1. IDENTIFICATION

**Product identifier**

<table>
<thead>
<tr>
<th>Product code:</th>
<th>HP416</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Product Name:</strong></td>
<td>ACETONITRILE, EXCEEDS A.C.S. SPECIFICATIONS, HPLC GRADE</td>
</tr>
</tbody>
</table>

**Other means of identification**

**Synonyms:**
- Cyanomethane
- Cyanure de methyl (French)
- acétonitrile (French)
- Ethenanitrile
- Ethyl nitrile
- Methane, cyano-
- Methanecarbonitrile
- Methyl Cyanide
- acetonitriilo (Spanish)

<table>
<thead>
<tr>
<th>CAS #:</th>
<th>75-05-8</th>
</tr>
</thead>
<tbody>
<tr>
<td>RTECS #:</td>
<td>AL7700000</td>
</tr>
<tr>
<td>CI#:</td>
<td>Not available</td>
</tr>
</tbody>
</table>

**Recommended use of the chemical and restrictions on use**

**Recommended use:** Solvent. Chemical intermediate. In organic synthesis.

**Uses advised against:** No information available

**Supplier:**
Spectrum Chemical Mfg. Corp
14422 South San Pedro St.
Gardena, CA  90248
(310) 516-8000

<table>
<thead>
<tr>
<th>Order Online At:</th>
<th><a href="https://www.spectrumchemical.com">https://www.spectrumchemical.com</a></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Emergency telephone number:</strong></td>
<td>Chembrec 1-800-424-9300</td>
</tr>
<tr>
<td><strong>Contact Person:</strong></td>
<td>Tom Tyner (USA - West Coast)</td>
</tr>
<tr>
<td><strong>Contact Person:</strong></td>
<td>Ibad Tirmiz (USA - East Coast)</td>
</tr>
</tbody>
</table>

2. HAZARDS IDENTIFICATION

**Classification**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Considered a dangerous substance or mixture according to the Globally Harmonized System (GHS)

<table>
<thead>
<tr>
<th>Acute toxicity - Oral</th>
<th>Category 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity - Dermal</td>
<td>Category 4</td>
</tr>
<tr>
<td>Acute toxicity - Inhalation (Gases)</td>
<td>Category 4</td>
</tr>
<tr>
<td>Acute toxicity - Inhalation (Vapors)</td>
<td>Category 4</td>
</tr>
<tr>
<td>Acute toxicity - Inhalation (Dusts/Mists)</td>
<td>Category 4</td>
</tr>
<tr>
<td>Serious eye damage/eye irritation</td>
<td>Category 2A</td>
</tr>
</tbody>
</table>
Flammable liquids

Category 2

Label elements

Danger

Hazard statements
Harmful if swallowed
Harmful in contact with skin
Harmful if inhaled
Causes serious eye irritation
Highly flammable liquid and vapor

Hazards not otherwise classified (HNOC)
Not Applicable

Other hazards
Causes mild skin irritation

Precautionary Statements - Prevention
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Wear protective gloves/protective clothing/eye protection/face protection
Avoid breathing dust/fume/gas/mist/vapors/spray
Use only outdoors or in a well-ventilated area
Keep away from heat/sparks/open flames/hot surfaces. — No smoking
Keep container tightly closed
Ground container and receiving equipment
Use explosion-proof equipment
Use only non-sparking tools
Take precautionary measures against static discharge

Precautionary Statements - Response
In case of fire: Use CO2, dry chemical, or foam to extinguish.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.
Call a POISON CENTER or physician if you feel unwell
Wash contaminated clothing before reuse
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water
IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or physician if you feel unwell.
IF SWALLOWED: Call a POISON CENTER or physician if you feel unwell
Rinse mouth

Precautionary Statements - Storage
Store in a well-ventilated place. Keep cool

Precautionary Statements - Disposal
Dispose of contents and container to an approved waste disposal plant in accordance with local, regional, national and international regulations as applicable

