SAFETY DATA SHEET
Poroshell 120 - USP Method Development Kit - 3.0 x 100mm, Part Number 5190-6160

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: Poroshell 120 - USP Method Development Kit - 3.0 x 100mm, Part Number 5190-6160
Part No. (Kit): 5190-6160
Part No.: Poroshell 120, EC-C18 695975-302
Poroshell 120, EC-C8 695975-306
Poroshell 120, EC-CN 695975-305

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

Identified uses

<table>
<thead>
<tr>
<th>Analytical chemistry. Column</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poroshell 120, EC-C18</td>
</tr>
<tr>
<td>Poroshell 120, EC-C8</td>
</tr>
<tr>
<td>Poroshell 120, EC-CN</td>
</tr>
</tbody>
</table>

Solvent Volume: 0.36

1.3 Details of the supplier of the safety data sheet

Agilent Technologies Manufacturing GmbH & Co. KG
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: Poroshell 120, EC-C18 Mixture (encapsulated in article)
Poroshell 120, EC-C8 Mixture (encapsulated in article)
Poroshell 120, EC-CN Mixture (encapsulated in article)

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

Poroshell 120, EC-C18
H225 FLAMMABLE LIQUIDS - Category 2
H319 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2

Poroshell 120, EC-C8
H225 FLAMMABLE LIQUIDS - Category 2
H319 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2

Poroshell 120, EC-CN

Date of issue/Date of revision: 19/04/2017
CONFORMS TO REGULATION (EC) No. 1907/2006 (REACH), ANNEX II - UNITED KINGDOM (UK)

Poroshell 120 - USP METHOD DEVELOPMENT KIT - 3.0 x 100mm, Part Number 5190-6160

SECTION 2: HAZARDS IDENTIFICATION

H225 FLAMMABLE LIQUIDS - CATEGORY 2
H319 SERIOUS EYE DAMAGE/EYE IRRITATION - CATEGORY 2

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:
- Poroshell 120, EC-C18: Danger
- Poroshell 120, EC-C8: Danger
- Poroshell 120, EC-CN: Danger

Hazard statements:
- Poroshell 120, EC-C18: GHS02 - Highly flammable liquid and vapour.
  GHS07 - Causes serious eye irritation.
- Poroshell 120, EC-C8: GHS02 - Highly flammable liquid and vapour.
  GHS07 - Causes serious eye irritation.
- Poroshell 120, EC-CN: GHS02 - Highly flammable liquid and vapour.
  GHS07 - Causes serious eye irritation.

Precautionary statements

Prevention:
- Poroshell 120, EC-C18: P280 - Wear protective gloves. Wear eye or face protection.
  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.
- Poroshell 120, EC-C8: P280 - Wear protective gloves. Wear eye or face protection.
  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.
- Poroshell 120, EC-CN: P280 - Wear protective gloves. Wear eye or face protection.
  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.

Response:
- Poroshell 120, EC-C18: P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
- Poroshell 120, EC-C8: P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
- Poroshell 120, EC-CN: P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.

Storage:
- Poroshell 120, EC-C18: P235 - Keep cool.
- Poroshell 120, EC-C8: P235 - Keep cool.
- Poroshell 120, EC-CN: P235 - Keep cool.

Disposal:
- Poroshell 120, EC-C18: P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
- Poroshell 120, EC-C8: P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
- Poroshell 120, EC-CN: P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.

Date of issue/Date of revision: 19/04/2017 2/22
SECTION 2: Hazards identification

Hazardous ingredients:
- Poroshell 120, EC-C18: Not applicable.
- Poroshell 120, EC-C8: Not applicable.
- Poroshell 120, EC-CN: Not applicable.

Supplemental label elements:
- Poroshell 120, EC-C18: Not applicable.
- Poroshell 120, EC-C8: Not applicable.
- Poroshell 120, EC-CN: Not applicable.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles:
- Poroshell 120, EC-C18: Not applicable.
- Poroshell 120, EC-C8: Not applicable.
- Poroshell 120, EC-CN: Not applicable.

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:
- Poroshell 120, EC-C18: Mixture (encapsulated in article)
- Poroshell 120, EC-C8: Mixture (encapsulated in article)
- Poroshell 120, EC-CN: Mixture (encapsulated in article)

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Identifiers</th>
<th>%</th>
<th>Regulation (EC) No. 1272/2008 [CLP]</th>
</tr>
</thead>
</table>

See Section 16 for the full text of the H statements declared above.
SECTION 3: Composition/information on ingredients

Contains: Organosilane bonded silica gel

Note: To the best of our knowledge, the acute and chronic toxicological properties of bonded silica gels have not been investigated. This product contains synthetic amorphous silica, and should not be confused with crystalline silica such as quartz, cristobalite, or tridymite, or with diatomaceous earth or other naturally occurring forms of amorphous silica that frequently contain crystalline forms of silica.

