

Trade name: Standard sample for LC/MS**Product no.:** 225-06613-04**Current version :** 3.1.0, issued: 18.05.2020**Replaced version:** 3.0.0, issued: 18.07.2018**Region:** GB**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1 Product identifier**

Trade name

Standard sample for LC/MS**1.2 Relevant identified uses of the substance or mixture and uses advised against****Relevant identified uses of the substance or mixture**

General chemical processes

Uses advised against

No data available.

1.3 Details of the supplier of the safety data sheet**Address**

Shimadzu Europa GmbH

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47269 Duisburg

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Fax no. +49 (0)203 - 711045

Information provided by / telephone

Tel.: +49 (0)203 - 7687-0

Advice on Safety Data Sheet

sdb_info@umco.de

1.4 Emergency telephone number

For medical advice (in German and English):

+49 (0)551 192 40 (Giftinformationszentrum Nord)

SECTION 2: Hazards identification**2.1 Classification of the substance or mixture****Classification in accordance with Regulation (EC) No 1272/2008 (CLP)**

Acute Tox. 4; H302

Acute Tox. 4; H312

Acute Tox. 4; H332

Eye Irrit. 2; H319

Flam. Liq. 2; H225

Classification information

This product is assessed and classified using the methods and criteria below referred to in Article 9 of Regulation (EC) n° 1272/2008:

Physical hazards: determined through assessment data based on the methods or standards referred to in part 2 of Annex I to CLP

Health hazards and environmental hazards: determined through toxicological and ecotoxicological assessment data based on the methods or standards referred to in Part 3, 4 and 5 of Annex I to CLP.

2.2 Label elements**Labelling according to Regulation (EC) No 1272/2008 (CLP Regulation)****Hazard pictograms**

GHS02



GHS07

Signal word

Danger

Hazardous component(s) to be indicated on label:

acetonitrile

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.

P305+P351+P338

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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No data available.

SECTION 3: Composition/information on ingredients**3.1 Substances**

Not applicable. The product is not a substance.

3.2 Mixtures**Chemical characterization**

Acetonitrile with 1.0 µg/ml Papaverine HCl (CAS-no. 61-25-6)

Hazardous ingredients

No	Substance name		Additional information	
	CAS / EC / Index / REACH no	Classification (EC) 1272/2008 (CLP)	Concentration	%
1	acetonitrile			
	75-05-8 200-835-2 608-001-00-3 -	Acute Tox. 4*; H302 Acute Tox. 4*; H312 Acute Tox. 4*; H332 Eye Irrit. 2; H319 Flam. Liq. 2; H225	< 100.00	%-b.w.

Full Text for all H-phrases and EUH-phrases: pls. see section 16

(*, **, ***, ****) Detailed explanation pls. refer to CLP regulation No. 1272/2008, annex VI, 1.2

SECTION 4: First aid measures**4.1 Description of first aid measures****General information**

In case of persisting adverse effects, consult a physician. Remove contaminated clothing and shoes immediately, and launder thoroughly before reusing. If the patient is likely to become unconscious, place and transport in stable sideways position.

After inhalation

Remove affected person from the immediate area. Ensure supply of fresh air. Irregular breathing/no breathing: artificial respiration. Call a doctor immediately.

After skin contact

Wash off immediately with soap and water. Don't use solvents.

After eye contact

Separate eyelids, wash the eyes thoroughly with water (15 min.).

After ingestion

Do not induce vomiting. Call a doctor immediately. Never give anything by mouth to an unconscious person.

4.2 Most important symptoms and effects, both acute and delayed

No data available.

4.3 Indication of any immediate medical attention and special treatment needed

No data available.

SECTION 5: Firefighting measures**5.1 Extinguishing media****Suitable extinguishing media**

Alcohol-resistant foam; Extinguishing powder; Carbon dioxide; Water spray jet

Unsuitable extinguishing media

High power water jet

5.2 Special hazards arising from the substance or mixtureIn the event of fire, the following can be released: Carbon monoxide (CO); Carbon dioxide (CO₂); Combustion products of this material have to be classed invariably as respiratory poison.**5.3 Advice for firefighters**

Use self-contained breathing apparatus. Cool endangered containers with water spray jet. Wear protective clothing. Suppress gases/vapours/mists with water spray jet.