Product code:  HP416

Product name:  ACETONITRILE,
EXCEEDS A.C.S. SPECIFICATIONS,
HPLC GRADE
### 3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS No</th>
<th>Weight-%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetonitrile</td>
<td>75-05-8</td>
<td>100</td>
</tr>
</tbody>
</table>

### 4. FIRST AID MEASURES

**First aid measures**

**General Advice:** National Capital Poison Center in the United States can provide assistance if you have a poison emergency and need to talk to a poison specialist. Call 1-800-222-1222. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves. First aider needs to protect himself.

**Skin Contact:** Wash off immediately with soap and plenty of water removing all contaminated clothing and shoes. Get medical attention. If skin irritation persists, call a physician.

**Eye Contact:** Flush eyes with water for 15 minutes. Get medical attention.

**Inhalation:** Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention.

**Ingestion:** Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Obtain medical attention.

**Most important symptoms and effects, both acute and delayed**

**Symptoms**

- Central nervous system effects
- Drowsiness
- Dizziness
- Headache
- Ataxia
- Convulsions
- Weakness
- Nausea
- Vomiting
- May cause cardiovascular effects
- May cause metabolic acidosis
- May affect respiration
- Causes serious eye irritation
- Moderate eye irritation
- Mild to moderate skin irritation

**Indication of any immediate medical attention and special treatment needed**

**Notes to Physician:** Patients with a potential ingestion or inhalation exposure to acetonitrile or products containing acetonitrile should be admitted to an intensive care unit for at least 24 to 48 hours of observation for the development of cyanide poisoning. Toxicity may be prolonged. Clinical deterioration has been reported as long as 3 days following the initial response to the antidote treatment.

**Antidote:** Always have a cyanide antidote kit on hand when working with Acetonitrile or other cyanide compounds. Get medical advice on how to use it and when it should be used.

**Protection of first-aiders**

First-Aid Providers: Avoid exposure to blood or body fluids. Wear gloves and other necessary protective clothing. Dispose of contaminated clothing and equipment as bio-hazardous waste.

### 5. FIRE-FIGHTING MEASURES
Extinguishing Media
Suitable Extinguishing Media: Carbon dioxide (CO2). Dry chemical. Alcohol-resistant foam. Water spray.

Unsuitable Extinguishing Media: Do not use a solid (straight) water stream as it may scatter and spread fire.

Specific hazards arising from the chemical
Specific hazards Flammable. May be ignited by heat, sparks or flames. Container explosion may occur under fire conditions or when heated. Vapor may travel considerable distance to source of ignition and flash back. Vapors may form explosive mixtures with air. Most vapors are heavier than air. They will spread along the ground and collect in low or confined areas (sewers, basements, tanks). Fire may produce irritating, corrosive and/or toxic gases.

Special Protective Actions for Firefighters
Specific Methods: No information available
Special Protective Equipment for Firefighters: As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures
Personal Precautions: Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Avoid contact with skin, eyes and clothing. Use personal protective equipment. Remove all sources of ignition. Pay attention to flashback. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use spark-proof tools and explosion-proof equipment. In case of large spill, water spray or vapor suppressing foam may be used to reduce vapors, but may not prevent ignition in closed spaces.

Environmental precautions Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. Prevent entry into waterways, sewers, basements or confined areas.

Methods and material for containment and cleaning up
Methods for containment Stop leak if you can do it without risk. Absorb spill with inert material (e.g. vermiculite, dry sand or earth). In case of large spill, dike if needed. Dike far ahead of liquid spill for later disposal.

Methods for cleaning up Use appropriate tools to put the spilled material in a suitable chemical waste disposal container. Use only non-sparking tools. Clean contaminated surface thoroughly.

