

# SAFETY DATA SHEET



RRHD pH Method Development Kit, Part Number 5190-6152

## 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** : RRHD pH Method Development Kit, Part Number 5190-6152  
**Part No. (Kit)** : 5190-6152  
**Part No.** : RRHD SB-C18 857700-902  
RRHD Eclipse Plus C18 959757-902  
RRHD Extend - C18 757700-902

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

Identified uses	
Analytical chemistry. LC columns Solvent volume: <10 ml	
<input checked="" type="checkbox"/> RRHD SB-C18	2.1 x 50mm, 1.8µm, 1200bar
RRHD Eclipse Plus C18	2.1 x 50mm, 1.8µm
RRHD Extend - C18	2.1 x 50mm, 1.8µm, 1200bar

### 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** : RRHD SB-C18 Mixture (encapsulated in article)  
RRHD Eclipse Plus C18 Mixture (encapsulated in article)  
RRHD Extend - C18 Mixture (encapsulated in article)

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

## SECTION 2: Hazards identification

### RRHD SB-C18

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

### RRHD Eclipse Plus C18

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

### RRHD Extend - C18




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

RRHD SB-C18	
RRHD Eclipse Plus C18	
RRHD Extend - C18	

### Signal word

RRHD SB-C18	Danger
RRHD Eclipse Plus C18	Danger
RRHD Extend - C18	Danger

### Hazard statements

RRHD SB-C18	H225 - Highly flammable liquid and vapour. H319 - Causes serious eye irritation.
RRHD Eclipse Plus C18	H225 - Highly flammable liquid and vapour. H319 - Causes serious eye irritation.
RRHD Extend - C18	H225 - Highly flammable liquid and vapour. H319 - Causes serious eye irritation.

### Precautionary statements

#### Prevention

RRHD SB-C18	P280 - Wear protective gloves. Wear protective clothing. Wear eye or face protection. P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
RRHD Eclipse Plus C18	P280 - Wear protective gloves. Wear protective clothing. Wear eye or face protection. P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
RRHD Extend - C18	P280 - Wear protective gloves. Wear protective clothing. Wear eye or face protection. P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

#### Response

RRHD SB-C18	P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
RRHD Eclipse Plus C18	P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
RRHD Extend - C18	P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.

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## SECTION 2: Hazards identification

<b>Storage</b>	: RRHD SB-C18 RRHD Eclipse Plus C18 RRHD Extend - C18	Not applicable. Not applicable. Not applicable.
<b>Disposal</b>	: RRHD SB-C18  RRHD Eclipse Plus C18  RRHD Extend - C18	P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations. P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations. P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
<b>Hazardous ingredients</b>	: RRHD SB-C18 RRHD Eclipse Plus C18 RRHD Extend - C18	Not applicable. Not applicable. Not applicable.
<b>Supplemental label elements</b>	: RRHD SB-C18 RRHD Eclipse Plus C18 RRHD Extend - C18	Not applicable. Not applicable. Not applicable.
<b>Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles</b>	: RRHD SB-C18 RRHD Eclipse Plus C18 RRHD Extend - C18	Not applicable. Not applicable. Not applicable.
<b>Special packaging requirements</b>		
<b>Tactile warning of danger</b>	: RRHD SB-C18 RRHD Eclipse Plus C18 RRHD Extend - C18	Not applicable. Not applicable. Not applicable.

### 2.3 Other hazards

<b>Other hazards which do not result in classification</b>	: RRHD SB-C18 RRHD Eclipse Plus C18 RRHD Extend - C18	None known. None known. None known.
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## 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.