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.

Type

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit


[5] Substance of equivalent concern

SECTION 4: First aid measures

4.1 Description of first aid measures

Eye contact: Poroshell 120, EC-C18
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.

Poroshell 120, EC-C8
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.

Poroshell 120, EC-CN
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: Poroshell 120, EC-C18
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.

Poroshell 120, EC-C8
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.

Poroshell 120, EC-CN
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...
SECTION 4: First aid measures

Skin contact

Poroshell 120, EC-C18
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.

Poroshell 120, EC-C8
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.

Poroshell 120, EC-CN
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

Poroshell 120, EC-C18
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 adverse health effects persist or are severe. 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.

Poroshell 120, EC-C8
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 adverse health effects persist or are severe. 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.

Poroshell 120, EC-CN
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 adverse health effects persist or are severe. 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.
## SECTION 4: First aid measures

### Protection of first-aiders
- **Poroshell 120, EC-C18**: 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.
- **Poroshell 120, EC-C8**: 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.
- **Poroshell 120, EC-CN**: 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

<table>
<thead>
<tr>
<th>Type</th>
<th>Subtype</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eye contact</td>
<td></td>
<td><strong>Poroshell 120, EC-C18</strong>: Causes serious eye irritation.</td>
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<tr>
<td></td>
<td></td>
<td><strong>Poroshell 120, EC-C8</strong>: Causes serious eye irritation.</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Poroshell 120, EC-CN</strong>: Causes serious eye irritation.</td>
</tr>
<tr>
<td>Inhalation</td>
<td></td>
<td><strong>Poroshell 120, EC-C18</strong>: No known significant effects or critical hazards.</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Poroshell 120, EC-C8</strong>: No known significant effects or critical hazards.</td>
</tr>
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<td></td>
<td></td>
<td><strong>Poroshell 120, EC-CN</strong>: No known significant effects or critical hazards.</td>
</tr>
</tbody>
</table>

#### Over-exposure signs/symptoms

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<tr>
<th>Type</th>
<th>Subtype</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eye contact</td>
<td></td>
<td><strong>Poroshell 120, EC-C18</strong>: Adverse symptoms may include the following:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- pain or irritation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- watering</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- redness</td>
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<tr>
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<td></td>
<td><strong>Poroshell 120, EC-C8</strong>: Adverse symptoms may include the following:</td>
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<td>- redness</td>
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<td>Inhalation</td>
<td></td>
<td><strong>Poroshell 120, EC-C18</strong>: No specific data.</td>
</tr>
<tr>
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<td><strong>Poroshell 120, EC-C8</strong>: No specific data.</td>
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<td></td>
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<td><strong>Poroshell 120, EC-CN</strong>: No specific data.</td>
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<td>Skin contact</td>
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<td></td>
<td></td>
<td><strong>Poroshell 120, EC-CN</strong>: No specific data.</td>
</tr>
</tbody>
</table>

### 4.3 Indication of any immediate medical attention and special treatment needed

#### Notes to physician
- **Poroshell 120, EC-C18**: 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.
- **Poroshell 120, EC-C8**: 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.
- **Poroshell 120, EC-CN**: 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
- **Poroshell 120, EC-C18**: No specific treatment.
- **Poroshell 120, EC-C8**: No specific treatment.
- **Poroshell 120, EC-CN**: No specific treatment.
SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media:
- Poroshell 120, EC-C18
- Poroshell 120, EC-C8
- Poroshell 120, EC-CN

Unsuitable extinguishing media:
- Poroshell 120, EC-C18
- Poroshell 120, EC-C8
- Poroshell 120, EC-CN

5.2 Special hazards arising from the substance or mixture

Hazard from the substance or mixture:
- Poroshell 120, EC-C18
- Poroshell 120, EC-C8
- Poroshell 120, EC-CN

Hazardous combustion products:
- Poroshell 120, EC-C18
- Poroshell 120, EC-C8
- Poroshell 120, EC-CN

Suitable extinguishing media:
- Use dry chemical, \( \text{CO}_2 \), water spray (fog) or foam.

Unsuitable extinguishing media:
- Do not use water jet.

