

SAFETY DATA SHEET

PLRP-S in 7 to 1 Acetonitrile and Water less than 10mL solvent

SECTION 1: Identification of the substance/mixture and of the company/undertaking

This product is considered an article. This Safety Data Sheet is written based on the encapsulated substance or mixture in this article.

1.1 Product identifier

| | |
|---------------------|--|
| Product name | : PLRP-S in 7 to 1 Acetonitrile and Water less than 10mL solvent |
| Part no. | : PL1111-3500, PL1112-1801, PL1112-1802, PL1112-1803, PL1112-3801, PL1112-3802, PL1112-6800, PL1112-6801, PL1112-6802, PL1212-4100, PL1212-4201, PL1212-4800, PL1312-1300, PL1312-1301, PL1312-1500, PL1312-1501, PL1312-1502, PL1312-1503, PL1312-1802, PL1312-1803, PL1312-3300, PL1312-3301, PL1312-3501, PL1312-3503, PL1512-1300, PL1512-1301, PL1512-1500, PL1512-1501, PL1512-1502, PL1512-1503, PL1512-1801, PL1512-1802, PL1512-1803, PL1512-3100, PL1512-3101, PL1512-3102, PL1512-3103, PL1512-3200, PL1512-3201, PL1512-3300, PL1512-3301, PL1512-3400, PL1512-3401, PL1512-3501, PL1512-3702, PL1512-3703, PL1512-3800, PL1512-3801, PL1512-3802, PL1512-3803, PL1512-5100, PL1512-5101, PL1512-5102, PL1512-5103, PL1512-5200, PL1512-5201, PL1512-5400, PL1512-5401, PL1512-5500, PL1512-5501, PL1512-5702, PL1512-5703, PL1512-5800, PL1512-5801, PL1512-5802, PL1612-1801, PL1912-3800, PL1912-1300, PL1912-1803, PL1912-1301, PL1912-1500, PL1912-1501, PL1912-1502, PL1912-1503, PL1912-1801, PL1912-1802, PL1912-5802, PL1912-3801, PL1912-5801, PL1912-3802, PL1912-3803, PL1912-5500, PL1912-5501, PL1912-5800, PL1912-3300, PL1912-3301, PL1912-3500, PL1912-3501, PL1912-1502PK, PL1912-2502PK |

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

| | |
|------------------------|---|
| Identified uses | : Analytical chemistry. chromatography column Solvent volume: <10 ml Acetonitrile/ Water 7:1 (w/w) |
| PL1111-3500 | PLRP-S 100A 5uM 150X4.6MM |
| PL1112-1801 | PLRP-S 8uM 300A 50X7.5MM |
| PL1112-1802 | PLRP-S 1000A 8uM 50X7.5MM |
| PL1112-1803 | PLRP-S 4000A 8uM 50X7.5MM |
| PL1112-3801 | PLRP-S 300A 8uM 150X7.5mm |
| PL1112-3802 | PLRP-S 1000A 8uM 150X7.5MM |
| PL1112-6800 | PLRP-S 100A 8uM 300X7.5MM |
| PL1112-6801 | PLRP-S 300A 8uM 300X7.5MM |
| PL1112-6802 | PLRP-S 1000A 8uM 300X7.5MM |
| PL1212-4100 | PLRP-S 25X25mm guard 1/8in 10u |
| PL1212-4201 | PLRP-S 300A 20uM 25X25MM GUARD COLUMN |
| PL1212-4800 | PLRP-S 25X25mm guard 1/16in 8u |
| PL1312-1300 | PLRP-S 100A 3uM 50X1.0MM |
| PL1312-1301 | PLRP-S 300A 3uM 50X1.0MM |
| PL1312-1500 | PLRP-S 100A 5uM 50X1.0MM |
| PL1312-1501 | PLRP-S 300A 5uM 50X1.0MM |
| PL1312-1502 | PLRP-S 1000A 5uM 50X1.0MM |
| PL1312-1503 | PLRP-S 4000A 5uM 50X1.0MM |
| PL1312-1802 | PLRP-S 1000A 8uM 50X1.0MM |
| PL1312-1803 | PLRP-S 4000A 8uM 50X1.0MM |
| PL1312-3300 | PLRP-S 100A 3uM 150X1.0MM |
| PL1312-3301 | PLRP-S 300A 3uM 150X1.0MM |
| PL1312-3501 | PLRP-S 300A 5uM 150X1.0MM |
| PL1312-3503 | PLRP-S 4000A 5uM 150X1.0MM |
| PL1512-1300 | PLRP-S 100A 3uM 50X4.6MM |
| PL1512-1301 | PLRP-S 300A 3uM 50X4.6MM |
| PL1512-1500 | PLRP-S 100A 5uM 50X4.6MM |
| PL1512-1501 | PLRP-S 300A 5uM 50X4.6MM |
| PL1512-1502 | PLRP-S 1000A 5uM 50X4.6MM |
| PL1512-1503 | PLRP-S 4000A 5uM 50X4.6MM |
| PL1512-1801 | PLRP-S 300A 8uM 50X4.6MM |