<b>3.1 Substances</b>	: RRHD SB-C18 RRHD Eclipse Plus C18 RRHD Extend - C18	Mixture (encapsulated in article) Mixture (encapsulated in article) Mixture (encapsulated in article)
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Product/ingredient name	Identifiers	%	Regulation (EC) No. 1272/2008 [CLP]	Type
RRHD SB-C18 Acetonitrile	EC: 200-835-2 CAS: 75-05-8 Index: 608-001-00-3	≥10 - <25	Flam. Liq. 2, H225 Acute Tox. 4, H302 Acute Tox. 4, H312 Acute Tox. 4, H332 Eye Irrit. 2, H319	[1] [2]
RRHD Eclipse Plus C18 Acetonitrile	EC: 200-835-2 CAS: 75-05-8 Index: 608-001-00-3	≥10 - <25	Flam. Liq. 2, H225 Acute Tox. 4, H302 Acute Tox. 4, H312 Acute Tox. 4, H332 Eye Irrit. 2, H319	[1] [2]
RRHD Extend - C18				[1] [2]

Date of issue/Date of revision : 13/10/2017

3/22

**RRHD pH Method Development Kit, Part Number 5190-6152**

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

Acetonitrile	EC: 200-835-2 CAS: 75-05-8 Index: 608-001-00-3	≥10 - <25	Flam. Liq. 2, H225 Acute Tox. 4, H302 Acute Tox. 4, H312 Acute Tox. 4, H332 Eye Irrit. 2, H319  <b>See Section 16 for the full text of the H statements declared above.</b>
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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
- [3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII
- [4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII
- [5] Substance of equivalent concern
- [6] Additional disclosure due to company policy

**SECTION 4: First aid measures**

**4.1 Description of first aid measures**

<b>Eye contact</b>	: RRHD SB-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.
	RRHD Eclipse Plus 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.
	RRHD Extend - 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.
<b>Inhalation</b>	: RRHD SB-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.
	RRHD Eclipse Plus 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.

## SECTION 4: First aid measures

		<p>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.</p>
	RRHD Extend - C18	<p>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.</p> <p>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.</p>
<b>Skin contact</b>	: RRHD SB-C18	<p>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.</p>
	RRHD Eclipse Plus C18	<p>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.</p>
	RRHD Extend - C18	<p>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.</p>
<b>Ingestion</b>	: RRHD SB-C18	<p>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.</p>
	RRHD Eclipse Plus C18	<p>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.</p>
	RRHD Extend - C18	<p>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</p>

## SECTION 4: First aid measures

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.

<b>Protection of first-aiders</b>	: RRHD SB-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.
	RRHD Eclipse Plus 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.
	RRHD Extend - 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.

### 4.2 Most important symptoms and effects, both acute and delayed

#### Potential acute health effects

<b>Eye contact</b>	: RRHD SB-C18 RRHD Eclipse Plus C18 RRHD Extend - C18	Causes serious eye irritation. Causes serious eye irritation. Causes serious eye irritation.
<b>Inhalation</b>	: RRHD SB-C18 RRHD Eclipse Plus C18 RRHD Extend - C18	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.
<b>Skin contact</b>	: RRHD SB-C18 RRHD Eclipse Plus C18 RRHD Extend - C18	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.
<b>Ingestion</b>	: RRHD SB-C18 RRHD Eclipse Plus C18 RRHD Extend - C18	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.

#### Over-exposure signs/symptoms

<b>Eye contact</b>	: RRHD SB-C18	Adverse symptoms may include the following: pain or irritation watering redness
	RRHD Eclipse Plus C18	Adverse symptoms may include the following: pain or irritation watering redness
	RRHD Extend - C18	Adverse symptoms may include the following: pain or irritation watering redness
<b>Inhalation</b>	: RRHD SB-C18 RRHD Eclipse Plus C18 RRHD Extend - C18	No specific data. No specific data. No specific data.
<b>Skin contact</b>	: RRHD SB-C18 RRHD Eclipse Plus C18 RRHD Extend - C18	No specific data. No specific data. No specific data.
<b>Ingestion</b>	: RRHD SB-C18 RRHD Eclipse Plus C18 RRHD Extend - C18	No specific data. No specific data. No specific data.