5.3 Advice for firefighters

Special precautions for fire-fighters:
- Poroshell 120, EC-C18
- Poroshell 120, EC-C8
- Poroshell 120, EC-CN

Date of issue/Date of revision: 19/04/2017
SECTION 5: Firefighting measures

Special protective equipment for fire-fighters

Poroshell 120, EC-C18
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.

Poroshell 120, EC-C8
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.

Poroshell 120, EC-CN
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

Poroshell 120, EC-C18
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.

Poroshell 120, EC-C8
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.

Poroshell 120, EC-CN
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

Poroshell 120, EC-C18
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".

Poroshell 120, EC-C8
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".

Poroshell 120, EC-CN
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".

Date of issue/Date of revision: 19/04/2017
SECTION 6: Accidental release measures

6.2 Environmental precautions

- Poroshell 120, EC-C18
  - 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).

- Poroshell 120, EC-C8
  - 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).

- Poroshell 120, EC-CN
  - 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

- Poroshell 120, EC-C18
  - 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.

- Poroshell 120, EC-C8
  - 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.

- Poroshell 120, EC-CN
  - 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

- Poroshell 120, EC-C18
  - 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.

- Poroshell 120, EC-C8
  - 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.
SECTION 7: Handling and storage

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.

Poroshell 120, EC-CN
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.

Advice on general occupational hygiene:

Poroshell 120, EC-C18
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.

Poroshell 120, EC-C8
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.

Poroshell 120, EC-CN
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:

Poroshell 120, EC-C18
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 unlabelled containers. Use appropriate containment to avoid environmental contamination.

Poroshell 120, EC-C8
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 unlabelled containers. Use appropriate containment to avoid environmental contamination.
SECTION 7: Handling and storage

Poroshell 120, EC-CN
Environmental contamination.
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 unlabelled containers. Use appropriate containment to avoid environmental contamination.

Seveso Directive - Reporting thresholds (in tonnes)

<table>
<thead>
<tr>
<th>Category</th>
<th>Notification and MAPP threshold</th>
<th>Safety report threshold</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poroshell 120, EC-C18 P5c: Flammable liquids 2 and 3 not falling under P5a or P5b</td>
<td>5000</td>
<td>50000</td>
</tr>
<tr>
<td>Poroshell 120, EC-C8 P5c: Flammable liquids 2 and 3 not falling under P5a or P5b</td>
<td>5000</td>
<td>50000</td>
</tr>
<tr>
<td>Poroshell 120, EC-CN P5c: Flammable liquids 2 and 3 not falling under P5a or P5b</td>
<td>5000</td>
<td>50000</td>
</tr>
</tbody>
</table>

7.3 Specific end use(s)

Recommendations:
- Poroshell 120, EC-C18 Industrial applications, Professional applications.
- Poroshell 120, EC-C8 Industrial applications, Professional applications.
- Poroshell 120, EC-CN Industrial applications, Professional applications.

Industrial sector specific solutions:
- Poroshell 120, EC-C18 Not applicable.
- Poroshell 120, EC-C8 Not applicable.
- Poroshell 120, EC-CN 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

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Exposure limit values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poroshell 120, EC-C18 Acetonitrile</td>
<td>EH40/2005 WELs (United Kingdom (UK), 12/2011). STEL: 102 mg/m³ 15 minutes. STEL: 60 ppm 15 minutes. TWA: 40 ppm 8 hours. TWA: 68 mg/m³ 8 hours.</td>
</tr>
<tr>
<td>Poroshell 120, EC-C8 Acetonitrile</td>
<td>EH40/2005 WELs (United Kingdom (UK), 12/2011). STEL: 102 mg/m³ 15 minutes. STEL: 60 ppm 15 minutes. TWA: 40 ppm 8 hours. TWA: 68 mg/m³ 8 hours.</td>
</tr>
<tr>
<td>Poroshell 120, EC-CN Acetonitrile</td>
<td>EH40/2005 WELs (United Kingdom (UK), 12/2011). STEL: 102 mg/m³ 15 minutes. STEL: 60 ppm 15 minutes. TWA: 40 ppm 8 hours.</td>
</tr>
</tbody>
</table>
SECTION 8: Exposure controls/personal protection

Recommended monitoring procedures: If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. 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
No DNELs/DMELs available.

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.