**SECTION 1: Identification of the substance/mixture and of the company/
undertaking**

| | |
|---------------|------------------------------------|
| PL1512-1802 | PLRP-S 1000A 8uM 50X4.6MM |
| PL1512-1803 | PLRP-S 4000A 8uM 50X4.6MM |
| PL1512-3100 | PLRP-S 100A 10uM 150X4.6MM |
| PL1512-3101 | PLRP-S 300A 10uM 150X4.6MM |
| PL1512-3102 | PLRP-S 1000A 10uM 150X4.6MM |
| PL1512-3103 | PLRP-S 4000A 10uM 150X4.6MM |
| PL1512-3200 | PLRP-S 100A 15-20uM 150X4.6MM |
| PL1512-3201 | PLRP-S 300A 15-20uM 150X4.6MM |
| PL1512-3300 | PLRP-S 100A 3uM 150X4.6MM |
| PL1512-3301 | PLRP-S 300A 3uM 150X4.6MM |
| PL1512-3400 | PLRP-S 100A 10-15uM 150X4.6MM |
| PL1512-3401 | PLRP-S 300A 10-15uM 150X4.6MM |
| PL1512-3501 | PLRP-S 300A 5uM 150X4.6MM |
| PL1512-3702 | PLRP-S 1000A 30uM 150X4.6MM |
| PL1512-3703 | PLRP-S 4000A 30uM 150X4.6MM |
| PL1512-3800 | PLRP-S 100A 8uM 150X4.6MM |
| PL1512-3801 | PLRP-S 300A 8uM 150X4.6MM |
| PL1512-3802 | PLRP-S 1000A 8uM 150X4.6MM |
| PL1512-3803 | PLRP-S 4000A 8uM 150X4.6MM |
| PL1512-5100 | PLRP-S 100A 10uM 250X4.6MM |
| PL1512-5101 | PLRP-S 300A 10uM 250X4.6MM |
| PL1512-5102 | PLRP-S 1000A 10uM 250X4.6MM |
| PL1512-5103 | PLRP-S 4000A 10uM 250X4.6MM |
| PL1512-5200 | PLRP-S 100A 15-20uM 250X4.6MM |
| PL1512-5201 | PLRP-S 300A 15-20uM 250X4.6MM |
| PL1512-5400 | PLRP-S 100A 10-15uM 250X4.6MM |
| PL1512-5401 | PLRP-S 300A 10-15uM 250X4.6MM |
| PL1512-5500 | PLRP-S 100A 5uM 250X4.6MM |
| PL1512-5501 | PLRP-S 300A 5uM 250X4.6MM |
| PL1512-5702 | PLRP-S 1000A 30uM 250X4.6MM |
| PL1512-5703 | PLRP-S 4000A 30uM 250X4.6MM |
| PL1512-5800 | PLRP-S 100A 8uM 250X4.6MM |
| PL1512-5801 | PLRP-S 300A 8uM 250X4.6MM |
| PL1512-5802 | PLRP-S 1000A 8uM 250X4.6MM |
| PL1612-1801 | PLRP-S GUARD CARTRIDGES 5X3MM (X2) |
| PL1912-3800 | PLRP-S 100A 5uM 150X2.1MM |
| PL1912-1300 | PLRP-S 100A 3uM 50X2.1MM |
| PL1912-1803 | PLRP-S 4000A 8uM 50X2.1MM |
| PL1912-1301 | PLRP-S 300A 3uM 50X2.1MM |
| PL1912-1500 | PLRP-S 100A 5uM 50X2.1MM |
| PL1912-1501 | PLRP-S 300A 5uM 50X2.1MM |
| PL1912-1502 | PLRP-S 1000A 5uM 50X2.1MM |
| PL1912-1503 | PLRP-S 4000A 5uM 50X2.1MM |
| PL1912-1801 | PLRP-S 300A 8uM 50X2.1MM |
| PL1912-1802 | PLRP-S 1000A 8uM 50X2.1MM |
| PL1912-5802 | PLRP-S 8uM 1000A 250X2.1MM |
| PL1912-3801 | PLRP-S 300A 8uM 150X2.1MM |
| PL1912-5801 | PLRP-S 300A 8uM 250X2.1MM |
| PL1912-3802 | PLRP-S 1000A 8uM 150X2.1MM |
| PL1912-3803 | PLRP-S 4000A 8uM 150X2.1MM |
| PL1912-5500 | PLRP-S 100A 5uM 250X2.1MM |
| PL1912-5501 | PLRP-S 300A 5uM 250X2.1MM |
| PL1912-5800 | PLRP-S 8uM 100A 250X2.1MM |
| PL1912-3300 | PLRP-S 100A 3uM 150X2.1MM |
| PL1912-3301 | PLRP-S 300A 3uM 150X2.1MM |
| PL1912-3500 | PLRP-S 100A 5uM 150X2.1MM |
| PL1912-3501 | PLRP-S 100A 5uM 150X2.1MM |
| PL1912-1502PK | PLRP-S 1000Å, 5µm. 2.1x50mm PEEK |
| PL1912-2502PK | PLRP-S 1000Å, 5µm. 2.1x100mm PEEK |

