

SAFETY DATA SHEET

Rapid Resolution pH Method Development Kit, Part Number 5190-1436

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	: Rapid Resolution pH Method Development Kit, Part Number 5190-1436
Part no. (chemical kit)	: 5190-1436
Part no.	: ZORBAX Extend C18 764953-902
	SB-C18 Rapid Res 861953-902
	Eclipse Plus C18 959961-902

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

Identified uses	: Analytical chemistry. HPLC column Solvent volume: <10 ml ZORBAX Extend C18 3.5 µm, 4.6 x 100 mm SB-C18 Rapid Res 3.5 µm, 4.6 x 100 mm Eclipse Plus C18 3.5 µm, 4.6 x 100 mm
Uses advised against	: None known.

1.3 Details of the supplier of the safety data sheet

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

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

1.4 Emergency telephone number

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

SECTION 2: Hazards identification

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

2.1 Classification of the substance or mixture

Product definition	: ZORBAX Extend C18 Mixture (encapsulated in article)
	SB-C18 Rapid Res Mixture (encapsulated in article)
	Eclipse Plus C18 Mixture (encapsulated in article)

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

ZORBAX Extend C18

H225	FLAMMABLE LIQUIDS	Category 2
H302	ACUTE TOXICITY (oral)	Category 4
H312	ACUTE TOXICITY (dermal)	Category 4
H332	ACUTE TOXICITY (inhalation)	Category 4
H370	SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE	Category 1

SB-C18 Rapid Res

H225	FLAMMABLE LIQUIDS	Category 2
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SECTION 2: Hazards identification

H302	ACUTE TOXICITY (oral)	Category 4
H312	ACUTE TOXICITY (dermal)	Category 4
H332	ACUTE TOXICITY (inhalation)	Category 4
H370	SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE	Category 1
Eclipse Plus C18		
H225	FLAMMABLE LIQUIDS	Category 2
H302	ACUTE TOXICITY (oral)	Category 4
H312	ACUTE TOXICITY (dermal)	Category 4
H332	ACUTE TOXICITY (inhalation)	Category 4
H370	SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE	Category 1
ZORBAX Extend C18	The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.	
SB-C18 Rapid Res	The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.	
Eclipse Plus C18	The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.	
See Section 16 for the full text of the H statements declared above.		
See Section 11 for more detailed information on health effects and symptoms.		

2.2 Label elements

Hazard pictograms		: ZORBAX Extend C18	
		SB-C18 Rapid Res	
		Eclipse Plus C18	
Signal word		: ZORBAX Extend C18	Danger
		SB-C18 Rapid Res	Danger
		Eclipse Plus C18	Danger
Hazard statements		: ZORBAX Extend C18	H225 - Highly flammable liquid and vapour. H302 + H312 + H332 - Harmful if swallowed, in contact with skin or if inhaled. H370 - Causes damage to organs.
		SB-C18 Rapid Res	H225 - Highly flammable liquid and vapour. H302 + H312 + H332 - Harmful if swallowed, in contact with skin or if inhaled. H370 - Causes damage to organs.
		Eclipse Plus C18	H225 - Highly flammable liquid and vapour. H302 + H312 + H332 - Harmful if swallowed, in contact with skin or if inhaled. H370 - Causes damage to organs.
Precautionary statements			
Prevention		: ZORBAX Extend C18	P280 - Wear protective gloves and protective clothing. P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P260 - Do not breathe vapour.
		SB-C18 Rapid Res	P270 - Do not eat, drink or smoke when using this product. P280 - Wear protective gloves and protective clothing. P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P260 - Do not breathe vapour.