## SECTION 4: First aid measures

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

<b>Notes to physician</b>	: RRHD SB-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.
	RRHD Eclipse Plus 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.
	RRHD Extend - 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.
<b>Specific treatments</b>	: RRHD SB-C18	No specific treatment.
	RRHD Eclipse Plus C18	No specific treatment.
	RRHD Extend - C18	No specific treatment.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

<b>Suitable extinguishing media</b>	: RRHD SB-C18	Use dry chemical, CO <sub>2</sub> , water spray (fog) or foam.
	RRHD Eclipse Plus C18	Use dry chemical, CO <sub>2</sub> , water spray (fog) or foam.
	RRHD Extend - C18	Use dry chemical, CO <sub>2</sub> , water spray (fog) or foam.
<b>Unsuitable extinguishing media</b>	: RRHD SB-C18	Do not use water jet.
	RRHD Eclipse Plus C18	Do not use water jet.
	RRHD Extend - C18	Do not use water jet.

### 5.2 Special hazards arising from the substance or mixture

<b>Hazards from the substance or mixture</b>	: RRHD SB-C18	Highly flammable liquid and vapour. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion.
	RRHD Eclipse Plus C18	Highly flammable liquid and vapour. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion.
	RRHD Extend - C18	Highly flammable liquid and vapour. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion.
<b>Hazardous combustion products</b>	: RRHD SB-C18	Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides metal oxide/oxides cyanides
	RRHD Eclipse Plus C18	Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides metal oxide/oxides cyanides
	RRHD Extend - C18	Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides metal oxide/oxides cyanides

### 5.3 Advice for firefighters

## SECTION 5: Firefighting measures

<b>Special precautions for fire-fighters</b>	: RRHD SB-C18	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
	RRHD Eclipse Plus C18	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
	RRHD Extend - C18	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
<b>Special protective equipment for fire-fighters</b>	: RRHD SB-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.
	RRHD Eclipse Plus 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.
	RRHD Extend - 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.

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

<b>For non-emergency personnel</b>	: RRHD SB-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.
	RRHD Eclipse Plus 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.
	RRHD Extend - 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



## SECTION 6: Accidental release measures

		inadequate. Put on appropriate personal protective equipment.
<b>For emergency responders</b>	: RRHD SB-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".
	RRHD Eclipse Plus 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".
	RRHD Extend - 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".
<b>6.2 Environmental precautions</b>	: RRHD SB-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).
	RRHD Eclipse Plus 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).
	RRHD Extend - 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).
<b>6.3 Methods and material for containment and cleaning up</b>		
<b>Methods for cleaning up</b>	: RRHD SB-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.
	RRHD Eclipse Plus 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.
	RRHD Extend - 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.
<b>6.4 Reference to other sections</b>	: 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** : RRHD SB-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.

RRHD Eclipse Plus 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.

RRHD Extend - 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.

**Advice on general occupational hygiene** : RRHD SB-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.

RRHD Eclipse Plus 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.

RRHD Extend - 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,

## SECTION 7: Handling and storage

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

<b>Storage</b>	: RRHD SB-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. See Section 10 for incompatible materials before handling or use.
	RRHD Eclipse Plus 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. See Section 10 for incompatible materials before handling or use.
	RRHD Extend - 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. See Section 10 for incompatible materials before handling or use.

### Danger criteria

Category	Notification and MAPP threshold	Safety report threshold
<b>RRHD SB-C18</b> P5c: Flammable liquids 2 and 3 not falling under P5a or P5b	5000	50000
<b>RRHD Eclipse Plus C18</b> P5c: Flammable liquids 2 and 3 not falling under P5a or P5b	5000	50000
<b>RRHD Extend - C18</b> P5c: Flammable liquids 2 and 3 not falling under P5a or P5b	5000	50000

### 7.3 Specific end use(s)

<b>Recommendations</b>	: RRHD SB-C18 RRHD Eclipse Plus C18 RRHD Extend - C18	Industrial applications, Professional applications. Industrial applications, Professional applications. Industrial applications, Professional applications.
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## SECTION 7: Handling and storage

**Industrial sector specific solutions** : RRHD SB-C18 Not applicable.  
 RRHD Eclipse Plus C18 Not applicable.  
 RRHD Extend - C18 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