Uses advised against : None known.

1.3 Details of the supplier of the safety data sheet

SECTION 1: Identification of the substance/mixture and of the company/undertaking

Agilent Technologies Deutschland GmbH
Hewlett-Packard-Str. 8
76337 Waldbronn
Germany
0800 603 1000

e-mail address of person responsible for this SDS : pdl-msds_author@agilent.com

1.4 Emergency telephone number

Emergency telephone number (with hours of operation) : CHEMTREC®: +(44)-870-8200418

SECTION 2: Hazards identification

This article, when used under reasonable conditions and in accordance with the directions for use, should not present a health hazard. The substance or mixture is encapsulated in the article. Only if released due to use or processing of the article in a manner not in accordance with 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 article)

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

| | | |
|------|-----------------------------------|------------|
| H225 | FLAMMABLE LIQUIDS | Category 2 |
| H302 | ACUTE TOXICITY (oral) | Category 4 |
| 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 :



Signal word : Danger

Hazard statements : H225 - Highly flammable liquid and vapour.
H302 - Harmful if swallowed.
H319 - Causes serious eye irritation.

Precautionary statements

Prevention : P280 - Wear eye or face protection.
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P270 - Do not eat, drink or smoke when using this product.
P264 - Wash thoroughly after handling.

Response : P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Storage : Not applicable.

Disposal : P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.

Hazardous ingredients : acetonitrile

Supplemental label elements : Not applicable.

