

Trade name: HPLC Standard Sample**Product no.:** 228-32996 -02**Current version :** 5.0.0, issued: 17.07.2018**Replaced version:** 4.0.0, issued: 01.12.2016**Region:** GB**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1 Product identifier****Trade name****HPLC Standard Sample****1.2 Relevant identified uses of the substance or mixture and uses advised against****Relevant identified uses of the substance or mixture**

Chemical processes general

Uses advised against

No data available.

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

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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.

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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): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
 P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

2.3 Other hazards

No data available.

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

Not applicable. The product is not a substance.

3.2 Mixtures**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. |
| 2 | anthracene, pure | | |
| | 120-12-7 204-371-1 - - | Aquatic Acute 1; H400 Aquatic Chronic 1; H410 Eye Irrit. 2; H319 Skin Irrit. 2; H315 STOT SE 3; H335 | < 0.10 %-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

| No | Note | Specific concentration limits | M-factor (acute) | M-factor (chronic) |
|----|------|-------------------------------|------------------|--------------------|
| 2 | - | - | M = 100 | - |

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 immediately with plenty of water for several minutes.

After eye contact

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

After ingestion

Rinse mouth thoroughly with water. Call a doctor immediately. Do not induce vomiting. 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.

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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 away sources of ignition.

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. Product inherent handling risks must be minimised taking the appropriate measures for protection and preventive actions. The working process should be designed to rule out the release of hazardous substances or skin contact as far as possible by the state of the art.

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 one.

Advice on storage assembly

Do not store together with: Acids; Acid anhydrides; Acid chlorides; Oxidizing agents; Alkali metals; Reducing agents

7.3 Specific end use(s)

No data available.

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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 |
| List of approved workplace exposure limits (WELs) / EH40 | | | |
| Acetonitrile | | | |
| | STEL | 102 mg/m ³ | 60 ml/m ³ |
| | TWA | 68 mg/m ³ | 40 ml/m ³ |
| 2006/15/EC | | | |
| Acetonitrile | | | |
| | TWA | 70 mg/m ³ | 40 ppm |
| | Skin resorption / sensibilisation | Skin | |

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)

Hand protection

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.

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 | |
| No data available | |
| Odour threshold | |
| Value | 70 - 875 ppm |
| pH value | |
| No data available | |
| Boiling point / boiling range | |
| Value | 81 - 82 °C |
| Melting point / melting range | |
| Value | -48 °C |
| Decomposition point / decomposition range | |
| No data available | |
| Flash point | |
| Value | appr. 2 °C |
| Method | closed cup |
| Auto-ignition temperature | |
| Value | 523 °C |

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| | | |
|---|----------|-------|
| Oxidising properties | | |
| No data available | | |
| Explosive properties | | |
| No data available | | |
| Flammability (solid, gas) | | |
| No data available | | |
| Lower flammability or explosive limits | | |
| Value | 4.4 | % vol |
| Upper flammability or explosive limits | | |
| Value | 16 | % vol |
| Vapour pressure | | |
| Value | 72.8 | mm Hg |
| Reference temperature | 20 | °C |
| Vapour density | | |
| Value | 1.41 | |
| Evaporation rate | | |
| No data available | | |
| Relative density | | |
| No data available | | |
| Density | | |
| Value | 0.782 | g/cm³ |
| Solubility in water | | |
| Remarks | miscible | |
| Solubility(ies) | | |
| No data available | | |
| Partition coefficient: n-octanol/water | | |
| No data available | | |
| Viscosity | | |
| Value | 0.35 | Pa*s |
| Reference temperature | 20 | °C |

9.2 Other information

| | |
|--------------------------|--|
| Other information | |
| No data available. | |

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

Acids; Acid anhydrides; Acid chlorides; Oxidizing agents; Alkali metals; Reducing agents

10.6 Hazardous decomposition products

No hazardous decomposition products known.

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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 | HPLC Standard Sample |
| ATE (Mixture) | 500.50 |
| Method | Calculation method according Regulation (EC) No 1272/2008, (CLP), annex I, part 3, section 3.1.3.6. |

| Acute oral toxicity | |
|---------------------|--|
| No data available | |

| Acute dermal toxicity (result of the ATE calculation for the mixture) | |
|---|---|
| No | Product Name |
| 1 | HPLC Standard Sample |
| ATE (Mixture) | 1101.10 |
| Method | Calculation method according Regulation (EC) No 1272/2008, (CLP), annex I, part 3, section 3.1.3.6. |

| Acute dermal toxicity | |
|-----------------------|--|
| No data available | |

| Acute inhalational toxicity (result of the ATE calculation for the mixture) | |
|---|---|
| No | Product Name |
| 1 | HPLC Standard Sample |
| ATE (Mixture) | 11.0110 |
| Route of exposure / physical form | Vapour |
| Method | Calculation method according Regulation (EC) No 1272/2008, (CLP), annex I, part 3, section 3.1.3.6. |

| Acute inhalational toxicity | |
|-----------------------------|--|
| No data available | |

| 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. Poisonings effect on central nervous system. Liver damage is possible. | |

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SECTION 12: Ecological information**12.1 Toxicity**

| Toxicity to fish (acute) | | | |
|--------------------------|----------------------|------|------|
| No | Product Name | | |
| 1 | HPLC Standard Sample | | |
| LC50 | | 1640 | mg/l |
| Duration of exposure | | 96 | h |
| Species | Pimephales promelas | | |

| Toxicity to fish (chronic) | | | |
|----------------------------|--|--|--|
| No data available | | | |

| Toxicity to Daphnia (acute) | | | |
|-----------------------------|----------------------|------|------|
| No | Product Name | | |
| 1 | HPLC Standard Sample | | |
| EC50 | | 3600 | mg/l |
| Duration of exposure | | 48 | h |
| Species | Daphnia magna | | |

| Toxicity to Daphnia (chronic) | | | |
|-------------------------------|--|--|--|
| No data available | | | |

| Toxicity to algae (acute) | | | |
|---------------------------|----------------------|------|------|
| No | Product Name | | |
| 1 | HPLC Standard Sample | | |
| IC50 | | 7300 | mg/l |
| Duration of exposure | | 72 | h |
| Species | Algae | | |

| Toxicity to algae (chronic) | | | |
|-----------------------------|--|--|--|
| No data available | | | |

| Bacteria toxicity | | | |
|-------------------|--|--|--|
| 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

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. |

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.

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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 |
| Proper shipping name | Acetonitrile |
| Label | 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

The product contains following substance(s) meeting the criteria in Article 57 in association with Article 59 of the REACH regulation ((EC) 1907/2006) that are placed on the list of candidates considered for inclusion in annexe XIV (substances subject to Authorisation).

| No | Substance name | CAS no. | EC no. |
|----|------------------|----------|-----------|
| 1 | anthracene, pure | 120-12-7 | 204-371-1 |

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

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

15.2 Chemical safety assessment

No data available.

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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. |
| H315 | Causes skin irritation. |
| H332 | Harmful if inhaled. |
| H335 | May cause respiratory irritation. |
| H400 | Very toxic to aquatic life. |
| H410 | Very toxic to aquatic life with long lasting effects. |

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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Prod-ID 40052