Date of issue/Date of revision: 19/04/2017
### SECTION 8: Exposure controls/personal protection

| 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

#### 9.1 Information on basic physical and chemical properties

##### Appearance

<table>
<thead>
<tr>
<th>Physical state</th>
<th>Poroshell 120, EC-C18</th>
<th>Solid. (containing flammable liquid)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Poroshell 120, EC-C8</td>
<td>Solid. (containing flammable liquid)</td>
</tr>
<tr>
<td></td>
<td>Poroshell 120, EC-CN</td>
<td>Solid. (containing flammable liquid)</td>
</tr>
<tr>
<td>Colour</td>
<td>Poroshell 120, EC-C18</td>
<td>White.</td>
</tr>
<tr>
<td></td>
<td>Poroshell 120, EC-C8</td>
<td>White.</td>
</tr>
<tr>
<td></td>
<td>Poroshell 120, EC-CN</td>
<td>White.</td>
</tr>
<tr>
<td>Odour</td>
<td>Poroshell 120, EC-C18</td>
<td>Not available.</td>
</tr>
<tr>
<td></td>
<td>Poroshell 120, EC-C8</td>
<td>Not available.</td>
</tr>
<tr>
<td></td>
<td>Poroshell 120, EC-CN</td>
<td>Not available.</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>Poroshell 120, EC-C18</td>
<td>Not available.</td>
</tr>
<tr>
<td></td>
<td>Poroshell 120, EC-C8</td>
<td>Not available.</td>
</tr>
<tr>
<td></td>
<td>Poroshell 120, EC-CN</td>
<td>Not available.</td>
</tr>
<tr>
<td>pH</td>
<td>Poroshell 120, EC-C18</td>
<td>Not available.</td>
</tr>
<tr>
<td></td>
<td>Poroshell 120, EC-C8</td>
<td>Not available.</td>
</tr>
<tr>
<td></td>
<td>Poroshell 120, EC-CN</td>
<td>Not available.</td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>Poroshell 120, EC-C18</td>
<td>Not available.</td>
</tr>
<tr>
<td></td>
<td>Poroshell 120, EC-C8</td>
<td>Not available.</td>
</tr>
<tr>
<td></td>
<td>Poroshell 120, EC-CN</td>
<td>Not available.</td>
</tr>
<tr>
<td>Initial boiling point and boiling range</td>
<td>Poroshell 120, EC-C18</td>
<td>Not available.</td>
</tr>
<tr>
<td></td>
<td>Poroshell 120, EC-C8</td>
<td>Not available.</td>
</tr>
<tr>
<td></td>
<td>Poroshell 120, EC-CN</td>
<td>Not available.</td>
</tr>
<tr>
<td>Flash point</td>
<td>Poroshell 120, EC-C18</td>
<td>Closed cup: -18 to 23°C</td>
</tr>
<tr>
<td></td>
<td>Poroshell 120, EC-C8</td>
<td>Closed cup: -18 to 23°C</td>
</tr>
<tr>
<td></td>
<td>Poroshell 120, EC-CN</td>
<td>Closed cup: -18 to 23°C</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Poroshell 120, EC-C18</td>
<td>Not available.</td>
</tr>
<tr>
<td></td>
<td>Poroshell 120, EC-C8</td>
<td>Not available.</td>
</tr>
<tr>
<td></td>
<td>Poroshell 120, EC-CN</td>
<td>Not available.</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Poroshell 120, EC-C18</td>
<td>Contains: Flammable liquid</td>
</tr>
<tr>
<td></td>
<td>Poroshell 120, EC-C8</td>
<td>Contains: Flammable liquid</td>
</tr>
<tr>
<td></td>
<td>Poroshell 120, EC-CN</td>
<td>Contains: Flammable liquid</td>
</tr>
<tr>
<td>Upper/lower flammability or explosive limits</td>
<td>Poroshell 120, EC-C18</td>
<td>Not available.</td>
</tr>
<tr>
<td></td>
<td>Poroshell 120, EC-C8</td>
<td>Not available.</td>
</tr>
<tr>
<td></td>
<td>Poroshell 120, EC-CN</td>
<td>Not available.</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>Poroshell 120, EC-C18</td>
<td>Not available.</td>
</tr>
<tr>
<td></td>
<td>Poroshell 120, EC-C8</td>
<td>Not available.</td>
</tr>
<tr>
<td></td>
<td>Poroshell 120, EC-CN</td>
<td>Not available.</td>
</tr>
<tr>
<td>Vapour density</td>
<td>Poroshell 120, EC-C18</td>
<td>Not available.</td>
</tr>
<tr>
<td></td>
<td>Poroshell 120, EC-C8</td>
<td>Not available.</td>
</tr>
<tr>
<td></td>
<td>Poroshell 120, EC-CN</td>
<td>Not available.</td>
</tr>
<tr>
<td>Relative density</td>
<td>Poroshell 120, EC-C18</td>
<td>Not available.</td>
</tr>
<tr>
<td></td>
<td>Poroshell 120, EC-C8</td>
<td>Not available.</td>
</tr>
<tr>
<td></td>
<td>Poroshell 120, EC-CN</td>
<td>Not available.</td>
</tr>
<tr>
<td>Solubility(ies)</td>
<td>Poroshell 120, EC-C18</td>
<td>Mobile phase: Soluble</td>
</tr>
<tr>
<td></td>
<td>Poroshell 120, EC-C8</td>
<td>Stationary phase: Insoluble</td>
</tr>
<tr>
<td></td>
<td>Poroshell 120, EC-CN</td>
<td>Mobile phase: Soluble</td>
</tr>
<tr>
<td></td>
<td>Poroshell 120, EC-CN</td>
<td>Stationary phase: Insoluble</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>Poroshell 120, EC-C18</td>
<td>Not available.</td>
</tr>
<tr>
<td></td>
<td>Poroshell 120, EC-C8</td>
<td>Not available.</td>
</tr>
<tr>
<td></td>
<td>Poroshell 120, EC-CN</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