SECTION 6: Accidental release measures**6.1 Personal precautions, protective equipment and emergency procedures****For non-emergency personnel**

Refer to protective measures listed in sections 7 and 8. Avoid contact with skin, eyes and clothing. Ensure adequate ventilation. Keep

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away from ignition sources.

For emergency responders

No data available. Personal protective equipment (PPE) - see Section 8.

6.2 Environmental precautions

Do not discharge into the drains/surface waters/groundwater. Do not discharge into the subsoil/soil.

6.3 Methods and material for containment and cleaning up

Pick up with absorbent material (e.g., sand, sawdust, general-purpose binder). Send in suitable containers for recovery or disposal.

6.4 Reference to other sections

No data available.

SECTION 7: Handling and storage**7.1 Precautions for safe handling****Advice on safe handling**

Provide good ventilation at the work area (local exhaust ventilation, if necessary). If workplace exposure limits are exceeded, respiratory protection approved for this particular job must be worn. Risks inherent to handling the product must be minimised by applying the appropriate protective and preventive measures. Working processes should - so far as possible, according to the state of the art - be designed to rule out bodily contact or the release of hazardous substances.

General protective and hygiene measures

Do not eat, drink or smoke during work time. Keep away from foodstuffs and beverages. Avoid contact with eyes and skin. Remove soiled or soaked clothing immediately. Do not inhale vapours. Wash hands before breaks and after work. Provide eye wash fountain in work area. Have emergency shower available.

Advice on protection against fire and explosion

Vapours can form an explosive mixture with air. Take precautionary measures against static charges. Keep away from sources of heat and ignition. Use explosion-proof equipment/fittings and non-sparking tools.

7.2 Conditions for safe storage, including any incompatibilities**Technical measures and storage conditions**

Keep container tightly closed in a cool, well-ventilated place. Protect from heat and direct sunlight.

Requirements for storage rooms and vessels

Containers which are opened must be carefully closed and kept upright to prevent leakage. Always keep in containers of same material as the original.

Incompatible products

Do not store together with:

7.3 Specific end use(s)

No data available.

SECTION 8: Exposure controls/personal protection**8.1 Control parameters****Occupational exposure limit values**

No	Substance name	CAS no.	EC no.
1	acetonitrile	75-05-8	200-835-2
	2006/15/EC		
	Acetonitrile		
	WEL long-term (8-hr TWA reference period)	70	mg/m ³ 40 ppm
	Skin resorption / sensitisation	Skin	
	List of approved workplace exposure limits (WELs) / EH40		
	Acetonitrile		
	WEL short-term (15 min reference period)	102	mg/m ³ 60 ppm
	WEL long-term (8-hr TWA reference period)	68	mg/m ³ 40 ppm

8.2 Exposure controls**Appropriate engineering controls**

No data available.

Personal protective equipment**Respiratory protection**

If workplace exposure limits are exceeded, a respiration protection approved for this particular job must be worn. In case of aerosol and mist formation, take appropriate measures for breathing protection in the event workplace threshold values are not specified.

Eye / face protection

Safety glasses with side protection shield (EN 166)

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In case of intensive contact, wear protective gloves (EN 374). Sufficient protection is given wearing suitable protective gloves checked according to i.e. EN 374, in the event of risk of skin contact with the product. Before use, the protective gloves should be tested in any case for its specific work-station suitability (i.e. mechanical resistance, product compatibility and antistatic properties). Adhere to the manufacturer's instructions and information relating to the use, storage, care and replacement of protective gloves. Protective gloves shall be replaced immediately when physically damaged or worn. Design operations thus to avoid permanent use of protective gloves.

Appropriate Material

In case of longer-term contact:

Appropriate Material

viton

Appropriate Material

In case of short-term contact / splash protection:

Appropriate Material

nitrile

Other

Normal chemical work clothing.

Environmental exposure controls

No data available.