SECTION 2: Hazards identification

	Eclipse Plus C18	P270 - Do not eat, drink or smoke when using this product. P280 - Wear protective gloves and protective clothing. P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P260 - Do not breathe vapour. P270 - Do not eat, drink or smoke when using this product.
Response	: ZORBAX Extend C18	P308 + P311 - IF exposed or concerned: Call a POISON CENTER or doctor.
	SB-C18 Rapid Res	P308 + P311 - IF exposed or concerned: Call a POISON CENTER or doctor.
	Eclipse Plus C18	P308 + P311 - IF exposed or concerned: Call a POISON CENTER or doctor.
Storage	: ZORBAX Extend C18	Not applicable.
	SB-C18 Rapid Res	Not applicable.
	Eclipse Plus C18	Not applicable.
Disposal	: ZORBAX Extend C18	P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
	SB-C18 Rapid Res	P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
	Eclipse Plus C18	P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
Hazardous ingredients	: ZORBAX Extend C18	methanol
	SB-C18 Rapid Res	methanol
	Eclipse Plus C18	methanol
Supplemental label elements	: ZORBAX Extend C18	Not applicable.
	SB-C18 Rapid Res	Not applicable.
	Eclipse Plus C18	Not applicable.
Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles	: ZORBAX Extend C18	Not applicable.
	SB-C18 Rapid Res	Not applicable.
	Eclipse Plus C18	Not applicable.
<u>Special packaging requirements</u>		
Tactile warning of danger	: ZORBAX Extend C18	Not applicable.
	SB-C18 Rapid Res	Not applicable.
	Eclipse Plus C18	Not applicable.

2.3 Other hazards

Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII	: ZORBAX Extend C18	This mixture does not contain any substances that are assessed to be a PBT or a vPvB.
	SB-C18 Rapid Res	This mixture does not contain any substances that are assessed to be a PBT or a vPvB.
	Eclipse Plus C18	This mixture does not contain any substances that are assessed to be a PBT or a vPvB.
Other hazards which do not result in classification	: ZORBAX Extend C18	None known.
	SB-C18 Rapid Res	None known.
	Eclipse Plus C18	None known.

SECTION 3: Composition/information on ingredients

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

3.1 Substances	: ZORBAX Extend C18	Mixture (encapsulated in article)
	SB-C18 Rapid Res	Mixture (encapsulated in article)
	Eclipse Plus C18	Mixture (encapsulated in article)

SECTION 3: Composition/information on ingredients

Product/ingredient name	Identifiers	%	Classification	Specific Conc. Limits, M-factors and ATEs	Type
ZORBAX Extend C18 methanol	EC: 200-659-6 CAS: 67-56-1	≥25 - <30	Flam. Liq. 2, H225 Acute Tox. 3, H301 Acute Tox. 3, H311 Acute Tox. 3, H331 STOT SE 1, H370 (central nervous system (CNS), optic nerve)	ATE [Oral] = 100 mg/kg ATE [Dermal] = 300 mg/kg ATE [Inhalation (vapours)] = 3 mg/l STOT SE 1, H370: C ≥ 10% STOT SE 2, H371: 3% ≤ C < 10%	[1] [2]
SB-C18 Rapid Res methanol	EC: 200-659-6 CAS: 67-56-1	≥10 - ≤25	Flam. Liq. 2, H225 Acute Tox. 3, H301 Acute Tox. 3, H311 Acute Tox. 3, H331 STOT SE 1, H370 (central nervous system (CNS), optic nerve)	ATE [Oral] = 100 mg/kg ATE [Dermal] = 300 mg/kg ATE [Inhalation (vapours)] = 3 mg/l STOT SE 1, H370: C ≥ 10% STOT SE 2, H371: 3% ≤ C < 10%	[1] [2]
Eclipse Plus C18 methanol	EC: 200-659-6 CAS: 67-56-1	≥25 - <30	Flam. Liq. 2, H225 Acute Tox. 3, H301 Acute Tox. 3, H311 Acute Tox. 3, H331 STOT SE 1, H370 (central nervous system (CNS), optic nerve) See Section 16 for the full text of the H statements declared above.	ATE [Oral] = 100 mg/kg ATE [Dermal] = 300 mg/kg ATE [Inhalation (vapours)] = 3 mg/l STOT SE 1, H370: C ≥ 10% STOT SE 2, H371: 3% ≤ C < 10%	[1] [2]

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, are classified and contribute to the classification of the substance and hence require reporting in this section.