7. HANDLING AND STORAGE

Product code: HP416 Product name: ACETONITRILE, EXCEEDS A.C.S. SPECIFICATIONS, HPLC GRADE
Precautions for safe handling

Technical Measures/Precautions:
Provide sufficient air exchange and/or exhaust in work rooms. Remove all sources of ignition. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded. Keep away from incompatible materials.

Safe Handling Advice:
Wear personal protective equipment. Use only in well-ventilated areas. Avoid contact with skin, eyes and clothing. Keep away from heat and sources of ignition. Do not breathe vapors or spray mist. Do not ingest. When using do not smoke. Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Technical Measures/Storage Conditions:
Keep container tightly closed in a dry and well-ventilated place. Store at room temperature in the original container. Protect from moisture. Keep away from heat and sources of ignition. Store in a segregated and approved area. Store away from incompatible materials.

Incompatible Materials:
Oxidizing agents
Chlorine
Fluorine
Bromine
Acids
Sulfuric acid
Chlorosulfonic acid
Nitric acid
Perchloric acid
Oleum
Nitrogen-Fluorine compounds
Dinitrogen tetraoxide

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

National occupational exposure limits

United States

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS No</th>
<th>OSHA</th>
<th>NIOSH</th>
<th>ACGIH</th>
<th>AIHA WEEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetonitrile</td>
<td>75-05-8</td>
<td>40 ppm TWA 70 mg/m³ TWA</td>
<td>20 ppm TWA 34 mg/m³ TWA</td>
<td>20 ppm TWA</td>
<td>None</td>
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</table>

Canada

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS No</th>
<th>Canada - Alberta</th>
<th>Canada - British Columbia</th>
<th>Canada - Ontario</th>
<th>Canada - Quebec</th>
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</thead>
<tbody>
<tr>
<td>Acetonitrile</td>
<td>75-05-8</td>
<td>20 ppm TWA 34 mg/m³ TWA</td>
<td>20 ppm TWA</td>
<td>None</td>
<td>40 ppm TWA 67 mg/m³ TWAEV 60 ppm STEV 101 mg/m³ STEV</td>
</tr>
</tbody>
</table>

Australia and Mexico

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS No</th>
<th>Australia</th>
<th>Mexico</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetonitrile</td>
<td>75-05-8</td>
<td>60 ppm STEL</td>
<td>40 ppm TWA</td>
</tr>
</tbody>
</table>

Product code: HP416
Product name: ACetonitrile, EXCEEDS A.C.S. SPECIFICATIONS, HPLC GRADE
Appropriate engineering controls

Engineering measures to reduce exposure: Ensure adequate ventilation. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors and mist below their respective threshold limit value.

Individual protection measures, such as personal protective equipment

Personal Protective Equipment

Eye protection: Goggles
Skin and body protection: Chemical resistant apron, Long sleeved clothing, Gloves
Respiratory protection: Vapor respirator. Be sure to use an approved/certified respirator or equivalent.
Hygiene measures: Avoid contact with skin, eyes and clothing. When using, do not eat, drink or smoke. Wash hands before breaks and immediately after handling the product

9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Physical state:</th>
<th>Appearance:</th>
<th>Color:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Odor:</th>
<th>Taste:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Molecular/Formula weight (g/mole):</th>
<th>Flammability (solid, gas):</th>
</tr>
</thead>
<tbody>
<tr>
<td>41.05</td>
<td>no data available</td>
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</table>