SECTION 9: Physical and chemical properties**9.1 Information on basic physical and chemical properties**

Form/Colour		
liquid		
colourless		
Odour		
aromatic		
Odour threshold		
No data available		
pH value		
No data available		
Boiling point / boiling range		
Value	81	°C
Melting point / melting range		
Value	-46	°C
Decomposition point / decomposition range		
No data available		
Flash point		
Value	5	°C
Ignition temperature		
Value	525	°C
Auto-ignition temperature		
No data available		
Oxidising properties		
No data available		
Explosive properties		
No data available		
Flammability (solid, gas)		
No data available		
Lower flammability or explosive limits		
Value	3	% vol
Upper flammability or explosive limits		
Value	16	% vol
Vapour pressure		
Value	97	mbar
Reference temperature	20	°C
Vapour density		
No data available		
Evaporation rate		
No data available		
Relative density		
No data available		

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Density		
Value	0.78	g/cm³
Reference temperature	20	°C
Solubility in water		
Comments	miscible in all proportions	
Solubility(ies)		
No data available		
Partition coefficient: n-octanol/water		
No	Product Name	
1	Standard sample for LC/MS	
log Pow	-0.34	
Viscosity		
Value	0.39	mPa*s
Reference temperature	20	°C
Type	dynamic	

9.2 Other information

Other information
The physical data is that of the main component/s.

SECTION 10: Stability and reactivity**10.1 Reactivity**

No data available.

10.2 Chemical stability

No data available.

10.3 Possibility of hazardous reactions

No data available.

10.4 Conditions to avoid

None, if handled according to intended use.

10.5 Incompatible materials

None known.

10.6 Hazardous decomposition products

No hazardous decomposition products known.

SECTION 11: Toxicological information**11.1 Information on toxicological effects**

Acute oral toxicity (result of the ATE calculation for the mixture)		
No	Product Name	
1	Standard sample for LC/MS	
ATE (Mixture)		500.05
Method		Calculation method according Regulation (EC) No 1272/2008, (CLP), annex I, part 3, section 3.1.3.6.
Acute oral toxicity		
No	Product Name	
1	Standard sample for LC/MS	
LD50		2460 mg/kg
Species		rat
Acute dermal toxicity (result of the ATE calculation for the mixture)		
No	Product Name	
1	Standard sample for LC/MS	
ATE (Mixture)		1100.11
Method		Calculation method according Regulation (EC) No 1272/2008, (CLP), annex I, part 3, section 3.1.3.6.
Acute dermal toxicity		
No	Product Name	
1	Standard sample for LC/MS	
LD50		1250 mg/kg
Species		rabbit

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Acute inhalational toxicity (result of the ATE calculation for the mixture)	
No	Product Name
1	Standard sample for LC/MS
ATE (Mixture)	11.0011
Route of exposure / physical from Method	Vapour Calculation method according Regulation (EC) No 1272/2008, (CLP), annex I, part 3, section 3.1.3.6.

Acute inhalational toxicity	
No	Product Name
1	Standard sample for LC/MS
LC50	16000 ppm
Duration of exposure	4 h
Species	rat

Skin corrosion/irritation	
No data available	

Serious eye damage/irritation	
No data available	

Respiratory or skin sensitisation	
No data available	

Germ cell mutagenicity	
No data available	

Reproduction toxicity	
No data available	

Carcinogenicity	
No data available	

STOT - single exposure	
No data available	

STOT - repeated exposure	
No data available	

Aspiration hazard	
No data available	

Delayed and immediate effects as well as chronic effects from short and long-term exposure	
Inhalation of vapours may lead to headache, drowsiness and dizziness. Inhalation of vapours in higher concentration may lead to irritation of eyes, nose and respiratory tract. Repeated and prolonged skin contact may cause removal of natural fat from the skin and irritation of the skin. Eye contact with the product may lead to irritation.	

Other information	
The toxicological information is based on the main components.	