Type

ZORBAX Extend C18

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

SB-C18 Rapid Res

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

Eclipse Plus C18

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

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

SECTION 4: First aid measures

4.1 Description of first aid measures

Eye contact	: ZORBAX 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. If necessary, call a poison center or physician.
	SB-C18 Rapid Res	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. If necessary, call a poison center or physician.
	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. If necessary, call a poison center or physician.
Inhalation	: ZORBAX Extend C18	Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
	SB-C18 Rapid Res	Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
	Eclipse Plus C18	Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
Skin contact	: ZORBAX Extend C18	Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. If necessary, call a poison center or physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.
	SB-C18 Rapid Res	Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. If necessary, call a poison center or physician. Wash clothing

SECTION 4: First aid measures**Ingestion**

Eclipse Plus C18

before reuse. Clean shoes thoroughly before reuse. Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. If necessary, call a poison center or physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.

: ZORBAX Extend C18

Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. If necessary, call a poison center or physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

SB-C18 Rapid Res

Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. If necessary, call a poison center or physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Eclipse Plus C18

Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. If necessary, call a poison center or physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Protection of first-aiders : ZORBAX Extend C18

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

SB-C18 Rapid Res

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

Eclipse Plus C18

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

SECTION 4: First aid measures

water before removing it, or wear gloves.

4.2 Most important symptoms and effects, both acute and delayed**Potential acute health effects**

Eye contact	: ZORBAX Extend C18	No known significant effects or critical hazards.
	SB-C18 Rapid Res	No known significant effects or critical hazards.
	Eclipse Plus C18	No known significant effects or critical hazards.
Inhalation	: ZORBAX Extend C18	Harmful if inhaled. Causes damage to organs following a single exposure if inhaled.
	SB-C18 Rapid Res	Harmful if inhaled. Causes damage to organs following a single exposure if inhaled.
	Eclipse Plus C18	Harmful if inhaled. Causes damage to organs following a single exposure if inhaled.
Skin contact	: ZORBAX Extend C18	Harmful in contact with skin. Causes damage to organs following a single exposure in contact with skin.
	SB-C18 Rapid Res	Harmful in contact with skin. Causes damage to organs following a single exposure in contact with skin.
	Eclipse Plus C18	Harmful in contact with skin. Causes damage to organs following a single exposure in contact with skin.
Ingestion	: ZORBAX Extend C18	Harmful if swallowed. Causes damage to organs following a single exposure if swallowed.
	SB-C18 Rapid Res	Harmful if swallowed. Causes damage to organs following a single exposure if swallowed.
	Eclipse Plus C18	Harmful if swallowed. Causes damage to organs following a single exposure if swallowed.

Over-exposure signs/symptoms

Eye contact	: ZORBAX Extend C18	No specific data.
	SB-C18 Rapid Res	No specific data.
	Eclipse Plus C18	No specific data.
Inhalation	: ZORBAX Extend C18	No specific data.
	SB-C18 Rapid Res	No specific data.
	Eclipse Plus C18	No specific data.
Skin contact	: ZORBAX Extend C18	No specific data.
	SB-C18 Rapid Res	No specific data.
	Eclipse Plus C18	No specific data.
Ingestion	: ZORBAX Extend C18	No specific data.
	SB-C18 Rapid Res	No specific data.
	Eclipse Plus C18	No specific data.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician	: ZORBAX Extend C18	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
	SB-C18 Rapid Res	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
	Eclipse Plus C18	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments	: ZORBAX Extend C18	No specific treatment.
	SB-C18 Rapid Res	No specific treatment.
	Eclipse Plus C18	No specific treatment.

SECTION 5: Firefighting measures**5.1 Extinguishing media**

Suitable extinguishing media	: ZORBAX Extend C18	Use dry chemical, CO ₂ , water spray (fog) or foam.
	SB-C18 Rapid Res	Use dry chemical, CO ₂ , water spray (fog) or foam.
	Eclipse Plus C18	Use dry chemical, CO ₂ , water spray (fog) or foam.
Unsuitable extinguishing media	: ZORBAX Extend C18	Do not use water jet.
	SB-C18 Rapid Res	Do not use water jet.
	Eclipse Plus C18	Do not use water jet.

SECTION 5: Firefighting measures**5.2 Special hazards arising from the substance or mixture**

Hazards from the substance or mixture	: ZORBAX 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.
	SB-C18 Rapid Res	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.
	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.
Hazardous combustion products	: ZORBAX Extend C18	Decomposition products may include the following materials: carbon dioxide carbon monoxide metal oxide/oxides Formaldehyde.
	SB-C18 Rapid Res	Decomposition products may include the following materials: carbon dioxide carbon monoxide metal oxide/oxides Formaldehyde.
	Eclipse Plus C18	Decomposition products may include the following materials: carbon dioxide carbon monoxide metal oxide/oxides Formaldehyde.