<table>
<thead>
<tr>
<th>Flashpoint (°C/F):</th>
<th>Flash Point Tested according to:</th>
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</thead>
<tbody>
<tr>
<td>12.778 °C/55 °F</td>
<td>Closed cup</td>
</tr>
<tr>
<td>5.56 °C/42 °F</td>
<td>Open cup</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Lower Explosion Limit (%):</th>
<th>Upper Explosion Limit (%):</th>
</tr>
</thead>
<tbody>
<tr>
<td>3%</td>
<td>16%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Decomposition temperature(°C/F):</th>
<th>Boiling point/range(°C/F):</th>
</tr>
</thead>
<tbody>
<tr>
<td>No information available</td>
<td>81.6 °C/178.9 °F</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Density (g/cm3):</th>
<th>Specific gravity:</th>
</tr>
</thead>
<tbody>
<tr>
<td>No information available</td>
<td>0.78-0.79</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Vapor pressure @ 20°C (kPa):</th>
<th>Evaporation rate:</th>
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</thead>
<tbody>
<tr>
<td>9.73</td>
<td>No information available</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>VOC content (g/L):</th>
<th>Odor threshold (ppm):</th>
</tr>
</thead>
<tbody>
<tr>
<td>780-790</td>
<td>40</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Flash point (°C):</th>
<th>Autoignition Temperature (°C/F):</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.56</td>
<td>524 °C/975 °F</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Melting point/range(°C/F):</th>
<th>Bulk density:</th>
</tr>
</thead>
<tbody>
<tr>
<td>-45 to -46 °C/-49 to -50.8 °F</td>
<td>No information available</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>pH</th>
<th>No information available</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Vapor density:</th>
<th>Partition coefficient (n-octanol/water):</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.42</td>
<td>-0.34</td>
</tr>
</tbody>
</table>

Product code: HP416  Product name: ACETONITRILE, EXCEEDS A.C.S. SPECIFICATIONS, HPLC GRADE
10. STABILITY AND REACTIVITY

Reactivity
Will react with water, steam, or acids to produce toxic and flammable vapors
Reactive with oxidizing agents
Reactive with acids
Reacts with Nitrogen-Fluorine compounds
Reacts with Dinitrogen tetraoxide

Chemical stability

Stability: Stable under recommended storage conditions.

Possibility of Hazardous Reactions: Hazardous polymerization does not occur


Incompatible Materials:
Oxidizing agents
Chlorine
Fluorine
Bromine
Acids
Sulfuric acid
Chlorosulfonic acid
Nitric acid
Perchloric acid
Oleum

Viscosity: No information available

Miscibility:
Miscible with Methanol
Miscible with Ethanol
Miscible with Ether
Miscible with Acetone
Miscible with Benzene
Miscible with Carbon tetrachloride
Miscible with Ethyl Acetate
Miscible with Chloroform
Miscible with Ethylene chloride
Miscible with many unsaturated hydrocarbons
Immiscible with many saturated hydrocarbons
Equal weight of acetonitrile and the following materials are miscible at room temp: formic acid, acetic acid, levulinic acid, methanol, cellosolve solvent, formaldehyde, acetaldehyde, di-n-butyl amine, acetic anhydride, pyridine, nitrobenzene, aniline, xylene, phenol, acetyl chloride, dibutyl phthalate, diglycol stearate, n-butyl ether, dichloroethyl ether, methyl isobutyl ketone, nitromethane, nitroethane, nitropropane
Miscible with Methanol
Miscible with Methyl acetate

Solubility:
Freely soluble in water
Soluble in hot alcohol
Dissolves somewhat in inorganic salts such as silver nitrate, lithium nitrate, magnesium bromide

Viscosity: No information available

Miscibility:
Miscible with Methanol
Miscible with Ethanol
Miscible with Ether
Miscible with Acetone
Miscible with Benzene
Miscible with Carbon tetrachloride
Miscible with Ethyl Acetate
Miscible with Chloroform
Miscible with Ethylene chloride
Miscible with many unsaturated hydrocarbons
Immiscible with many saturated hydrocarbons
Equal weight of acetonitrile and the following materials are miscible at room temp: formic acid, acetic acid, levulinic acid, methanol, cellosolve solvent, formaldehyde, acetaldehyde, di-n-butyl amine, acetic anhydride, pyridine, nitrobenzene, aniline, xylene, phenol, acetyl chloride, dibutyl phthalate, diglycol stearate, n-butyl ether, dichloroethyl ether, methyl isobutyl ketone, nitromethane, nitroethane, nitropropane
Miscible with Methanol
Miscible with Methyl acetate

Product code: HP416
Product name: ACETONITRILE, EXCEEDS A.C.S. SPECIFICATIONS, HPLC GRADE

Page 7 / 15
Nitrogen-Fluorine compounds
Dinitrogen tetraoxide

Hazardous decomposition products:

Other Information
Corrosivity: No information available

Special Remarks on Corrosivity: No information available

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure
Principal Routes of Exposure:
Ingestion. Skin. Eyes. Inhalation.