**Date of issue/Date of revision**: 19/04/2017
## SECTION 9: Physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Poroshell 120, EC-C18</th>
<th>Poroshell 120, EC-C8</th>
<th>Poroshell 120, EC-CN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auto-ignition temperature</td>
<td>Not available.</td>
<td>Not available.</td>
<td>Not available.</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>Not available.</td>
<td>Not available.</td>
<td>Not available.</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Not available.</td>
<td>Not available.</td>
<td>Not available.</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>Not available.</td>
<td>Not available.</td>
<td>Not available.</td>
</tr>
<tr>
<td>Oxidising properties</td>
<td>Not available.</td>
<td>Not available.</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

### 9.2 Other information

No additional information.

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

- **Poroshell 120, EC-C18**: No specific test data related to reactivity available for this product or its ingredients.
- **Poroshell 120, EC-C8**: No specific test data related to reactivity available for this product or its ingredients.
- **Poroshell 120, EC-CN**: No specific test data related to reactivity available for this product or its ingredients.

### 10.2 Chemical stability

- **Poroshell 120, EC-C18**: The product is stable.
- **Poroshell 120, EC-C8**: The product is stable.
- **Poroshell 120, EC-CN**: The product is stable.

### 10.3 Possibility of hazardous reactions

- **Poroshell 120, EC-C18**: Under normal conditions of storage and use, hazardous reactions will not occur.
- **Poroshell 120, EC-C8**: Under normal conditions of storage and use, hazardous reactions will not occur.
- **Poroshell 120, EC-CN**: Under normal conditions of storage and use, hazardous reactions will not occur.

### 10.4 Conditions to avoid

- **Poroshell 120, EC-C18**: 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.
- **Poroshell 120, EC-C8**: 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.
- **Poroshell 120, EC-CN**: 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

- **Poroshell 120, EC-C18**: Reactive or incompatible with the following materials: oxidizing materials. Incompatible with hydrogen fluoride.
- **Poroshell 120, EC-C8**: Reactive or incompatible with the following materials: oxidizing materials. Incompatible with hydrogen fluoride.
- **Poroshell 120, EC-CN**: Reactive or incompatible with the following materials: oxidizing materials. Incompatible with hydrogen fluoride.

**Date of issue/Date of revision**: 19/04/2017
SECTION 10: Stability and reactivity

10.6 Hazardous decomposition products

- Poroshell 120, EC-C18: Under normal conditions of storage and use, hazardous decomposition products should not be produced.
- Poroshell 120, EC-C8: Under normal conditions of storage and use, hazardous decomposition products should not be produced.
- Poroshell 120, EC-CN: 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**

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Dose</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poroshell 120, EC-C18</td>
<td>LC50 Inhalation Vapour</td>
<td>Rat</td>
<td>17100 ppm</td>
<td>4 hours</td>
</tr>
<tr>
<td>Acetonitrile</td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>2460 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td>Poroshell 120, EC-C8</td>
<td>LC50 Inhalation Vapour</td>
<td>Rat</td>
<td>17100 ppm</td>
<td>4 hours</td>
</tr>
<tr>
<td>Acetonitrile</td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>2460 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td>Poroshell 120, EC-CN</td>
<td>LC50 Inhalation Vapour</td>
<td>Rat</td>
<td>17100 ppm</td>
<td>4 hours</td>
</tr>
<tr>
<td>Acetonitrile</td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>2460 mg/kg</td>
<td>-</td>
</tr>
</tbody>
</table>