5.3 Advice for firefighters

Special precautions for fire-fighters	: ZORBAX 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.
	SB-C18 Rapid Res	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.
	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.
Special protective equipment for fire-fighters	: ZORBAX 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.
	SB-C18 Rapid Res	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.
	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)

SECTION 5: Firefighting measures

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	: ZORBAX 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 inadequate. Put on appropriate personal protective equipment.
	SB-C18 Rapid Res	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.
	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.
For emergency responders	: ZORBAX 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".
	SB-C18 Rapid Res	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".
	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".
6.2 Environmental precautions	: ZORBAX 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).
	SB-C18 Rapid Res	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).
	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).

6.3 Methods and material for containment and cleaning up

SECTION 6: Accidental release measures

Methods for cleaning up	: ZORBAX 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.
	SB-C18 Rapid Res	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.
	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.
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	: ZORBAX Extend C18	Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Do not breathe vapour or mist. Do not ingest. 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.
	SB-C18 Rapid Res	Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Do not breathe vapour or mist. Do not ingest. 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.
	Eclipse Plus C18	Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Do not breathe vapour or mist. Do not ingest. 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

Advice on general occupational hygiene		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.
	: ZORBAX 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, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
	SB-C18 Rapid Res	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.
	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.

7.2 Conditions for safe storage, including any incompatibilities

Storage	: ZORBAX 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. Store locked up. Eliminate all ignition sources. Separate from oxidising materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.
	SB-C18 Rapid Res	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. Store locked up. Eliminate all ignition sources. Separate from oxidising materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.
	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. Store locked up. Eliminate all ignition sources. Separate from oxidising materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

SECTION 7: Handling and storage

Seveso Directive - Reporting thresholds

Danger criteria

Category	Notification and MAPP threshold	Safety report threshold
ZORBAX Extend C18 H3 P5c	50 tonne 5000 tonne	200 tonne 50000 tonne
SB-C18 Rapid Res H3 P5c	50 tonne 5000 tonne	200 tonne 50000 tonne
Eclipse Plus C18 H3 P5c	50 tonne 5000 tonne	200 tonne 50000 tonne

7.3 Specific end use(s)

Recommendations	: ZORBAX Extend C18 SB-C18 Rapid Res Eclipse Plus C18	Industrial applications, Professional applications. Industrial applications, Professional applications. Industrial applications, Professional applications.
Industrial sector specific solutions	: ZORBAX Extend C18 SB-C18 Rapid Res Eclipse Plus C18	Not available. Not available. Not available.

SECTION 8: Exposure controls/personal protection

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

8.1 Control parameters

Occupational exposure limits

Product/ingredient name	Exposure limit values
ZORBAX Extend C18 Methanol	NAOSH (Ireland, 5/2021). Absorbed through skin. Notes: EU derived Occupational Exposure Limit Values OELV: 200 ppm 8 hours. OELV: 260 mg/m ³ 8 hours.
SB-C18 Rapid Res Methanol	NAOSH (Ireland, 5/2021). Absorbed through skin. Notes: EU derived Occupational Exposure Limit Values OELV: 200 ppm 8 hours. OELV: 260 mg/m ³ 8 hours.
Eclipse Plus C18 Methanol	NAOSH (Ireland, 5/2021). Absorbed through skin. Notes: EU derived Occupational Exposure Limit Values OELV: 200 ppm 8 hours. OELV: 260 mg/m ³ 8 hours.

Biological exposure indices

SECTION 8: Exposure controls/personal protection

Product/ingredient name	Exposure indices
ZORBAX Extend C18 Methanol	NAOSH (Ireland, 1/2011) BMGV: 15 mg/l, methanol [in urine]. Sampling time: end of shift - As soon as possible after exposure ceases.
SB-C18 Rapid Res Methanol	NAOSH (Ireland, 1/2011) BMGV: 15 mg/l, methanol [in urine]. Sampling time: end of shift - As soon as possible after exposure ceases.
Eclipse Plus C18 Methanol	NAOSH (Ireland, 1/2011) BMGV: 15 mg/l, methanol [in urine]. Sampling time: end of shift - As soon as possible after exposure ceases.