Acute Toxicity

Component Information

<table>
<thead>
<tr>
<th>Acetonitrile</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS No</td>
</tr>
<tr>
<td>LD50/oral/rat =</td>
</tr>
<tr>
<td>LD50/oral/mouse =</td>
</tr>
<tr>
<td>LD50/dermal/rabbit =</td>
</tr>
<tr>
<td>LD50/dermal/rat =</td>
</tr>
<tr>
<td>LC50/inhalation/rat =</td>
</tr>
<tr>
<td>LC50/inhalation/mouse =</td>
</tr>
<tr>
<td>Other LD50 or LC50 information =</td>
</tr>
</tbody>
</table>

Product Information

LD50/oral/rat =
Value - Acute Toxicity = 1327 mg/kg

LD50/oral/mouse =
Value - Acute Tox = 269 mg/kg

LD50/dermal/rabbit
Value - Acute Toxicity = 1250 mg/kg

LD50/dermal/rat
VALUE - Acute Tox = No information available

LC50/inhalation/rat
VALUE-Vapor = 26.8 mg/l (4-hr)
VALUE-Gas = 16000 ppm (4-hr)
VALUE-Dust/Mist = No information available

Product code: HP416
Product name: ACETONITRILE, EXCEEDS A.C.S. SPECIFICATIONS, HPLC GRADE

Page 8 / 15
LC50/Inhalation/mouse
VALUE-Vapor = No information available
VALUE - Gas = 2693 ppm 1H
VALUE - Dust/Mist = No information available

Symptoms

Skin Contact: Mildly to moderately irritating to the skin. Harmful in contact with skin. It may be absorbed through the skin. If absorbed through skin it may cause systemic effects. It may be absorbed through the skin and cause symptoms similar to cyanide poisoning. It may be metabolized to cyanide which inhibits cytochrome oxidase thus impairing cellular respiration.

Eye Contact: Causes serious eye irritation.

Inhalation May cause irritation of respiratory tract. It may cause pulmonary edema. May cause bronchitis. May cause pneumonia. May cause gastric distress. May cause nausea, vomiting. May cause salivation. It may be metabolized to cyanide which inhibits cytochrome oxidase thus impairing cellular respiration. It may cause symptoms similar to cyanide poisoning (see acute ingestion for symptoms). May affect the kidneys. It may affect the urinary system. It may affect respiration (anoxia, hypoxia, respiratory insufficiency, respiratory arrest). It may affect the cardiovascular system (hypotension, cardiac arrhythmias, cardiac arrest). Other symptoms of acute inhalation may include flushing of the face, sweating, weakness, chest pain/chest tightness, vomiting of blood, convulsions, shock, unconsciousness, coma/excitement alternating with coma. May cause corneal opacity.

Ingestion Harmful if swallowed. Ingestion may cause nausea, vomiting. May cause flushing of the face. May cause hematemesis. Ingestion may cause symptoms similar to cyanide poisoning. It may be metabolized to cyanide which inhibits cytochrome oxidase thus impairing cellular respiration. Cyanide poisoning is characterized by central nervous system, cardiovascular system, and respiratory system effects such as general weakness, giddiness, confusion, sleepiness, headache, dizziness, vertigo, seizures, ataxia, tetany, irritability, stupor, anxiety, hallucinations, agitation, tremors, unconsciousness, coma, palpitations, cardiac arrhythmias, slow or rapid heartbeat, hypertension or hypotension, perceived breathing difficulty and shortness of breath, hyperventilation, asphyxiation/respiratory failure. Other symptoms may include excitement, chest pain, chest tightness, anoxia, hypoxia, shortness of breath, cardiac arrest. May cause metabolic acidosis. May cause lactic acidosis.