SECTION 2: Hazards identification

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles : Not applicable.

Special packaging requirements

Tactile warning of danger : Not applicable.

2.3 Other hazards

Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII : This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

Other hazards which do not result in classification : None known.

SECTION 3: Composition/information on ingredients

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

3.1 Substances : Mixture (encapsulated in article)

| Product/ingredient name | Identifiers | % | Classification | Specific Conc. Limits, M-factors and ATEs | Type |
|-------------------------|--|-----------|---|---|---------|
| acetonitrile | EC: 200-835-2 CAS: 75-05-8 Index: 608-001-00-3 | ≥50 - <55 | Flam. Liq. 2, H225 Acute Tox. 4, H302 Acute Tox. 4, H312 Acute Tox. 4, H332 Eye Irrit. 2, H319 See Section 16 for the full text of the H statements declared above. | ATE [Oral] = 500 mg/kg ATE [Dermal] = 1100 mg/kg ATE [Inhalation (vapours)] = 11 mg/l | [1] [2] |

There are no additional ingredients present which, within the current knowledge of the supplier, are classified and contribute to the classification of the substance and hence require reporting in this section.

Type

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

Occupational exposure limits, if available, are listed in Section 8.

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

Eye contact : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.

SECTION 4: First aid measures

- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. If necessary, call a poison center or physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

4.2 Most important symptoms and effects, both acute and delayed

Potential acute health effects

- Eye contact** : Causes serious eye irritation.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : No known significant effects or critical hazards.
- Ingestion** : Harmful if swallowed.

Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:
pain or irritation
watering
redness
- Inhalation** : No specific data.
- Skin contact** : No specific data.
- Ingestion** : No specific data.

4.3 Indication of any immediate medical attention and special treatment needed

- Notes to physician** : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Specific treatments** : No specific treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

- Suitable extinguishing media** : Use dry chemical, CO₂, water spray (fog) or foam.
- Unsuitable extinguishing media** : Do not use water jet.

5.2 Special hazards arising from the substance or mixture

- Hazards from the substance or mixture** : Highly flammable liquid and vapour. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion.

SECTION 5: Firefighting measures

Hazardous combustion products : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
nitrogen oxides
cyanides

5.3 Advice for firefighters

Special precautions for fire-fighters : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

6.2 Environmental precautions : Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

6.4 Reference to other sections : See Section 1 for emergency contact information.
See Section 8 for information on appropriate personal protective equipment.
See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Protective measures : Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapour or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.

SECTION 7: Handling and storage

Advice on general occupational hygiene : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

7.2 Conditions for safe storage, including any incompatibilities

Storage : Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Eliminate all ignition sources. Separate from oxidising materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Seveso Directive - Reporting thresholds

Danger criteria

| Category | Notification and MAPP threshold | Safety report threshold |
|----------|---------------------------------|-------------------------|
| P5c | 5000 tonne | 50000 tonne |

7.3 Specific end use(s)

Recommendations : Industrial applications, Professional applications.

Industrial sector specific solutions : Not available.

SECTION 8: Exposure controls/personal protection

Since the hazardous ingredient in this article is encapsulated, the risk of exposure by inhalation, ingestion, skin contact and eyes contact is minimum.

8.1 Control parameters

Occupational exposure limits

| Product/ingredient name | Exposure limit values |
|-------------------------|---|
| acetonitrile | NAOSH (Ireland, 5/2021). Absorbed through skin. Notes: EU derived Occupational Exposure Limit Values OELV: 40 ppm 8 hours. OELV: 70 mg/m ³ 8 hours. |

Biological exposure indices

No exposure indices known.