SECTION 12: Ecological information

12.1 Toxicity

Toxicity to fish (acute)	
No	Product Name
1	Standard sample for LC/MS
LC50	5850 mg/l
Species	Leuciscus idus

Toxicity to fish (chronic)	
No data available	

Toxicity to Daphnia (acute)	
No	Product Name
1	Standard sample for LC/MS
EC50	100 mg/l
Duration of exposure	96 h
Species	Daphnia magna

Toxicity to Daphnia (chronic)	
No data available	

Toxicity to algae (acute)	
No	Product Name
1	Standard sample for LC/MS
EC0	7300 mg/l

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Species		Scenedesmus quadricauda	
Toxicity to algae (chronic)			
No data available			
Bacteria toxicity			
No	Product Name		
1	Standard sample for LC/MS		
EC0		680	mg/l
Species	Pseudomonas putida		

12.2 Persistence and degradability

Biodegradability	
No	Product Name
1	Standard sample for LC/MS
Evaluation	readily degradable

12.3 Bioaccumulative potential

Partition coefficient: n-octanol/water	
No	Product Name
1	Standard sample for LC/MS
log Pow	-0.34

12.4 Mobility in soil

No data available.

12.5 Results of PBT and vPvB assessment

No data available.

12.6 Other adverse effects

No data available.

12.7 Other information

Other information	
Do not discharge product unmonitored into the environment.	
Ecological data refers to the main components.	

SECTION 13: Disposal considerations**13.1 Waste treatment methods****Product**

Allocation of a waste code number, according to the European Waste Catalogue, should be carried out in agreement with the regional waste disposal company.

Packaging

Residuals must be removed from packaging and when emptied completely disposed of in accordance with the regulations for waste removal. Incompletely emptied packaging must be disposed of in the form of disposal specified by the regional disposer.

SECTION 14: Transport information**14.1 Transport ADR/RID/ADN**

Class	3
Classification code	F1
Packing group	II
Hazard identification no.	33
UN number	UN1648
Proper shipping name	ACETONITRILE
Tunnel restriction code	D/E
Label	3

14.2 Transport IMDG

Class	3
Packing group	II
UN number	UN1648
Proper shipping name	ACETONITRILE
EmS	F-E, S-D
Label	3

14.3 Transport ICAO-TI / IATA

Class	3
Packing group	II
UN number	UN1648

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Proper shipping name
Label

Acetonitrile
3

14.4 Other information

No data available.

14.5 Environmental hazards

Information on environmental hazards, if relevant, please see 14.1 - 14.3.

14.6 Special precautions for user

No data available.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

Not relevant

SECTION 15: Regulatory information**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture****EU regulations****Regulation (EC) No 1907/2006 (REACH) Annex XIV (List of substances subject to authorisation)**

According to the data available and/or specifications supplied by upstream suppliers, this product does not contain any substances considered as substances requiring authorisation as listed on Annex XIV of the REACH regulation (EC) 1907/2006.

REACH candidate list of substances of very high concern (SVHC) for authorisation

According to available data and the information provided by preliminary suppliers, the product does not contain substances that are considered substances meeting the criteria for inclusion in annex XIV (List of Substances Subject to Authorisation) as laid down in Article 57 and article 59 of REACH (EC) 1907/2006.

Regulation (EC) No 1907/2006 (REACH) Annex XVII: RESTRICTIONS ON THE MANUFACTURE, PLACING ON THE MARKET AND USE OF CERTAIN DANGEROUS SUBSTANCES, PREPARATIONS AND ARTICLES

The product is considered being subject to REACH regulation (EC) 1907/2006 annexe XVII.	No 3, 40
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Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances

This product is subject to Part I of Annex I, risk category:	P5b
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15.2 Chemical safety assessment

No data available.

SECTION 16: Other information**Sources of key data used to compile the data sheet:**

Regulation (EC) No 1907/2006 (REACH), 1272/2008 (CLP) as amended in each case.

EC Directives 2000/39/EC, 2006/15/EC, 2009/161/EU

National Threshold Limit Values of the corresponding countries as amended in each case.

Transport regulations according to ADR, RID, IMDG, IATA as amended in each case.

The data sources used to determine physical, toxic and ecotoxic data, are indicated directly in the corresponding chapter.

Full text of the H- and EUH- phrases drawn up in sections 2 and 3 (provided not already drawn up in these sections)

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

Department issuing safety data sheet

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This information is based on our present knowledge and experience.

The safety data sheet describes products with a view to safety requirements.

It does not however, constitute a guarantee for any specific product properties and shall not establish a legally valid contractual relationship.

Alterations/supplements:

Alterations to the previous edition are marked in the left-hand margin.

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