

SAFETY DATA SHEET



PLRP-S in 70 percent acetonitrile - water

Section 1. Identification

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 70 percent acetonitrile - water
- 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, 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, PL1512-5700, 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

Validation date : 2/13/2017

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

Material uses : Analytical chemistry.
chromatography column

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
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

Section 1. Identification

PL1512-1503	PLRP-S 4000A 5uM 50X4.6MM
PL1512-1801	PLRP-S 300A 8uM 50X4.6MM
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

[1.3 Details of the supplier of the safety data sheet](#)

Section 1. Identification

Supplier/Manufacturer : Agilent Technologies, Inc.
5301 Stevens Creek Blvd
Santa Clara, CA 95051, USA
800-227-9770

1.4 Emergency telephone number

In case of emergency : CHEMTREC®: 1-800-424-9300

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

OSHA/HCS status : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture

H225	FLAMMABLE LIQUIDS - Category 2
H302	ACUTE TOXICITY (oral) - Category 4
H312	ACUTE TOXICITY (dermal) - Category 4
H332	ACUTE TOXICITY (inhalation) - Category 4
H319	EYE IRRITATION - Category 2A
H373	SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (blood system, central nervous system (CNS), kidneys, liver) - Category 2

2.2 GHS label elements

Hazard pictograms



Signal word

: **Danger**

Hazard statements

: H225 - Highly flammable liquid and vapor.
H302 + H312 + H332 - Harmful if swallowed, in contact with skin or if inhaled.
H319 - Causes serious eye irritation.
H373 - May cause damage to organs through prolonged or repeated exposure. (blood system, central nervous system (CNS), kidneys, liver)

Precautionary statements

Prevention

: P280 - Wear protective gloves. Wear eye or face protection. Wear protective clothing.
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P241 - Use explosion-proof electrical, ventilating, lighting and all material-handling equipment.
P242 - Use only non-sparking tools.
P243 - Take precautionary measures against static discharge.
P233 - Keep container tightly closed.
P271 - Use only outdoors or in a well-ventilated area.
P260 - Do not breathe vapor.
P270 - Do not eat, drink or smoke when using this product.
P264 - Wash hands thoroughly after handling.

Section 2. Hazards identification

- Response** : P314 - Get medical attention if you feel unwell.
P304 + P340 + P312 - IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or physician if you feel unwell.
P301 + P312 + P330 - IF SWALLOWED: Call a POISON CENTER or physician if you feel unwell. Rinse mouth.
P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P302 + P352 + P312 + P362+P364 - IF ON SKIN: Wash with plenty of soap and water. Call a POISON CENTER or physician if you feel unwell. Take off contaminated clothing and wash it before reuse.
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 attention.
- Storage** : P403 - Store in a well-ventilated place.
P235 - Keep cool.
- Disposal** : P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.

2.3 Other hazards

- Hazards not otherwise classified** : 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.

- Substance/mixture** : Mixture (encapsulated in article)

Ingredient name	%	CAS number
Acetonitrile	≥50 - ≤75	75-05-8

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

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

Section 4. First aid measures

4.1 Description of necessary 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.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. 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 following exposure or if feeling unwell. If necessary, call a poison center or physician. 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.

Section 4. First aid measures

- Skin contact** : Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention following exposure or if feeling unwell. If necessary, call a poison center or physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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.

4.2 Most important symptoms/effects, acute and delayed

Potential acute health effects

- Eye contact** : Causes serious eye irritation.
- Inhalation** : Harmful if inhaled.
- Skin contact** : Harmful in contact with skin.
- 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 immediate medical attention and special treatment needed, if necessary

- 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.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting 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

Section 5. Fire-fighting measures

- Specific hazards arising from the chemical** : Highly flammable liquid and vapor. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Runoff to sewer may create fire or explosion hazard.
- Hazardous thermal decomposition products** : Decomposition products may include the following materials:
 carbon dioxide
 carbon monoxide
 nitrogen oxides
 cyanides

5.3 Advice for firefighters

- Special protective actions 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.

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 spilled material. Shut off all ignition sources. No flames, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialized 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 spilled 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 materials 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.

Section 7. Handling and storage

7.1 Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Do not breathe vapor or mist. Do not ingest. Avoid contact with eyes, skin and clothing. 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** : 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 oxidizing 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 unlabeled containers. Use appropriate containment to avoid environmental contamination.
- 7.3 Specific end use(s)**
- Recommendations** : Industrial applications, Professional applications.
- Industrial sector specific solutions** : Not applicable.

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

Ingredient name	Exposure limits
Acetonitrile	<p>ACGIH TLV (United States, 3/2016). Absorbed through skin. TWA: 20 ppm 8 hours.</p> <p>OSHA PEL 1989 (United States, 3/1989). TWA: 40 ppm 8 hours. TWA: 70 mg/m³ 8 hours. STEL: 60 ppm 15 minutes. STEL: 105 mg/m³ 15 minutes.</p> <p>NIOSH REL (United States, 10/2013). TWA: 20 ppm 10 hours. TWA: 34 mg/m³ 10 hours.</p> <p>OSHA PEL (United States, 6/2016). TWA: 40 ppm 8 hours. TWA: 70 mg/m³ 8 hours.</p>

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, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.
- 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.

Individual protection measures

Section 8. Exposure controls/personal protection

- 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.
- 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.