Recommended monitoring procedures : Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

DNELs/DMELs

SECTION 8: Exposure controls/personal protection

| Product/ingredient name | Type | Exposure | Value | Population | Effects |
|-------------------------|------|----------------------|-----------------------|--------------------|----------|
| acetonitrile | DNEL | Long term Oral | 0.4 mg/kg bw/day | General population | Systemic |
| | DNEL | Short term Oral | 0.6 mg/kg bw/day | General population | Systemic |
| | DNEL | Long term Dermal | 1.2 mg/kg bw/day | General population | Systemic |
| | DNEL | Long term Inhalation | 2.4 mg/m ³ | General population | Systemic |

PNECs

No PNECs available

8.2 Exposure controls

Appropriate engineering controls : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapour or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

Skin protection

Hand protection : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Body protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves. Refer to European Standard EN 1149 for further information on material and design requirements and test methods.

Other skin protection : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

9.1 Information on basic physical and chemical properties

Appearance

| Physical state | : Solid. (Paste.) (containing flammable liquid) | | | | | | |
|--|---|-------|--------|--------------|---------|------------------|-----------|
| Colour | : Not available. | | | | | | |
| Odour | : Not available. | | | | | | |
| Odour threshold | : Not available. | | | | | | |
| Melting point/freezing point | : Not available. | | | | | | |
| Initial boiling point and boiling range | : Not available. | | | | | | |
| Flammability | : Contains: Flammable liquid | | | | | | |
| Upper/lower flammability or explosive limits | : Not available. | | | | | | |
| Flash point | : Closed cup: -18 to 23°C [Based on solvent.] | | | | | | |
| Auto-ignition temperature | : 432.22°C | | | | | | |
| Decomposition temperature | : Not available. | | | | | | |
| pH | : Not available. | | | | | | |
| Viscosity | : Not available. | | | | | | |
| Solubility(ies) | : <table border="1"> <thead> <tr> <th>Media</th> <th>Result</th> </tr> </thead> <tbody> <tr> <td>Mobile phase</td> <td>Soluble</td> </tr> <tr> <td>Stationary phase</td> <td>Insoluble</td> </tr> </tbody> </table> | Media | Result | Mobile phase | Soluble | Stationary phase | Insoluble |
| Media | Result | | | | | | |
| Mobile phase | Soluble | | | | | | |
| Stationary phase | Insoluble | | | | | | |

Partition coefficient: n-octanol/water : Not applicable.

| Vapour pressure | Ingredient name | Vapour Pressure at 20°C | | | Vapour pressure at 50°C | | |
|-----------------|-----------------|-------------------------|-----|--------|-------------------------|------|--------|
| | | mm Hg | kPa | Method | mm Hg | kPa | Method |
| | acetonitrile | 70.88853 | 9.5 | - | - | - | - |
| | water | 17.5 | 2.3 | - | 92.258 | 12.3 | - |

| | |
|--------------------------|--|
| Evaporation rate | : Not available. |
| Relative density | : Not available. |
| Vapour density | : Not available. |
| Explosive properties | : Explosive in the presence of the following materials or conditions: organic materials. |
| Oxidising properties | : Not available. |
| Particle characteristics | |
| Median particle size | : Not applicable. |

9.2 Other information

No additional information.

SECTION 10: Stability and reactivity

| | |
|---|--|
| 10.1 Reactivity | : No specific test data related to reactivity available for this product or its ingredients. |
| 10.2 Chemical stability | : The product is stable. |
| 10.3 Possibility of hazardous reactions | : Under normal conditions of storage and use, hazardous reactions will not occur. |

PLRP-S in 7 to 1 Acetonitrile and Water less than 10mL solvent

SECTION 10: Stability and reactivity

- 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** : Reactive or incompatible with the following materials:
oxidising materials
- 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

| Product/ingredient name | Result | Species | Dose | Exposure |
|-------------------------|------------------------|---------|------------|----------|
| acetonitrile | LC50 Inhalation Vapour | Rat | 17100 ppm | 4 hours |
| | LD50 Oral | Rat | 2460 mg/kg | - |