Aspiration hazard No information available.

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

Chronic Toxicity Prolonged or repeated inhalation may cause loss of appetite. Prolonged or repeated ingestion may cause loss of appetite. Repeated or prolonged ingestion may affect the blood. Prolonged or repeated ingestion may affect the kidneys. Prolonged or repeated ingestion may affect the liver. Prolonged or repeated inhalation may affect the liver. Prolonged or repeated inhalation may affect the kidneys. Prolonged or repeated ingestion may affect the thyroid (hyperplasia/enlargement). Prolonged or repeated inhalation may affect the blood (changes in red blood cell count). Prolonged or repeated inhalation may cause central nervous system effects.

Sensitization: No information available.
Mutagenic Effects: May affect genetic material
Sister Chromatid Exchange: Hamster ovary (RTECS)

Carcinogenic effects: Not classifiable as a human carcinogen. May cause cancer based on animal test data. Equivocal tumorigenic agent by RTECS criteria.

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS No</th>
<th>IARC</th>
<th>ACGIH - Carcinogens</th>
<th>NTP</th>
<th>OSHA HCS - Carcinogens</th>
<th>Australia - Notifiable Carcinogenic Substances</th>
<th>Australia - Prohibited Carcinogenic Substances</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetonitrile</td>
<td>75-05-8</td>
<td>Not listed</td>
<td>A4 Not Classifiable as a Human Carcinogen</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
</tr>
</tbody>
</table>

ACGIH (American Conference of Governmental Industrial Hygienists)
A4 - Not Classifiable as a Human Carcinogen
IARC (International Agency for Research on Cancer)
NTP (National Toxicology Program)
OSHA (Occupational Safety and Health Administration of the US Department of Labor)

Reproductive toxicity: No data is available
Reproductive Effects: No information available
Developmental Effects: No information available
Teratogenic Effects: May cause birth defects (teratogenic effects) based on animal test data
Showed teratogenic effects in animal experiments

Specific Target Organ Toxicity
STOT - single exposure: No information available.
STOT - repeated exposure: No information available.

12. ECOLOGICAL INFORMATION

Ecotoxicity
Ecotoxicity effects: Aquatic environment.
Acetonitrile - 75-05-8
Fish
LC50: 1600 - 1690mg/L (96h, Pimephales promelas) LC50: =1000mg/L (96h, Pimephales promelas) LC50: =1850mg/L (96h, Lepomis macrochirus) LC50: =1650mg/L (96h, Poecilia reticulata)
Crustacea
EC50: 5838mg/L (18h, Daphnia pulex)
Persistence and degradability: No information available.
Bioaccumulative potential: No information available.
Mobility in soil: No information available.
Other adverse effects: No information available.
13. DISPOSAL CONSIDERATIONS

Disposal Methods

Waste from residues / unused products:
Waste must be disposed of in accordance with Federal, State and Local regulation.

Contaminated packaging:
Empty containers should be taken for local recycling, recovery or waste disposal

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetonitrile</td>
<td>75-05-8</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>U003 ignitable waste, toxic waste</td>
</tr>
</tbody>
</table>

14. TRANSPORT INFORMATION

DOT
UN-No: UN1648
Proper Shipping Name: Acetonitrile
Hazard Class: 3
Subsidiary Class: No information available
Packing group: II
Emergency Response Guide Number: 127
Marine Pollutant: No data available
DOT RQ (lbs): 5000 lbs./2270 kg
Special Provisions: IB2, T7, TP2
Symbol(s): [DOT]: (R5) - Identifies a material that is a hazardous substance that has a reportable quantity (RQ) of 5000 pounds (2270 Kilograms).
Description: UN1648, Acetonitrile, 3, II

