnia pulex (Water flea)): 0.59 mg/l

End point: mortality Exposure time: 125 d Test Type: static test Analytical monitoring: yes

Remarks: (ECHA)

Ecotoxicology Assessment

Acute aquatic toxicity : Very toxic to aquatic life.

Chronic aquatic toxicity : Very toxic to aquatic life with long lasting effects.

Persistence and degradability

Components:

Naphthalene:

Biodegradability : aerobic

Inoculum: activated sludge, non-adapted

Concentration: 100 mg/l

Result: Not readily biodegradable.

Biodegradation: 2 % Exposure time: 28 d

Method: OECD Test Guideline 302C

Bioaccumulative potential

Components:

Naphthalene:

Bioaccumulation : Species: Cyprinus carpio (Carp)

Bioconcentration factor (BCF): 36.5 - 168

Exposure time: 56 d

Temperature: 77 °F / 25 °C Method: OECD Test Guideline 305 Remarks: Bioaccumulation is unlikely.

Partition coefficient: n-

: log Pow: 3.4 (77 °F / 25 °C)

octanol/water

pH: 7 - 7.5

Method: OECD Test Guideline 107

Remarks: Bioaccumulation is not expected.

Mobility in soil

No data available

Aldrich- 147141 Page 12 of 17

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).

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 1334

Proper shipping name : Naphthalene, refined

: 4.1 Class Packing group TTT

Division 4.1 - Flammable solids Labels

Packing instruction (cargo: 449

aircraft)

Packing instruction (pas- : 446

senger aircraft)

IMDG-Code

UN number : UN 1334

Proper shipping name : NAPHTHALENE, REFINED

: 4.1 Class Packing group : III Labels : 4.1 EmS Code : F-A, S-G Marine pollutant : yes

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

National regulation

49 CFR Road

UN/ID/NA number : UN 1334

Aldrich- 147141 Page 13 of 17 Proper shipping name : Naphthalene, refined

Class : 4.1 Packing group : III

Labels : Division 4.1 - Flammable solids

ERG Code : 133 Marine pollutant : yes

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)
Naphthalene	91-20-3	100	100

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 Haz- : Fire Hazard

ards Acute Health Hazard

Chronic Health Hazard

SARA 313 : This material does not contain any chemical compo-

nents 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). The following chemical(s) are listed as HAP under the U.S. Clean Air Act, Section 112 (40 CFR 61):

Naphthalene 91-20-3 >= 90 - <= 100 %

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).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCMI Intermediate or Final VOC's (40 CFR 60.489).

Aldrich- 147141 Page 14 of 17

Clean Water Act

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

> Naphthalene 91-20-3 >= 90 - <= 100 %

The following Hazardous Chemicals are listed under the U.S. CleanWater Act, Section 311, Table 117.3:

> 91-20-3 Naphthalene >= 90 - <= 100 %

This product contains the following toxic pollutants listed under the U.S. Clean Water Act Section 307

> Naphthalene 91-20-3 >= 90 - <= 100 %

This product contains the following priority pollutants related to the U.S. Clean Water Act:

>= 90 - <= 100 % 91-20-3 Naphthalene

US State Regulations

Massachusetts Right To Know

Naphthalene 91-20-3

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 ingredients 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 Contaminants

: 8-hour, time-weighted average ACGIH / TWA

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

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

Aldrich- 147141 Page 15 of 17 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-Accelerating Decomposition Temperature; SARA - Superfund Amendments and 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 : 01/06/2025

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

Aldrich- 147141 Page 16 of 17



information in the document regarding the product remains unchanged and matches the product ordered. For further information please contact mlsbranding@sial.com.

US / EN

Aldrich- 147141 Page 17 of 17