Acute toxicity estimates

| Product/ingredient name | Oral (mg/kg) | Dermal (mg/kg) | Inhalation (gases) (ppm) | Inhalation (vapours) (mg/l) | Inhalation (dusts and mists) (mg/l) |
|--|--------------|----------------|--------------------------|-----------------------------|-------------------------------------|
| PLRP-S in 7 to 1 Acetonitrile and Water less than 10mL solvent | 936.8 | 2060.9 | N/A | 20.6 | N/A |
| acetonitrile | 500 | 1100 | N/A | 11 | N/A |

Irritation/Corrosion

| Product/ingredient name | Result | Species | Score | Exposure | Observation |
|-------------------------|--------------------------|---------|-------|-----------------|-------------|
| acetonitrile | Eyes - Moderate irritant | Rabbit | - | 24 hours 100 uL | - |

Sensitiser

Conclusion/Summary : Not available.

Mutagenicity

Conclusion/Summary : Not available.

Carcinogenicity

Conclusion/Summary : Not available.

Reproductive toxicity

Conclusion/Summary : Not available.

Teratogenicity

Conclusion/Summary : Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on likely routes of exposure : Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.

Potential acute health effects

- Inhalation** : No known significant effects or critical hazards.
- Ingestion** : Harmful if swallowed.

SECTION 11: Toxicological information

Skin contact : No known significant effects or critical hazards.

Eye contact : Causes serious eye irritation.

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation : No specific data.

Ingestion : No specific data.

Skin contact : No specific data.

Eye contact : Adverse symptoms may include the following:
pain or irritation
watering
redness

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

Conclusion/Summary : Not available.

General : No known significant effects or critical hazards.

Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : No known significant effects or critical hazards.

Reproductive toxicity : No known significant effects or critical hazards.

11.2 Information on other hazards

11.2.1 Endocrine disrupting properties

Not available.

11.2.2 Other information

Not available.

SECTION 12: Ecological information

12.1 Toxicity

| Product/ingredient name | Result | Species | Exposure |
|-------------------------|---------------------------------------|-------------------------------------|----------|
| acetonitrile | Acute IC50 3685000 µg/l Fresh water | Aquatic plants - <i>Lemna minor</i> | 96 hours |
| | Acute LC50 3600000 µg/l Fresh water | Daphnia - <i>Daphnia magna</i> | 48 hours |
| | Acute LC50 1000000 µg/l Fresh water | Fish - <i>Pimephales promelas</i> | 96 hours |
| | Chronic NOEC 1000000 µg/l Fresh water | Aquatic plants - <i>Lemna minor</i> | 96 hours |
| | Chronic NOEC 160000 µg/l Fresh water | Daphnia - <i>Daphnia magna</i> | 21 days |

12.2 Persistence and degradability

PLRP-S in 7 to 1 Acetonitrile and Water less than 10mL solvent

SECTION 12: Ecological information

| Product/ingredient name | Test | Result | Dose | Inoculum |
|-------------------------|--|--------------------------|------|------------------|
| acetonitrile | OECD 310 Ready Biodegradability - CO2 in Sealed Vessels (Headspace Test) | 70 % - Readily - 21 days | - | Activated sludge |

| Product/ingredient name | Aquatic half-life | Photolysis | Biodegradability |
|-------------------------|-------------------|------------|------------------|
| acetonitrile | - | - | Readily |

12.3 Bioaccumulative potential

| Product/ingredient name | LogP _{ow} | BCF | Potential |
|-------------------------|--------------------|-----|-----------|
| acetonitrile | -0.34 | 3 | Low |

12.4 Mobility in soil

- Soil/water partition coefficient (K_{oc}) : Not available.
- Mobility : Not available.

12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

12.6 Endocrine disrupting properties

Not available.

12.7 Other adverse effects

No known significant effects or critical hazards.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Methods of disposal : The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

Hazardous waste : The classification of the product may meet the criteria for a hazardous waste.