TDG (Canada)
UN-No: UN1648
Proper Shipping Name: Acetonitrile
Hazard Class: 3
Subsidiary Risk: No information available
Packing Group: II
Marine Pollutant: No Information available
Description: UN1648, Acetonitrile, 3, II

ADR
UN Number: UN1648
Proper Shipping Name: Acetonitrile
Transport hazard class(es): 3
Packing group: II
Subsidiary Risk: No information available
Description: UN1648, Acetonitrile, 3, II

IMDG
UN-No: UN1648
Proper Shipping Name: Acetonitrile
Hazard Class: 3
Subsidiary Risk: No information available
Packing Group: II

Product code: HP416
Product name: ACETONITRILE, EXCEEDS A.C.S. SPECIFICATIONS, HPLC GRADE
Marine Pollutant: No information available
EMS: F-E
Description: UN1648, Acetonitrile, 3, II

RID
- UN Number: UN1648
- Proper Shipping Name: Acetonitrile
- Transport hazard class(es): 3
- Subsidiary Risk: 3
- Packing group: II
- Description: UN1648, Acetonitrile, 3, II

ICAO (air)
- UN-No: UN1648
- Proper Shipping Name: Acetonitrile
- Hazard Class: 3
- Subsidiary Risk: No information available
- Packing Group: II
- Description: UN1648, Acetonitrile, 3, II

IATA
- UN Number: UN1648
- Proper Shipping Name: Acetonitrile
- Transport hazard class(es): 3
- Subsidiary Risk: No information available
- Packing group: II
- Precautionary Statements - Response: 3L
- Special Provisions: No information available
- Description: UN1648, Acetonitrile, 3, II

15. REGULATORY INFORMATION

International Inventories

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS No</th>
<th>U.S. TSCA</th>
<th>KOREA KECL</th>
<th>Philippines (PICCS)</th>
<th>Japan ENCS</th>
<th>China IECSC</th>
<th>Australia (AICS)</th>
<th>EINECS-No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetonitrile</td>
<td>75-05-8</td>
<td>PresentACTIV E</td>
<td>Present KE-00067</td>
<td>Present</td>
<td>Present (2)-1508</td>
<td>Present</td>
<td>Present</td>
<td>Present 200-835-2</td>
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</tbody>
</table>

U.S. Regulations

Acetonitrile
- Massachusetts RTK: Present
- New Jersey RTK Hazardous Substance List: 0008
- New Jersey (EHS) List: 0008 500 lb TPO
- New Jersey - Discharge Prevention - List of Hazardous Substances: Present
- Pennsylvania RTK: Environmental hazard
- Pennsylvania RTK - Environmental Hazard List: Present
- Minnesota - Hazardous Substance List: Present
- New York Release Reporting - List of Hazardous Substances:
  - 5000 lb RQ
  - 1 lb RQ
- Louisiana Reportable Quantity List for Pollutants:
  - 5000lbfinal RQ
  - 2270kgfinal RQ
- California Directors List of Hazardous Substances: Present


Product code: HP416
Product name: ACETONITRILE, EXCEEDS A.C.S. SPECIFICATIONS, HPLC GRADE
**Chemicals Known to the State of California to Cause Cancer:**
This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

**Chemicals Known to the State of California to Cause Reproductive Toxicity:**
This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS No</th>
<th>Carcinogen</th>
<th>Developmental Toxicity Male Reproductive Toxicity</th>
<th>Female Reproductive Toxicity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetonitrile</td>
<td>75-05-8</td>
<td>Not Listed</td>
<td>Not Listed</td>
<td>Not Listed</td>
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</tbody>
</table>