Section 9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

- Physical state** : Solid. (containing flammable liquid)
- Color** : White.
- Odor** : Characteristic.
- Odor threshold** : Not available.
- pH** : Not available.
- Melting point** : 46 °C (-50.8 °F) [Acetonitrile]
- Boiling point** : 80 °C (176 °F) [Acetonitrile]
- Flash point** : 6 °C (42.8 °F)
- Evaporation rate** : Not available.
- Flammability (solid, gas)** : Contains: Flammable liquid
- Lower and upper explosive (flammable) limits** : Lower: 4%
Upper: 16%
- Vapor pressure** : Not available.
- Vapor density** : Not available.
- Relative density** : 0.9
- Density** : 0.9 g/cm³ [20°C (68°F)]
- Solubility** : Easily soluble in the following materials: cold water and hot water.

Section 9. Physical and chemical properties

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

Auto-ignition temperature : 432.22°C (810°F)

Decomposition temperature : Not available.

Viscosity : Not available.

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.

10.4 Conditions to avoid : Avoid all possible sources of ignition (spark or flame). Do not pressurize, 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:
oxidizing 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 Vapor LD50 Oral	Rat Rat	17100 ppm 2460 mg/kg	4 hours -

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Acetonitrile	Eyes - Moderate irritant	Rabbit	-	24 hours 100 microliters	-
	Skin - Mild irritant	Rabbit	-	500 milligrams	-

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Section 11. Toxicological information

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
Acetonitrile	Category 2	Not determined	blood system, central nervous system (CNS), kidneys and liver

Aspiration hazard

Not available.

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

Potential acute health effects

Eye contact : Causes serious eye irritation.
Inhalation : Harmful if inhaled.
Skin contact : Harmful in contact with skin.
Ingestion : Harmful if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics

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.

Delayed and immediate effects and also 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

General : May cause damage to organs through prolonged or repeated exposure.
Carcinogenicity : No known significant effects or critical hazards.
Mutagenicity : No known significant effects or critical hazards.
Teratogenicity : No known significant effects or critical hazards.
Developmental effects : No known significant effects or critical hazards.
Fertility effects : No known significant effects or critical hazards.

Numerical measures of toxicity

Section 11. Toxicological information

Acute toxicity estimates

Route	ATE value
Oral	909.1 mg/kg
Dermal	2000 mg/kg
Inhalation (vapors)	20 mg/l

Section 12. Ecological information

12.1 Toxicity

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

12.2 Persistence and degradability

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.

12.5 Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

13.1 Waste treatment methods

Disposal methods : The generation of waste should be avoided or minimized 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. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. 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. Vapor 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 spilled material and runoff and contact with soil, waterways, drains and sewers.

[United States - RCRA Toxic hazardous waste "U" List](#)

Section 13. Disposal considerations

Ingredient	CAS #	Status	Reference number
Acetonitrile (l,T)	75-05-8	Listed	U003

Disposal should be in accordance with applicable regional, national and local laws and regulations. Local regulations may be more stringent than regional or national requirements.

The information presented below only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

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.

Regulatory information

Additional information : Special provisions
216, 274

Remarks
SP A46

DOT / IMDG / IATA : Not regulated.

Section 15. Regulatory information

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

U.S. Federal regulations : TSCA 8(a) PAIR: Acetonitrile
United States inventory (TSCA 8b): All components are listed or exempted.
Clean Water Act (CWA) 307: Acetonitrile

Clean Air Act Section 112 : Listed
(b) Hazardous Air
Pollutants (HAPs)

Clean Air Act Section 602 : Not listed
Class I Substances

Clean Air Act Section 602 : Not listed
Class II Substances

DEA List I Chemicals : Not listed
(Precursor Chemicals)

DEA List II Chemicals : Not listed
(Essential Chemicals)

SARA 302/304

Composition/information on ingredients

No products were found.

SARA 304 RQ : Not applicable.

SARA 311/312

Section 15. Regulatory information

Classification : Fire hazard
 Immediate (acute) health hazard
 Delayed (chronic) health hazard

Composition/information on ingredients

Name	%	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
Acetonitrile	≥50 - ≤75	Yes.	No.	No.	Yes.	Yes.

SARA 313

	Product name	CAS number	%
Form R - Reporting requirements	Acetonitrile	75-05-8	≥50 - ≤75
Supplier notification	Acetonitrile	75-05-8	≥50 - ≤75

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

State regulations

Massachusetts : The following components are listed: ACETONITRILE
New York : The following components are listed: Acetonitrile; Ethanenitrile
New Jersey : The following components are listed: ACETONITRILE; CYANOMETHANE
Pennsylvania : The following components are listed: ACETONITRILE

California Prop. 65

No products were found.

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol (Annexes A, B, C, E)

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 inventory : Not determined.
China : All components are listed or exempted.
Europe : All components are listed or exempted.
Japan : **Japan inventory (ENCS)**: All components are listed or exempted.
Japan inventory (ISHL): All components are listed or exempted.
Malaysia : All components are listed or exempted.
New Zealand : Not determined.
Philippines : Not determined.

Section 15. Regulatory information

Republic of Korea	:	<input checked="" type="checkbox"/> Not determined.
Taiwan	:	<input checked="" type="checkbox"/> All components are listed or exempted.
Turkey	:	<input checked="" type="checkbox"/> Not determined.

Section 16. Other information

History

Date of issue	:	02/13/2017
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Version	:	2

Indicates information that has changed from previously issued version.

Notice to reader

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