Recommended monitoring procedures

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

DNELs/DMELs

Product/ingredient name	Type	Exposure	Value	Population	Effects
ZORBAX Extend C18 Methanol	DNEL	Short term Oral	4 mg/kg bw/day	General population	Systemic
	DNEL	Long term Oral	4 mg/kg bw/day	General population	Systemic
	DNEL	Short term Dermal	4 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	4 mg/kg bw/day	General population	Systemic
	DNEL	Short term Dermal	20 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Dermal	20 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Inhalation	26 mg/m ³	General population	Local
	DNEL	Long term Inhalation	26 mg/m ³	General population	Local
	DNEL	Short term Inhalation	26 mg/m ³	General population	Systemic
	DNEL	Long term Inhalation	26 mg/m ³	General population	Systemic
	DNEL	Short term Inhalation	130 mg/m ³	Workers	Local
	DNEL	Long term Inhalation	130 mg/m ³	Workers	Local
	DNEL	Short term Inhalation	130 mg/m ³	Workers	Systemic
	DNEL	Long term Inhalation	130 mg/m ³	Workers	Systemic
SB-C18 Rapid Res					

SECTION 8: Exposure controls/personal protection

Methanol	DNEL	Short term Oral	4 mg/kg bw/day	General population	Systemic
	DNEL	Long term Oral	4 mg/kg bw/day	General population	Systemic
	DNEL	Short term Dermal	4 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	4 mg/kg bw/day	General population	Systemic
	DNEL	Short term Dermal	20 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Dermal	20 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Inhalation	26 mg/m ³	General population	Local
	DNEL	Long term Inhalation	26 mg/m ³	General population	Local
	DNEL	Short term Inhalation	26 mg/m ³	General population	Systemic
	DNEL	Long term Inhalation	26 mg/m ³	General population	Systemic
	DNEL	Short term Inhalation	130 mg/m ³	Workers	Local
	DNEL	Long term Inhalation	130 mg/m ³	Workers	Local
	DNEL	Short term Inhalation	130 mg/m ³	Workers	Systemic
	DNEL	Long term Inhalation	130 mg/m ³	Workers	Systemic
Eclipse Plus C18 Methanol	DNEL	Short term Oral	4 mg/kg bw/day	General population	Systemic
	DNEL	Long term Oral	4 mg/kg bw/day	General population	Systemic
	DNEL	Short term Dermal	4 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	4 mg/kg bw/day	General population	Systemic
	DNEL	Short term Dermal	20 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Dermal	20 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Inhalation	26 mg/m ³	General population	Local
	DNEL	Long term Inhalation	26 mg/m ³	General population	Local
	DNEL	Short term Inhalation	26 mg/m ³	General population	Systemic
	DNEL	Long term Inhalation	26 mg/m ³	General population	Systemic
	DNEL	Short term Inhalation	130 mg/m ³	Workers	Local
	DNEL	Long term Inhalation	130 mg/m ³	Workers	Local
	DNEL	Short term Inhalation	130 mg/m ³	Workers	Systemic
	DNEL	Long term Inhalation	130 mg/m ³	Workers	Systemic

PNECs

No PNECs available

8.2 Exposure controls

SECTION 8: Exposure controls/personal protection

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.

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: safety glasses with side-shields.

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.

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

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

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

SECTION 9: Physical and chemical properties

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

9.1 Information on basic physical and chemical properties**Appearance**

Physical state	ZORBAX Extend C18	Solid. (containing flammable liquid)
	SB-C18 Rapid Res	Solid. (containing flammable liquid)
	Eclipse Plus C18	Solid. (containing flammable liquid)
Colour	ZORBAX Extend C18	Not available.
	SB-C18 Rapid Res	Not available.
	Eclipse Plus C18	Not available.
Odour	ZORBAX Extend C18	Not available.
	SB-C18 Rapid Res	Not available.
	Eclipse Plus C18	Not available.
Odour threshold	ZORBAX Extend C18	Not available.
	SB-C18 Rapid Res	Not available.
	Eclipse Plus C18	Not available.
Melting point/freezing point	ZORBAX Extend C18	Not available.
	SB-C18 Rapid Res	Not available.
	Eclipse Plus C18	Not available.

