

Version: 4.0

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SECTION 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY / UNDERTAKING

Product Name LudgerSep™ R1 HPLC Column

LudgerSep™ R2 HPLC Column LudgerSep™ uR2 UHPLC Column, LudgerSep™ N1 Amide HPLC Column,

LudgerSep™ N2 Amide HPLC

Product Catalogue Name LS-R1-4.6x150, 3 µm, 4.6 x 150 mm, 2.5 mL volume

LS-R2-4.6x150, 3 μ m, 4.6 x 150 mm, 2.5 mL volume LS-UR2-2.1x50, 1.9 μ m, 2.1 x 50 mm, 0.17 mL volume LS-UR2-2.1x100, 1.9 μ m, 2.1 x 100 mm, 0.34 mL volume LS-N1-4.6x250, 5 μ m, 4.6 x 250 mm, 4.2 mL volume LS-N2-4.6x250, 3 μ m, 4.6 x 250 mm, 4.2 mL volume

REACH No. A registration number is not available for this substance as the substance

or its uses are exempted from registration, the annual tonnage does not

require a registration or the registration is envisaged for a later

registration deadline

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SECTION 2. HAZARDS IDENTIFICATION

This article, when used under reasonable conditions and following the directions for use, should not present a health hazard. The substance or mixture is encapsulated in the article. Only if released due to the use or processing of the article in a manner not following the product's directions for use it may present potential health and safety hazards.

2.1 Classification of the substance or mixture

Product Definition: Mixture (encapsulated in the article)

Classification according to Regulation (EU) No. 1272/2008 [EU-GHS/CLP]

H225 FLAMMABLE LIQUIDS Category 2
H319 SERIOUS EYE DAMAGE/EYE IRRITATION Category 2

The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.

See Section 16 for the full text of the H statements declared above.

See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements

Hazard Pictograms:

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Signal Word: Danger

Hazard Statement(s)

H225 Highly flammable liquid and vapour.

H302 + H312 + H332 Harmful if swallowed, in contact with skin or if inhaled.

H319 Causes serious eye irritation.

Precautionary Statement(s)

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition

sources. No smoking.

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

P301 + P312 IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell.

P303 + P361 + P353 IF ON SKIN (or hair): Rinse skin with water.

P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Call a POISON CENTER/ doctor if you feel unwell.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing.

P337 + P313 If eye irritation persists: Get medical advice or attention.

Reduced Labelling

Hazard Pictograms:





Signal Word: Danger

Hazard Statement(s)

None

Precautionary Statement(s)

None

2.3 Other hazard information:

None.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

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3.1 Substances

Mixture (encapsulated in the article)

Acetonitrile Synonyms: Methyl cyanide, ACN

Formula C2H3N Molecular weight 41.05 g/mol

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CAS-No 75-05-8 EC-No 200-835-2 Index-No. 608-001-00-3

Component		Classification	Concentration
acetonitrile		Flam. Liq. 2, H225 Acute Tox. 4, H302 Acute Tox. 4, H312 Acute Tox. 4, H332 Eye Irrit. 2, H319	≥50 - <76
CAS-No. 75-05	5-8		

SECTION 4. FIRST-AID MEASURES

4.1 Description of First Aid Measures

General Advice

Consult a physician if exposure causes ill effects and if in any doubt. Show this safety data sheet to the physician/ first responder in attendance.

If Ingested

Rinse mouth well with water if the person is conscious. Do not give anything by mouth if unconscious.

If the skin is exposed

Wash the affected area well with soap and water.

If eyes are exposed

Rinse eyes with water/ eye wash solution for at least 5 minutes as a precaution. If safe and easy to do so remove contact lenses and continue rinsing.

If inhaled

Move the affected person to a source of ventilation/ fresh air. If not breathing give artificial respiration.

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 immediate medical attention and special treatment needed

No data available.

SECTION 5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Select extinguishing media appropriate to the surrounding area, compatible media are water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture

Carbon oxides Nitrogen oxides (NOx) Combustible. Pay attention to flashback. Vapours are heavier than air and may spread along floors. Development of hazardous combustion gases or vapours is possible in the event of a fire. Forms explosive mixtures with air at ambient temperatures.

5.3 Advice for Firefighters

Wear self-contained breathing equipment, if necessary.

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SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

For personal protection see section 8.

6.2 Environmental Precautions

None required.

6.3 Methods and material for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Take up with liquid-absorbent material. Dispose of it properly. Clean up the affected area.

6.4 Reference to other sections

See Section 13 for more information on disposal.

SECTION 7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Filled under nitrogen. Work under hood. Do not inhale a substance/mixture. Avoid the generation of vapours/aerosols.

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool place. Keep the container tightly closed in a dry and well-ventilated place.

7.3 Specific end uses

Laboratory chemicals, Analysis of substances, Professional applications

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components with workplace control parameters

Component	CAS No	Value	Control parameters	Basis
Acetonitrile	75-05-8	TWA	40 ppm 70 mg/m3	UK. EH40 WEL Workplace Exposure Limits
	Remarks	It can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity.		
		TWA	40 ppm 68 mg/m3	UK. EH40 WEL Workplace Exposure Limits
		STEL	60 ppm 102 mg/m3	UK. EH40 WEL Workplace Exposure Limits

Application Area	Routes of expo- sure	Health effect	Value
Workers	Inhalation	Acute local effects, Acute systemic effects	68 mg/m3
Workers	Skin Contact	Long-term systemic effects	32.2 mg/m3

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Workers	Inhalation	Long-term local effects, Long-term systemic effects	68 mg/m3
Consumers	Inhalation	Acute local effects	220 mg/m3
Consumers	Inhalation	Acute systemic effects	22 mg/m3
Consumers	Inhalation	Long-term systemic effects	4.8 mg/m3

8.2 Exposure controls

Appropriate engineering controls

Handle the product wearing Personal protective equipment, wash, and dry hands before and after handling the product. General good laboratory and safety practice.