**Acute toxicity estimates**

<table>
<thead>
<tr>
<th>Route</th>
<th>ATE value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poroshell 120, EC-C18</td>
<td></td>
</tr>
<tr>
<td>Oral</td>
<td>2487.6 mg/kg</td>
</tr>
<tr>
<td>Dermal</td>
<td>5472.6 mg/kg</td>
</tr>
<tr>
<td>Inhalation (vapours)</td>
<td>54.73 mg/l</td>
</tr>
<tr>
<td>Poroshell 120, EC-C8</td>
<td></td>
</tr>
<tr>
<td>Oral</td>
<td>2487.6 mg/kg</td>
</tr>
<tr>
<td>Dermal</td>
<td>5472.6 mg/kg</td>
</tr>
<tr>
<td>Inhalation (vapours)</td>
<td>54.73 mg/l</td>
</tr>
<tr>
<td>Poroshell 120, EC-CN</td>
<td></td>
</tr>
<tr>
<td>Oral</td>
<td>3229 mg/kg</td>
</tr>
<tr>
<td>Dermal</td>
<td>7103.9 mg/kg</td>
</tr>
<tr>
<td>Inhalation (vapours)</td>
<td>71.04 mg/l</td>
</tr>
</tbody>
</table>

**Irritation/Corrosion**

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Score</th>
<th>Exposure</th>
<th>Observation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poroshell 120, EC-C18</td>
<td>Eyes - Moderate irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>24 hours 100 microliters</td>
<td>-</td>
</tr>
<tr>
<td>Acetonitrile</td>
<td>Skin - Mild irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>500 milligrams</td>
<td>-</td>
</tr>
<tr>
<td>Poroshell 120, EC-C8</td>
<td>Eyes - Moderate irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>24 hours 100 microliters</td>
<td>-</td>
</tr>
<tr>
<td>Acetonitrile</td>
<td>Skin - Mild irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>500 milligrams</td>
<td>-</td>
</tr>
<tr>
<td>Poroshell 120, EC-CN</td>
<td>Eyes - Moderate irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>24 hours 100 microliters</td>
<td>-</td>
</tr>
<tr>
<td>Acetonitrile</td>
<td>Skin - Mild irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>500 milligrams</td>
<td>-</td>
</tr>
</tbody>
</table>

**Sensitiser**

Date of issue/Date of revision: 19/04/2017
SECTION 11: Toxicological information

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
- Poroshell 120, EC-C18 Routes of entry anticipated: Oral, Dermal, Inhalation.
- Poroshell 120, EC-C8 Routes of entry anticipated: Oral, Dermal, Inhalation.
- Poroshell 120, EC-CN Routes of entry anticipated: Oral, Dermal, Inhalation.

Potential acute health effects

Inhalation
- Poroshell 120, EC-C18 No known significant effects or critical hazards.
- Poroshell 120, EC-C8 No known significant effects or critical hazards.
- Poroshell 120, EC-CN No known significant effects or critical hazards.

Ingestion
- Poroshell 120, EC-C18 No known significant effects or critical hazards.
- Poroshell 120, EC-C8 No known significant effects or critical hazards.
- Poroshell 120, EC-CN No known significant effects or critical hazards.

Skin contact
- Poroshell 120, EC-C18 No known significant effects or critical hazards.
- Poroshell 120, EC-C8 No known significant effects or critical hazards.
- Poroshell 120, EC-CN No known significant effects or critical hazards.

Eye contact
- Poroshell 120, EC-C18 Causes serious eye irritation.
- Poroshell 120, EC-C8 Causes serious eye irritation.
- Poroshell 120, EC-CN Causes serious eye irritation.

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation
- Poroshell 120, EC-C18 No specific data.
- Poroshell 120, EC-C8 No specific data.
- Poroshell 120, EC-CN No specific data.

Ingestion
- Poroshell 120, EC-C18 No specific data.
- Poroshell 120, EC-C8 No specific data.
- Poroshell 120, EC-CN No specific data.

Skin contact
- Poroshell 120, EC-C18 No specific data.
- Poroshell 120, EC-C8 No specific data.
- Poroshell 120, EC-CN No specific data.