Product/ingredient name	Exposure limit values
<b>RRHD SB-C18</b> Acetonitrile	<b>EH40/2005 WELs (United Kingdom (UK), 12/2011).</b> STEL: 102 mg/m <sup>3</sup> 15 minutes. STEL: 60 ppm 15 minutes. TWA: 40 ppm 8 hours. TWA: 68 mg/m <sup>3</sup> 8 hours.
<b>RRHD Eclipse Plus C18</b> Acetonitrile	<b>EH40/2005 WELs (United Kingdom (UK), 12/2011).</b> STEL: 102 mg/m <sup>3</sup> 15 minutes. STEL: 60 ppm 15 minutes. TWA: 40 ppm 8 hours. TWA: 68 mg/m <sup>3</sup> 8 hours.
<b>RRHD Extend - C18</b> Acetonitrile	<b>EH40/2005 WELs (United Kingdom (UK), 12/2011).</b> STEL: 102 mg/m <sup>3</sup> 15 minutes. STEL: 60 ppm 15 minutes. TWA: 40 ppm 8 hours. TWA: 68 mg/m <sup>3</sup> 8 hours.

#### 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

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## SECTION 8: Exposure controls/personal protection

- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
- Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.
- Skin protection**
- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves. Refer to European Standard EN 1149 for further information on material and design requirements and test methods.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

#### Appearance

- Physical state** : RRHD SB-C18 Solid. (containing flammable liquid)  
RRHD Eclipse Plus C18 Solid. (containing flammable liquid)  
RRHD Extend - C18 Solid. (containing flammable liquid)
- Colour** : RRHD SB-C18 Not available.  
RRHD Eclipse Plus C18 White.  
RRHD Extend - C18 Not available.
- Odour** : RRHD SB-C18 Not available.  
RRHD Eclipse Plus C18 Not available.  
RRHD Extend - C18 Not available.
- Odour threshold** : RRHD SB-C18 Not available.  
RRHD Eclipse Plus C18 Not available.  
RRHD Extend - C18 Not available.
- pH** : RRHD SB-C18 Not available.  
RRHD Eclipse Plus C18 Not available.  
RRHD Extend - C18 Not available.
- Melting point/freezing point** : RRHD SB-C18 Not available.  
RRHD Eclipse Plus C18 Not available.  
RRHD Extend - C18 Not available.

## SECTION 9: Physical and chemical properties

<b>Initial boiling point and boiling range</b>	: RRHD SB-C18	Not available.
	RRHD Eclipse Plus C18	Not available.
	RRHD Extend - C18	Not available.
<b>Flash point</b>	: RRHD SB-C18	Closed cup: -18 to 23°C
	RRHD Eclipse Plus C18	Closed cup: -18 to 23°C
	RRHD Extend - C18	Closed cup: -18 to 23°C
<b>Evaporation rate</b>	: RRHD SB-C18	Not available.
	RRHD Eclipse Plus C18	Not available.
	RRHD Extend - C18	Not available.
<b>Flammability (solid, gas)</b>	: RRHD SB-C18	Contains: Flammable liquid
	RRHD Eclipse Plus C18	Contains: Flammable liquid
	RRHD Extend - C18	Contains: Flammable liquid
<b>Upper/lower flammability or explosive limits</b>	: RRHD SB-C18	Not available.
	RRHD Eclipse Plus C18	Not available.
	RRHD Extend - C18	Not available.
<b>Vapour pressure</b>	: RRHD SB-C18	Not available.
	RRHD Eclipse Plus C18	Not available.
	RRHD Extend - C18	Not available.
<b>Vapour density</b>	: RRHD SB-C18	Not available.
	RRHD Eclipse Plus C18	Not available.
	RRHD Extend - C18	Not available.
<b>Relative density</b>	: RRHD SB-C18	Not available.
	RRHD Eclipse Plus C18	Not available.
	RRHD Extend - C18	Not available.
<b>Solubility(ies)</b>	: RRHD SB-C18	Mobile phase: Soluble Stationary phase: Insoluble
	RRHD Eclipse Plus C18	Mobile phase: Soluble Stationary phase: Insoluble
	RRHD Extend - C18	Mobile phase: Soluble Stationary phase: Insoluble
<b>Partition coefficient: n-octanol/water</b>	: RRHD SB-C18	Not available.
	RRHD Eclipse Plus C18	Not available.
	RRHD Extend - C18	Not available.
<b>Auto-ignition temperature</b>	: RRHD SB-C18	Not available.
	RRHD Eclipse Plus C18	Not available.
	RRHD Extend - C18	Not available.
<b>Decomposition temperature</b>	: RRHD SB-C18	Not available.
	RRHD Eclipse Plus C18	Not available.
	RRHD Extend - C18	Not available.
<b>Viscosity</b>	: RRHD SB-C18	Not available.
	RRHD Eclipse Plus C18	Not available.
	RRHD Extend - C18	Not available.
<b>Explosive properties</b>	: RRHD SB-C18	Not available.
	RRHD Eclipse Plus C18	Not available.
	RRHD Extend - C18	Not available.
<b>Oxidising properties</b>	: RRHD SB-C18	Not available.
	RRHD Eclipse Plus C18	Not available.
	RRHD Extend - C18	Not available.