SECTION 9: Physical and chemical properties

Initial boiling point and boiling range	: ZORBAX Extend C18	Not available.																																		
	SB-C18 Rapid Res	Not available.																																		
	Eclipse Plus C18	Not available.																																		
Flammability	: ZORBAX Extend C18	Not applicable.																																		
	SB-C18 Rapid Res	Not applicable.																																		
	Eclipse Plus C18	Not applicable.																																		
Upper/lower flammability or explosive limits	: ZORBAX Extend C18	Not available.																																		
	SB-C18 Rapid Res	Not available.																																		
	Eclipse Plus C18	Not available.																																		
Flash point	: ZORBAX Extend C18	Closed cup: -18 to 23°C [Based on solvent.]																																		
	SB-C18 Rapid Res	Closed cup: -18 to 23°C [Based on solvent.]																																		
	Eclipse Plus C18	Closed cup: -18 to 23°C [Based on solvent.]																																		
Auto-ignition temperature	: <table><tr><th>Ingredient name</th><th>°C</th><th>Method</th></tr><tr><td colspan="3">ZORBAX Extend C18</td></tr><tr><td>methanol</td><td>455</td><td>DIN 51794</td></tr><tr><td colspan="3">SB-C18 Rapid Res</td></tr><tr><td>methanol</td><td>455</td><td>DIN 51794</td></tr><tr><td colspan="3">Eclipse Plus C18</td></tr><tr><td>methanol</td><td>455</td><td>DIN 51794</td></tr></table>	Ingredient name	°C	Method	ZORBAX Extend C18			methanol	455	DIN 51794	SB-C18 Rapid Res			methanol	455	DIN 51794	Eclipse Plus C18			methanol	455	DIN 51794														
Ingredient name	°C	Method																																		
ZORBAX Extend C18																																				
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SB-C18 Rapid Res																																				
methanol	455	DIN 51794																																		
Eclipse Plus C18																																				
methanol	455	DIN 51794																																		
Decomposition temperature	: ZORBAX Extend C18	Not available.																																		
	SB-C18 Rapid Res	Not available.																																		
	Eclipse Plus C18	Not available.																																		
pH	: ZORBAX Extend C18	Not available.																																		
	SB-C18 Rapid Res	Not available.																																		
	Eclipse Plus C18	Not available.																																		
Viscosity	: ZORBAX Extend C18	Not available.																																		
	SB-C18 Rapid Res	Not available.																																		
	Eclipse Plus C18	Not available.																																		
Solubility(ies)	: <table><tr><th>Media</th><th>Result</th></tr><tr><td colspan="2">ZORBAX Extend C18</td></tr><tr><td>Mobile phase</td><td>Soluble</td></tr><tr><td>Stationary phase</td><td>Insoluble</td></tr><tr><td colspan="2">SB-C18 Rapid Res</td></tr><tr><td>Mobile phase</td><td>Soluble</td></tr><tr><td>Stationary phase</td><td>Insoluble</td></tr><tr><td colspan="2">Eclipse Plus C18</td></tr><tr><td>Mobile phase</td><td>Soluble</td></tr><tr><td>Stationary phase</td><td>Insoluble</td></tr></table>	Media	Result	ZORBAX Extend C18		Mobile phase	Soluble	Stationary phase	Insoluble	SB-C18 Rapid Res		Mobile phase	Soluble	Stationary phase	Insoluble	Eclipse Plus C18		Mobile phase	Soluble	Stationary phase	Insoluble															
Media	Result																																			
ZORBAX Extend C18																																				
Mobile phase	Soluble																																			
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SB-C18 Rapid Res																																				
Mobile phase	Soluble																																			
Stationary phase	Insoluble																																			
Eclipse Plus C18																																				
Mobile phase	Soluble																																			
Stationary phase	Insoluble																																			
Partition coefficient: n-octanol/water	: ZORBAX Extend C18	Not applicable.																																		
	SB-C18 Rapid Res	Not applicable.																																		
	Eclipse Plus C18	Not applicable.																																		
Vapour pressure	: <table><tr><th rowspan="2">Ingredient name</th><th colspan="3">Vapour Pressure at 20°C</th><th colspan="3">Vapour pressure at 50°C</th></tr><tr><th>mm Hg</th><th>kPa</th><th>Method</th><th>mm Hg</th><th>kPa</th><th>Method</th></tr><tr><td colspan="7">ZORBAX Extend C18</td></tr><tr><td>methanol</td><td>126.96329</td><td>16.9</td><td>-</td><td>-</td><td>-</td><td>-</td></tr><tr><td>water</td><td>17.5</td><td>2.3</td><td>-</td><td>92.258</td><td>12.3</td><td>-</td></tr></table>	Ingredient name	Vapour Pressure at 20°C			Vapour pressure at 50°C			mm Hg	kPa	Method	mm Hg	kPa	Method	ZORBAX Extend C18							methanol	126.96329	16.9	-	-	-	-	water	17.5	2.3	-	92.258	12.3	-	
Ingredient name	Vapour Pressure at 20°C			Vapour pressure at 50°C																																
	mm Hg	kPa	Method	mm Hg	kPa	Method																														
ZORBAX Extend C18																																				
methanol	126.96329	16.9	-	-	-	-																														
water	17.5	2.3	-	92.258	12.3	-																														