Eye contact
- Poroshell 120, EC-C18 Adverse symptoms may include the following:
  pain or irritation
  watering
  redness
- Poroshell 120, EC-C8 Adverse symptoms may include the following:
  pain or irritation
  watering
  redness
- Poroshell 120, EC-CN 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.

Date of issue/Date of revision : 19/04/2017
SECTION 11: Toxicological information

Potential delayed effects: Not available.

Potential chronic health effects:

General:
- Poroshell 120, EC-C18: No known significant effects or critical hazards.
- Poroshell 120, EC-C8: No known significant effects or critical hazards.
- Poroshell 120, EC-CN: No known significant effects or critical hazards.

Carcinogenicity:
- Poroshell 120, EC-C18: No known significant effects or critical hazards.
- Poroshell 120, EC-C8: No known significant effects or critical hazards.
- Poroshell 120, EC-CN: No known significant effects or critical hazards.

Mutagenicity:
- Poroshell 120, EC-C18: No known significant effects or critical hazards.
- Poroshell 120, EC-C8: No known significant effects or critical hazards.
- Poroshell 120, EC-CN: No known significant effects or critical hazards.

Teratogenicity:
- Poroshell 120, EC-C18: No known significant effects or critical hazards.
- Poroshell 120, EC-C8: No known significant effects or critical hazards.
- Poroshell 120, EC-CN: No known significant effects or critical hazards.

Developmental effects:
- Poroshell 120, EC-C18: No known significant effects or critical hazards.
- Poroshell 120, EC-C8: No known significant effects or critical hazards.
- Poroshell 120, EC-CN: No known significant effects or critical hazards.

Fertility effects:
- Poroshell 120, EC-C18: No known significant effects or critical hazards.
- Poroshell 120, EC-C8: No known significant effects or critical hazards.
- Poroshell 120, EC-CN: No known significant effects or critical hazards.

SECTION 12: Ecological information

12.1 Toxicity

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poroshell 120, EC-C18 Acetonitrile</td>
<td>Acute IC50 3685000 μg/l Fresh water</td>
<td>Aquatic plants - Lemna minor</td>
<td>96 hours</td>
</tr>
<tr>
<td></td>
<td>Acute LC50 3600000 μg/l Fresh water</td>
<td>Daphnia - Daphnia magna</td>
<td>48 hours</td>
</tr>
<tr>
<td></td>
<td>Acute LC50 1000000 μg/l Fresh water</td>
<td>Fish - Pimephales promelas</td>
<td>96 hours</td>
</tr>
<tr>
<td></td>
<td>Chronic NOEC 1000000 μg/l Fresh water</td>
<td>Aquatic plants - Lemna minor</td>
<td>96 hours</td>
</tr>
<tr>
<td></td>
<td>Chronic NOEC 160000 μg/l Fresh water</td>
<td>Daphnia - Daphnia magna</td>
<td>21 days</td>
</tr>
</tbody>
</table>

| Poroshell 120, EC-C8 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 |

| Poroshell 120, EC-CN 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

Not available.

Date of issue/Date of revision: 19/04/2017 17/22
SECTION 12: Ecological information

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Aquatic half-life</th>
<th>Photolysis</th>
<th>Biodegradability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poroshell 120, EC-C18</td>
<td>-</td>
<td>-</td>
<td>Readily</td>
</tr>
<tr>
<td>Acetonitrile</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poroshell 120, EC-C8</td>
<td>-</td>
<td>-</td>
<td>Readily</td>
</tr>
<tr>
<td>Acetonitrile</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poroshell 120, EC-CN</td>
<td>-</td>
<td>-</td>
<td>Readily</td>
</tr>
<tr>
<td>Acetonitrile</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

12.3 Bioaccumulative potential

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>LogP&lt;sub&gt;ow&lt;/sub&gt;</th>
<th>BCF</th>
<th>Potential</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poroshell 120, EC-C18</td>
<td>-0.34</td>
<td>3</td>
<td>low</td>
</tr>
<tr>
<td>Acetonitrile</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poroshell 120, EC-C8</td>
<td>-0.34</td>
<td>3</td>
<td>low</td>
</tr>
<tr>
<td>Acetonitrile</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poroshell 120, EC-CN</td>
<td>-0.34</td>
<td>3</td>
<td>low</td>
</tr>
<tr>
<td>Acetonitrile</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

12.4 Mobility in soil

- Soil/water partition coefficient (K<sub>OC</sub>): Not available.
- Mobility: Not available.

12.5 Results of PBT and vPvB assessment

- PBT: Not applicable.
- vPvB: Not applicable.