### 9.2 Other information

No additional information.



## SECTION 10: Stability and reactivity

<b>10.1 Reactivity</b>	: RRHD SB-C18 RRHD Eclipse Plus C18 RRHD Extend - C18	No specific test data related to reactivity available for this product or its ingredients. No specific test data related to reactivity available for this product or its ingredients. No specific test data related to reactivity available for this product or its ingredients.
<b>10.2 Chemical stability</b>	: RRHD SB-C18 RRHD Eclipse Plus C18 RRHD Extend - C18	The product is stable. The product is stable. The product is stable.
<b>10.3 Possibility of hazardous reactions</b>	: RRHD SB-C18 RRHD Eclipse Plus C18 RRHD Extend - C18	Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous reactions will not occur.
<b>10.4 Conditions to avoid</b>	: RRHD SB-C18 RRHD Eclipse Plus C18 RRHD Extend - 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. 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. 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.
<b>10.5 Incompatible materials</b>	: <del>RRHD</del> RRHD SB-C18 RRHD Eclipse Plus C18 RRHD Extend - C18	Reactive or incompatible with the following materials: oxidizing materials Reactive or incompatible with the following materials: oxidizing materials. Incompatible with hydrogen fluoride. Reactive or incompatible with the following materials: oxidizing materials
<b>10.6 Hazardous decomposition products</b>	: RRHD SB-C18 RRHD Eclipse Plus C18 RRHD Extend - C18	Under normal conditions of storage and use, hazardous decomposition products should not be produced. Under normal conditions of storage and use, hazardous decomposition products should not be produced. Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
<b>RRHD SB-C18</b> Acetonitrile	LC50 Inhalation Vapour	Rat	17100 ppm	4 hours
	LD50 Oral	Rat	2460 mg/kg	-
<b>RRHD Eclipse Plus C18</b> Acetonitrile	LC50 Inhalation Vapour	Rat	17100 ppm	4 hours
	LD50 Oral	Rat	2460 mg/kg	-
<b>RRHD Extend - C18</b> Acetonitrile	LC50 Inhalation Vapour	Rat	17100 ppm	4 hours
	LD50 Oral	Rat	2460 mg/kg	-

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## SECTION 11: Toxicological information

### Acute toxicity estimates

Route	ATE value
<b>RRHD SB-C18</b> Oral Dermal Inhalation (vapours)	2463.1 mg/kg 5418.7 mg/kg 54.19 mg/l
<b>RRHD Eclipse Plus C18</b> Oral Dermal Inhalation (vapours)	2463.1 mg/kg 5418.7 mg/kg 54.19 mg/l
<b>RRHD Extend - C18</b> Oral Dermal Inhalation (vapours)	2463.1 mg/kg 5418.7 mg/kg 54.19 mg/l

### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
<b>RRHD SB-C18</b> Acetonitrile	Eyes - Moderate irritant	Rabbit	-	24 hours 100 microliters 500 milligrams	-
	Skin - Mild irritant	Rabbit	-		-
<b>RRHD Eclipse Plus C18</b> Acetonitrile	Eyes - Moderate irritant	Rabbit	-	24 hours 100 microliters 500 milligrams	-
	Skin - Mild irritant	Rabbit	-		-
<b>RRHD Extend - C18</b> Acetonitrile	Eyes - Moderate irritant	Rabbit	-	24 hours 100 microliters 500 milligrams	-
	Skin - Mild irritant	Rabbit	-		-

### Sensitiser

**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** : RRHD SB-C18 Routes of entry anticipated: Oral, Dermal, Inhalation.  
RRHD Eclipse Plus C18 Routes of entry anticipated: Oral, Dermal, Inhalation.  
RRHD Extend - C18 Routes of entry anticipated: Oral, Dermal, Inhalation.

### Potential acute health effects

**Inhalation** : RRHD SB-C18 No known significant effects or critical hazards.  
RRHD Eclipse Plus C18 No known significant effects or critical hazards.  
RRHD Extend - C18 No known significant effects or critical hazards.

**Ingestion** : RRHD SB-C18 No known significant effects or critical hazards.  
RRHD Eclipse Plus C18 No known significant effects or critical hazards.  
RRHD Extend - C18 No known significant effects or critical hazards.

## SECTION 11: Toxicological information

<b>Skin contact</b>	: RRHD SB-C18	No known significant effects or critical hazards.
	RRHD Eclipse Plus C18	No known significant effects or critical hazards.
	RRHD Extend - C18	No known significant effects or critical hazards.
<b>Eye contact</b>	: RRHD SB-C18	Causes serious eye irritation.
	RRHD Eclipse Plus C18	Causes serious eye irritation.
	RRHD Extend - C18	Causes serious eye irritation.

### Symptoms related to the physical, chemical and toxicological characteristics

<b>Inhalation</b>	: RRHD SB-C18	No specific data.
	RRHD Eclipse Plus C18	No specific data.
	RRHD Extend - C18	No specific data.
<b>Ingestion</b>	: RRHD SB-C18	No specific data.
	RRHD Eclipse Plus C18	No specific data.
	RRHD Extend - C18	No specific data.
<b>Skin contact</b>	: RRHD SB-C18	No specific data.
	RRHD Eclipse Plus C18	No specific data.
	RRHD Extend - C18	No specific data.
<b>Eye contact</b>	: RRHD SB-C18	Adverse symptoms may include the following: pain or irritation watering redness
	RRHD Eclipse Plus C18	Adverse symptoms may include the following: pain or irritation watering redness
	RRHD Extend - C18	Adverse symptoms may include the following: pain or irritation watering redness

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

#### Short term exposure

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

#### Long term exposure

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

### Potential chronic health effects

<b>General</b>	: RRHD SB-C18	No known significant effects or critical hazards.
	RRHD Eclipse Plus C18	No known significant effects or critical hazards.
	RRHD Extend - C18	No known significant effects or critical hazards.
<b>Carcinogenicity</b>	: RRHD SB-C18	No known significant effects or critical hazards.
	RRHD Eclipse Plus C18	No known significant effects or critical hazards.
	RRHD Extend - C18	No known significant effects or critical hazards.
<b>Mutagenicity</b>	: RRHD SB-C18	No known significant effects or critical hazards.
	RRHD Eclipse Plus C18	No known significant effects or critical hazards.
	RRHD Extend - C18	No known significant effects or critical hazards.
<b>Teratogenicity</b>	: RRHD SB-C18	No known significant effects or critical hazards.
	RRHD Eclipse Plus C18	No known significant effects or critical hazards.
	RRHD Extend - C18	No known significant effects or critical hazards.
<b>Developmental effects</b>	: RRHD SB-C18	No known significant effects or critical hazards.
	RRHD Eclipse Plus C18	No known significant effects or critical hazards.
	RRHD Extend - C18	No known significant effects or critical hazards.