Personal Protective Equipment

Eye/face protection

Wear eye protective equipment tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).

Skin protection

Handle the product wearing gloves. Gloves are to satisfy the specifications of EU Directive 2016/425 and the standard EN 374 derived from it. Gloves must be checked for tears/holes before use and to be removed using the proper glove removal technique, so that the outer side of the gloves does not touch any skin. Gloves are to be disposed of as contaminated solid waste. See Section 13 for information on waste disposal.

Body Protection

Wear a laboratory coat or similar covering over the operator's outside clothing.

Respiratory protection

p) Auto-ignition temperature

Respiratory protection is not required with this product.

Thermal hazards

None.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Solid (containing flammable liquid) a) Appearance b) Odour No data available

c) Odour Threshold No data available No data available d) pH e) Melting point/freezing point No data available $81 - 82^{\circ}$

f) Initial boiling point and boiling range

g) Flashpoint Closed cup: -18 to 23°C h) Evaporation rate No data available i) Flammability (solid, gas) No data available j) Upper/lower flammability or explosive limits No data available k) Vapour pressure No data available I) Vapour density No data available

m) Relative density No data available n) Water solubility No data available o) Partition coefficient: n-octanol/water No data available

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No data available



q) Decomposition temperature

r) Viscosity

s) Explosive properties

t) Oxidizing properties

No data available No data available No data available No data available

9.2 Other information

No data available

SECTION 10. STABILITY AND REACTIVITY

10.1 Reactivity

No data available.

10.2 Chemical stability

The product is stable at the correct storage conditions.

10.3 Possibility of Hazardous Reactions

Under normal conditions of storage and use, hazardous reactions will not occur.

10.4 Conditions to Avoid

Avoid all possible sources of ignition (spark or flame). Do not pressurise, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.

10.5 Incompatible materials

No data available.

10.6 Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

LD50 Oral - Mouse - male and female - 617 mg/kg
(OECD Test Guideline 401)
Acute toxicity estimate Oral - 617 mg/kg
(Calculation method)
LC50 Inhalation - Mouse - male and female - 4 h - 6.022 mg/l – vapour

(OECD Test Guideline 403)

Acute toxicity estimate Dermal - 1,500 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 - 4 h

(OECD Test Guideline 404)

Serious eye damage/irritation

Eyes - Rabbit Result: Causes serious eye irritation.

(OECD Test Guideline 405)

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

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Respiratory or skin sensitisation

Buehler Test - Guinea pig Result: negative (OECD Test Guideline 406)

Germ cell mutagenicity

No data available.

Carcinogenicity

No data available.

Reproductive toxicity

No data available.

STOT-single exposure

No data available.

STOT-repeated exposure

No data available.

Aspiration hazard.

No data available.

Signs and symptoms of exposure

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

Additional Information

RTECS: Not available

SECTION 12. ECOLOGICAL INFORMATION

12.1 Toxicity

Toxicity to fish flow-through test LC50 - Pimephales promelas (fathead minnow) - 1,640 mg/l - 96 h

Remarks: (ECHA)

Toxicity to algae static test NOEC - Phaeodactylum tricornutum - 400 mg/l - 72 h (ISO 10253)

static test ErC50 - Phaeodactylum tricornutum - 9,696 mg/l - 72 h (ISO 10253)

Toxicity to bacteria

Toxicity to fish (Chronic toxicity) flow-through test NOEC - Oryzias latipes - 102 mg/l - 21 d (OECD

Test Guideline 204)

12.2 Persistence and Degradability

Biodegradability Result: 70 % - Readily biodegradable. (OECD Test Guideline 310)

12.3 Bioaccumulative potential

No bioaccumulation is to be expected (log Pow <= 4).

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

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

12.6. Other adverse effects

No data available.

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SECTION 13. DISPOSAL CONSIDERATIONS

13.1 Waste Treatment Methods

Dispose of by using a licensed professional chemical liquid and solid waste disposal company.

Contaminated packaging

Dispose of it as an unused product.

SECTION 14. TRANSPORT INFORMATION

This Safety Data Sheet is written based on the encapsulated substance or mixture in this article. Since the hazardous ingredient is encapsulated, the risk of exposure by inhalation, ingestion, skin contact and eye contact is minimal. 14.1 UN Number

ADR/RID: - IMDG: - IATA: -

14.2 UN Proper Shipping Name

ADR/RID: Not dangerous goods IMDG: Not dangerous goods IATA: Not dangerous goods

14.3 Transport hazard class(es)

ADR/RID: - IMDG: - IATA: -

14.4 Packing group

ADR/RID: - IMDG: - IATA: -

14.5 Environmental hazards

ADR/RID: - IMDG: - IATA: -

14.6 Special precautions for user

No data available

SECTION 15. REGULATORY INFORMATION

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.

15.1 Safety, health, and environmental regulations/legislation specific to the substance or mixture No data available

15.2 Chemical Safety Assessment

No data available

Please note that the label elements that used to go in Section 15 are now in Section 2.

SECTION 16. OTHER INFORMATION

The advice offered is derived from the currently available information on the hazardous materials in this product and its component(s). Consideration has been made regarding the quantities offered in the pre-dispensed container. The advice offered is, therefore not all-inclusive nor should it be taken as the descriptive of the compound generally.

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