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

SECTION 13: Disposal considerations

13.1 Waste treatment methods

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

<table>
<thead>
<tr>
<th>Packaging</th>
<th>Methods of disposal</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The generation of waste should be avoided or minimised wherever possible. Waste</td>
</tr>
<tr>
<td></td>
<td>packaging should be recycled. Incineration or landfill should only be considered when</td>
</tr>
<tr>
<td></td>
<td>recycling is not feasible.</td>
</tr>
</tbody>
</table>

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

Date of issue/Date of revision: 19/04/2017
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

ADR/RID / IMDG / IATA : Not regulated.

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 Annex II of Marpol and the IBC Code

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

Poroshell 120, EC-C18 Not applicable.

Poroshell 120, EC-C8 Not applicable.

Poroshell 120, EC-CN Not applicable.

Other EU regulations

Europe inventory : All components are listed or exempted.

Industrial emissions (integrated pollution prevention and control) - Air

Listed

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.

Seveso Directive

This product is controlled under the Seveso Directive.

Danger criteria
SECTION 15: Regulatory information

<table>
<thead>
<tr>
<th>Category</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poroshell 120, EC-C18</td>
<td>P5c: Flammable liquids 2 and 3 not falling under P5a or P5b</td>
</tr>
<tr>
<td>Poroshell 120, EC-C8</td>
<td>P5c: Flammable liquids 2 and 3 not falling under P5a or P5b</td>
</tr>
<tr>
<td>Poroshell 120, EC-CN</td>
<td>P5c: Flammable liquids 2 and 3 not falling under P5a or P5b</td>
</tr>
</tbody>
</table>

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.

International lists

National inventory

Australia: All components are listed or exempted.
Canada: Not determined.
China: 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.
Republic of Korea: Not determined.
Taiwan: All components are listed or exempted.
Turkey: Not determined.
United States: All components are listed or exempted.

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]
DNEL = Derived No Effect Level
EUH statement = CLP-specific Hazard statement
PNEC = Predicted No Effect Concentration
RRN = REACH Registration Number

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]
**SECTION 16: Other information**

<table>
<thead>
<tr>
<th>Classification</th>
<th>Justification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poroshell 120, EC-C18</td>
<td>On basis of test data</td>
</tr>
<tr>
<td>Flam. Liq. 2, H225</td>
<td>Calculation method</td>
</tr>
<tr>
<td>Eye Irrit. 2, H319</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Classification</th>
<th>Justification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poroshell 120, EC-C8</td>
<td>On basis of test data</td>
</tr>
<tr>
<td>Flam. Liq. 2, H225</td>
<td>Calculation method</td>
</tr>
<tr>
<td>Eye Irrit. 2, H319</td>
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</tbody>
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<td>Eye Irrit. 2, H319</td>
<td></td>
</tr>
</tbody>
</table>

**Full text of abbreviated H statements**

**Poroshell 120, EC-C18**

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

**Poroshell 120, EC-C8**

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

**Poroshell 120, EC-CN**

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

**Full text of classifications [CLP/GHS]**

**Poroshell 120, EC-C18**

- Acute Tox. 4, H302: ACUTE TOXICITY (oral) - Category 4
- Acute Tox. 4, H312: ACUTE TOXICITY (dermal) - Category 4
- Acute Tox. 4, H332: ACUTE TOXICITY (inhalation) - Category 4
- Eye Irrit. 2, H319: SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2
- Flam. Liq. 2, H225: FLAMMABLE LIQUIDS - Category 2

**Poroshell 120, EC-C8**

- Acute Tox. 4, H302: ACUTE TOXICITY (oral) - Category 4
- Acute Tox. 4, H312: ACUTE TOXICITY (dermal) - Category 4
- Acute Tox. 4, H332: ACUTE TOXICITY (inhalation) - Category 4
- Eye Irrit. 2, H319: SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2
- Flam. Liq. 2, H225: FLAMMABLE LIQUIDS - Category 2

**Poroshell 120, EC-CN**

- Acute Tox. 4, H302: ACUTE TOXICITY (oral) - Category 4
- Acute Tox. 4, H312: ACUTE TOXICITY (dermal) - Category 4
- Acute Tox. 4, H332: ACUTE TOXICITY (inhalation) - Category 4
- Eye Irrit. 2, H319: SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2
- Flam. Liq. 2, H225: FLAMMABLE LIQUIDS - Category 2

**Date of issue/Date of revision**: 19/04/2017

**Date of previous issue**: No previous validation.

**Version**: 1

**Notice to reader**
SECTION 16: Other information

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