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## SECTION 11: Toxicological information

<b>Fertility effects</b>	: RRHD SB-C18	No known significant effects or critical hazards.
	RRHD Eclipse Plus C18	No known significant effects or critical hazards.
	RRHD Extend - C18	No known significant effects or critical hazards.

## SECTION 12: Ecological information

### 12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
<b>RRHD SB-C18</b> Acetonitrile	Acute IC50 3685000 µg/l Fresh water Acute LC50 3600000 µg/l Fresh water Acute LC50 1000000 µg/l Fresh water Chronic NOEC 1000000 µg/l Fresh water Chronic NOEC 160000 µg/l Fresh water	Aquatic plants - Lemna minor Daphnia - Daphnia magna Fish - Pimephales promelas Aquatic plants - Lemna minor Daphnia - Daphnia magna	96 hours 48 hours 96 hours 96 hours 21 days
<b>RRHD Eclipse Plus C18</b> Acetonitrile	Acute IC50 3685000 µg/l Fresh water Acute LC50 3600000 µg/l Fresh water Acute LC50 1000000 µg/l Fresh water Chronic NOEC 1000000 µg/l Fresh water Chronic NOEC 160000 µg/l Fresh water	Aquatic plants - Lemna minor Daphnia - Daphnia magna Fish - Pimephales promelas Aquatic plants - Lemna minor Daphnia - Daphnia magna	96 hours 48 hours 96 hours 96 hours 21 days
<b>RRHD Extend - C18</b> Acetonitrile	Acute IC50 3685000 µg/l Fresh water Acute LC50 3600000 µg/l Fresh water Acute LC50 1000000 µg/l Fresh water Chronic NOEC 1000000 µg/l Fresh water Chronic NOEC 160000 µg/l Fresh water	Aquatic plants - Lemna minor Daphnia - Daphnia magna Fish - Pimephales promelas Aquatic plants - Lemna minor Daphnia - Daphnia magna	96 hours 48 hours 96 hours 96 hours 21 days

### 12.2 Persistence and degradability

Not available.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
<b>RRHD SB-C18</b> Acetonitrile	-	-	Readily
<b>RRHD Eclipse Plus C18</b> Acetonitrile	-	-	Readily
<b>RRHD Extend - C18</b> Acetonitrile	-	-	Readily

### 12.3 Bioaccumulative potential

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
<b>RRHD SB-C18</b> Acetonitrile	-0.34	3	low
<b>RRHD Eclipse Plus C18</b> Acetonitrile	-0.34	3	low
<b>RRHD Extend - C18</b> Acetonitrile	-0.34	3	low

### 12.4 Mobility in soil

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## SECTION 12: Ecological information

**Soil/water partition coefficient ( $K_{oc}$ )** : 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

#### Product

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

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

#### Packaging

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

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

## SECTION 14: Transport information

This Safety Data Sheet is written based on the encapsulated substance or mixture in this article. Since the hazardous ingredient is encapsulated, the risk of exposure by inhalation, ingestion, skin contact and eyes contact is minimum.

**ADR/RID / IMDG / IATA** : Not regulated.

#### Additional information

##### **Special provisions :**

ADR: 216  
IATA: A46  
IMDG: 216

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

**14.7 Transport in bulk according to 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.

<b>Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles</b>	: RRHD SB-C18	Not applicable.
	RRHD Eclipse Plus C18	Not applicable.
	RRHD Extend - C18	Not applicable.

##### Other EU regulations

**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

Category
<b>RRHD SB-C18</b> P5c: Flammable liquids 2 and 3 not falling under P5a or P5b
<b>RRHD Eclipse Plus C18</b> P5c: Flammable liquids 2 and 3 not falling under P5a or P5b
<b>RRHD Extend - C18</b> P5c: Flammable liquids 2 and 3 not falling under P5a or P5b

##### 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



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## SECTION 15: Regulatory information

Not listed.