SECTION 9: Physical and chemical properties

	SB-C18 Rapid Res						
	methanol	126.96329	16.9	-	-	-	-
	water	17.5	2.3	-	92.258	12.3	-
	Eclipse Plus C18						
	methanol	126.96329	16.9	-	-	-	-
	water	17.5	2.3	-	92.258	12.3	-
Evaporation rate	: ZORBAX Extend C18	Not available.					
	SB-C18 Rapid Res	Not available.					
	Eclipse Plus C18	Not available.					
Relative density	: ZORBAX Extend C18	Not available.					
	SB-C18 Rapid Res	Not available.					
	Eclipse Plus C18	Not available.					
Vapour density	: ZORBAX Extend C18	Not available.					
	SB-C18 Rapid Res	Not available.					
	Eclipse Plus C18	Not available.					
Explosive properties	: ZORBAX Extend C18	Not available.					
	SB-C18 Rapid Res	Not available.					
	Eclipse Plus C18	Not available.					
Oxidising properties	: ZORBAX Extend C18	Not available.					
	SB-C18 Rapid Res	Not available.					
	Eclipse Plus C18	Not available.					
Particle characteristics							
Median particle size	: ZORBAX Extend C18	Not applicable.					
	SB-C18 Rapid Res	Not applicable.					
	Eclipse Plus C18	Not applicable.					

9.2 Other information

No additional information.

SECTION 10: Stability and reactivity

10.1 Reactivity	: ZORBAX Extend C18	No specific test data related to reactivity available for this product or its ingredients.
	SB-C18 Rapid Res	No specific test data related to reactivity available for this product or its ingredients.
	Eclipse Plus C18	No specific test data related to reactivity available for this product or its ingredients.
10.2 Chemical stability	: ZORBAX Extend C18	The product is stable.
	SB-C18 Rapid Res	The product is stable.
	Eclipse Plus C18	The product is stable.
10.3 Possibility of hazardous reactions	: ZORBAX Extend C18	Under normal conditions of storage and use, hazardous reactions will not occur.
	SB-C18 Rapid Res	Under normal conditions of storage and use, hazardous reactions will not occur.
	Eclipse Plus C18	Under normal conditions of storage and use, hazardous reactions will not occur.