### CERCLA/SARA

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS No</th>
<th>CERCLA - Hazardous Substances and their Reportable Quantities</th>
<th>Section 302 Extremely Hazardous Substances and RQs</th>
<th>Section 302 Extremely Hazardous Substances and TPQs</th>
<th>Section 313 - Chemical Category</th>
<th>Section 313 - Reporting de minimis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetonitrile</td>
<td>75-05-8</td>
<td>5000 lb final RQ 2270 kg final RQ</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>1.0 % de minimis concentration</td>
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</table>

### U.S. TSCA

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS No</th>
<th>TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)</th>
<th>TSCA 8(d) - Health and Safety Reporting</th>
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</thead>
<tbody>
<tr>
<td>Acetonitrile</td>
<td>75-05-8</td>
<td>Not Applicable</td>
<td>Not Applicable</td>
</tr>
</tbody>
</table>

### Canada

**WHIMIS 2015 - GHS Classifications**

WHIMIS 2015 Hazard Classification Information:

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS No</th>
<th>WHMIS 2015 Hazard Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetonitrile</td>
<td>75-05-8</td>
<td>Flammable liquids - Category 2: H225 Highly flammable liquid and vapour.; Acute toxicity - Oral - Category 3: H301 Toxic if swallowed.; Acute toxicity - Dermal - Category 4: H312 Harmful in contact with skin.; Acute toxicity - Inhalation - Category 3: H331 Toxic if inhaled.; Serious Eye Damage/Eye Irritation - Category 2A: H319 Causes serious eye irritation.</td>
</tr>
</tbody>
</table>

**Canada Hazardous Products Regulation** This product has been classified according to the hazard criteria of the HPR (Hazardous Products Regulation) and the SDS contains all of the information required by the HPR

### DSL/NDSL

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS No</th>
<th>Canada (DSL)</th>
<th>Canada (NDSL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetonitrile</td>
<td>75-05-8</td>
<td>Present</td>
<td>Not Listed</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS No</th>
<th>CEPA Schedule I - Toxic Substances</th>
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</thead>
<tbody>
<tr>
<td>Acetonitrile</td>
<td>75-05-8</td>
<td>Not listed</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS No</th>
<th>CEPA - 2010 Greenhouse Gases Subject to Mandatory Reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetonitrile</td>
<td>75-05-8</td>
<td>Not listed</td>
</tr>
</tbody>
</table>

**Product code:** HP416  
**Product name:** ACETONITRILE, EXCEEDS A.C.S. SPECIFICATIONS, HPLC GRADE  
**Page:** 13 / 15
EU Classification

EU GHS - SV - CLP 1272/2008

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS No</th>
<th>Classification</th>
<th>Concentration Limits:</th>
<th>Safety Phrases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetonitrile</td>
<td>75-05-8</td>
<td>F; R11 Xn; R20/21/22 Xi; R36</td>
<td>No information</td>
<td>S2 S16 S36/37</td>
</tr>
</tbody>
</table>

The product is classified in accordance with Annex VI to Directive 67/548/EEC

Indication of danger:
F - Highly flammable
Xn - Harmful
Xi - Irritant

16. OTHER INFORMATION

Preparation Date: 1/17/2014
Revision date: 6/6/2019
Prepared by: Sonia Owen

Disclaimer: All chemicals may pose unknown hazards and should be used with caution. This

Product code: HP416
Product name: ACETONITRILE, EXCEEDS A.C.S. SPECIFICATIONS, HPLC GRADE
Safety Data Sheet (SDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this SDS. The physical properties reported in this SDS are obtained from the literature and do not constitute product specifications. Information contained herein does not constitute a warranty, whether expressed or implied, as to the safety, merchantability or fitness of the goods for a particular purpose. Spectrum Chemicals & Laboratory Products, Inc. assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied. It shall be the user’s responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this SDS is based on technical data judged to be reliable, Spectrum assumes no responsibility for the completeness or accuracy of the information contained herein.

End of Safety Data Sheet