Packaging

Methods of disposal : The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

Special precautions : This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapour from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

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 eyes contact is minimum.

| | ADR/RID | IMDG | IATA |
|---------------------------------|----------------|----------------|----------------|
| 14.1 UN number or ID number | Not regulated. | Not regulated. | Not regulated. |
| 14.2 UN proper shipping name | - | - | - |
| 14.3 Transport hazard class(es) | - | - | - |
| 14.4 Packing group | - | - | - |
| 14.5 Environmental hazards | No. | No. | No. |

Additional information

Remarks: Special provisions

ADR: 216

IATA: A46

IMDG: 216

14.6 Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

14.7 Transport in bulk according to IMO instruments : Not available.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

EU Regulation (EC) No. 1907/2006 (REACH)**Annex XIV - List of substances subject to authorisation****Annex XIV**

None of the components are listed.

Substances of very high concern

None of the components are listed.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

| Product / Ingredient name | Identifiers | Designation [Usage] |
|--|-------------|---------------------|
| PLRP-S in 7 to 1 Acetonitrile and Water less than 10mL solvent | | 3 |

Label : Not applicable.

Other EU regulations

Industrial emissions (integrated pollution prevention and control) - Air : Listed

SECTION 15: Regulatory information

Industrial emissions (integrated pollution prevention and control) - Water : Listed

Ozone depleting substances (1005/2009/EU)

Not listed.

Prior Informed Consent (PIC) (649/2012/EU)

Not listed.

Persistent Organic Pollutants

Not listed.

Seveso Directive

This product is controlled under the Seveso Directive.

Danger criteria

| |
|-----------------|
| Category |
| P5c |

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Inventory list

- Australia** : All components are listed or exempted.
- Canada** : All components are listed or exempted.
- China** : All components are listed or exempted.
- Eurasian Economic Union** : **Russian Federation inventory:** All components are listed or exempted.
- Japan** : **Japan inventory (CSCL):** All components are listed or exempted.
Japan inventory (ISHL): All components are listed or exempted.
- New Zealand** : All components are listed or exempted.
- Philippines** : Not determined.
- Republic of Korea** : All components are listed or exempted.
- Taiwan** : All components are listed or exempted.
- Thailand** : Not determined.
- Turkey** : All components are listed or exempted.
- United States** : All components are active or exempted.
- Viet Nam** : Not determined.

15.2 Chemical safety assessment : This product contains substances for which Chemical Safety Assessments might still be required.

SECTION 16: Other information

✔ Indicates information that has changed from previously issued version.

Abbreviations and acronyms

- : ATE = Acute Toxicity Estimate
- CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
- DMEL = Derived Minimal Effect Level
- DNEL = Derived No Effect Level
- EUH statement = CLP-specific Hazard statement
- N/A = Not available
- PBT = Persistent, Bioaccumulative and Toxic
- PNEC = Predicted No Effect Concentration
- RRN = REACH Registration Number
- vPvB = Very Persistent and Very Bioaccumulative

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

| Classification | Justification |
|--|---|
| Flam. Liq. 2, H225 Acute Tox. 4, H302 Eye Irrit. 2, H319 | Expert judgment Calculation method Calculation method |

Full text of abbreviated H statements

| | |
|--------------------------------------|--|
| H225 H302 H312 H319 H332 | Highly flammable liquid and vapour. Harmful if swallowed. Harmful in contact with skin. Causes serious eye irritation. Harmful if inhaled. |
|--------------------------------------|--|

Full text of classifications [CLP/GHS]

| | |
|--|---|
| Acute Tox. 4 Eye Irrit. 2 Flam. Liq. 2 | ACUTE TOXICITY - Category 4 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2 FLAMMABLE LIQUIDS - Category 2 |
|--|---|

Date of issue/ Date of revision : 19/03/2024

Date of previous issue : No previous validation

Version : 1

Notice to reader

Disclaimer: The information contained in this document is based on Agilent’s state of knowledge at the time of preparation. No warranty as to its accurateness, completeness or suitability for a particular purpose is expressed or implied.