### Inventory list

<b>Australia</b>	: All components are listed or exempted.
<b>Canada</b>	: Not determined.
<b>China</b>	: All components are listed or exempted.
<b>Europe</b>	: All components are listed or exempted.
<b>Japan</b>	: <b>Japan inventory (ENCS)</b> : Not determined. <b>Japan inventory (ISHL)</b> : All components are listed or exempted.
<b>Malaysia</b>	: All components are listed or exempted.
<b>New Zealand</b>	: <input checked="" type="checkbox"/> All components are listed or exempted.
<b>Philippines</b>	: Not determined.
<b>Republic of Korea</b>	: Not determined.
<b>Taiwan</b>	: All components are listed or exempted.
<b>Thailand</b>	: <input checked="" type="checkbox"/> Not determined.
<b>Turkey</b>	: Not determined.
<b>United States</b>	: All components are listed or exempted.
<b>Viet Nam</b>	: <input checked="" type="checkbox"/> Not determined.

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

## SECTION 16: Other information

Indicates information that has changed from previously issued version.

**Abbreviations and acronyms** : ATE = Acute Toxicity Estimate  
CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]  
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]

Classification	Justification
<b>RRHD SB-C18</b> Flam. Liq. 2, H225 Eye Irrit. 2, H319	On basis of test data Calculation method
<b>RRHD Eclipse Plus C18</b> Flam. Liq. 2, H225 Eye Irrit. 2, H319	On basis of test data Calculation method
<b>RRHD Extend - C18</b> Flam. Liq. 2, H225 Eye Irrit. 2, H319	On basis of test data Calculation method

### Full text of abbreviated H statements

**RRHD pH Method Development Kit, Part Number 5190-6152**

**SECTION 16: Other information**

<p><b>RRHD SB-C18</b> H225 H302 H312 H319 H332</p>	<p>Highly flammable liquid and vapour. Harmful if swallowed. Harmful in contact with skin. Causes serious eye irritation. Harmful if inhaled.</p>
<p><b>RRHD Eclipse Plus C18</b> H225 H302 H312 H319 H332</p>	<p>Highly flammable liquid and vapour. Harmful if swallowed. Harmful in contact with skin. Causes serious eye irritation. Harmful if inhaled.</p>
<p><b>RRHD Extend - C18</b> H225 H302 H312 H319 H332</p>	<p>Highly flammable liquid and vapour. Harmful if swallowed. Harmful in contact with skin. Causes serious eye irritation. Harmful if inhaled.</p>

[Full text of classifications \[CLP/GHS\]](#)

<p><b>RRHD SB-C18</b> Acute Tox. 4, H302 Acute Tox. 4, H312 Acute Tox. 4, H332 Eye Irrit. 2, H319 Flam. Liq. 2, H225</p>	<p>ACUTE TOXICITY (oral) - Category 4 ACUTE TOXICITY (dermal) - Category 4 ACUTE TOXICITY (inhalation) - Category 4 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2 FLAMMABLE LIQUIDS - Category 2</p>
<p><b>RRHD Eclipse Plus C18</b> Acute Tox. 4, H302 Acute Tox. 4, H312 Acute Tox. 4, H332 Eye Irrit. 2, H319 Flam. Liq. 2, H225</p>	<p>ACUTE TOXICITY (oral) - Category 4 ACUTE TOXICITY (dermal) - Category 4 ACUTE TOXICITY (inhalation) - Category 4 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2 FLAMMABLE LIQUIDS - Category 2</p>
<p><b>RRHD Extend - C18</b> Acute Tox. 4, H302 Acute Tox. 4, H312 Acute Tox. 4, H332 Eye Irrit. 2, H319 Flam. Liq. 2, H225</p>	<p>ACUTE TOXICITY (oral) - Category 4 ACUTE TOXICITY (dermal) - Category 4 ACUTE TOXICITY (inhalation) - Category 4 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2 FLAMMABLE LIQUIDS - Category 2</p>

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