SECTION 10: Stability and reactivity

10.4 Conditions to avoid	: ZORBAX 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.
	SB-C18 Rapid Res	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.
	Eclipse Plus 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.
10.5 Incompatible materials	: ZORBAX Extend C18	Reactive or incompatible with the following materials: oxidising materials
	SB-C18 Rapid Res	Reactive or incompatible with the following materials: oxidising materials
	Eclipse Plus C18	Reactive or incompatible with the following materials: oxidising materials
10.6 Hazardous decomposition products	: ZORBAX Extend C18	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	SB-C18 Rapid Res	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	Eclipse Plus C18	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
ZORBAX Extend C18 Methanol	LC50 Inhalation Vapour	Rat	189.95 mg/l	1 hours
	LC50 Inhalation Vapour	Rat	145000 ppm	1 hours
	LC50 Inhalation Vapour	Rat	83.84 mg/l	4 hours
	LC50 Inhalation Vapour	Rat	64000 ppm	4 hours
	LD50 Dermal	Rabbit	15800 mg/kg	-
	LD50 Oral	Rat	5600 mg/kg	-
SB-C18 Rapid Res Methanol	LC50 Inhalation Vapour	Rat	189.95 mg/l	1 hours
	LC50 Inhalation Vapour	Rat	145000 ppm	1 hours
	LC50 Inhalation Vapour	Rat	83.84 mg/l	4 hours
	LC50 Inhalation Vapour	Rat	64000 ppm	4 hours
	LD50 Dermal	Rabbit	15800 mg/kg	-
	LD50 Oral	Rat	5600 mg/kg	-
Eclipse Plus C18 Methanol	LC50 Inhalation Vapour	Rat	189.95 mg/l	1 hours
	LC50 Inhalation Vapour	Rat	145000 ppm	1 hours
	LC50 Inhalation Vapour	Rat	83.84 mg/l	4 hours
	LC50 Inhalation Vapour	Rat	64000 ppm	4 hours
	LD50 Dermal	Rabbit	15800 mg/kg	-
	LD50 Oral	Rat	5600 mg/kg	-

Acute toxicity estimates

SECTION 11: Toxicological information

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapours) (mg/l)	Inhalation (dusts and mists) (mg/l)
ZORBAX Extend C18 ZORBAX Extend C18 Methanol	366.3 100	1098.9 300	N/A N/A	11.0 3	N/A N/A
SB-C18 Rapid Res SB-C18 Rapid Res Methanol	408.3 100	1225.0 300	N/A N/A	12.2 3	N/A N/A
Eclipse Plus C18 Eclipse Plus C18 Methanol	366.3 100	1098.9 300	N/A N/A	11.0 3	N/A N/A

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
ZORBAX Extend C18 Methanol	Eyes - Moderate irritant	Rabbit	-	24 hours 100 mg	-
	Eyes - Moderate irritant	Rabbit	-	40 mg	-
	Skin - Moderate irritant	Rabbit	-	24 hours 20 mg	-
SB-C18 Rapid Res Methanol	Eyes - Moderate irritant	Rabbit	-	24 hours 100 mg	-
	Eyes - Moderate irritant	Rabbit	-	40 mg	-
	Skin - Moderate irritant	Rabbit	-	24 hours 20 mg	-
Eclipse Plus C18 Methanol	Eyes - Moderate irritant	Rabbit	-	24 hours 100 mg	-
	Eyes - Moderate irritant	Rabbit	-	40 mg	-
	Skin - Moderate irritant	Rabbit	-	24 hours 20 mg	-

Sensitiser

Conclusion/Summary : Not available.

Mutagenicity

Conclusion/Summary : Not available.

Carcinogenicity

Conclusion/Summary : Not available.

Reproductive toxicity

Conclusion/Summary : Not available.

Teratogenicity

Conclusion/Summary : Not available.

Specific target organ toxicity (single exposure)

SECTION 11: Toxicological information

Product/ingredient name	Category	Route of exposure	Target organs
ZORBAX Extend C18 Methanol	Category 1	-	central nervous system (CNS), optic nerve
SB-C18 Rapid Res Methanol	Category 1	-	central nervous system (CNS), optic nerve
Eclipse Plus C18 Methanol	Category 1	-	central nervous system (CNS), optic nerve

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on likely routes of exposure : ZORBAX Extend C18 Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.
 SB-C18 Rapid Res Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.
 Eclipse Plus C18 Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.

Potential acute health effects

Inhalation : ZORBAX Extend C18 Harmful if inhaled. Causes damage to organs following a single exposure if inhaled.
 SB-C18 Rapid Res Harmful if inhaled. Causes damage to organs following a single exposure if inhaled.
 Eclipse Plus C18 Harmful if inhaled. Causes damage to organs following a single exposure if inhaled.

Ingestion : ZORBAX Extend C18 Harmful if swallowed. Causes damage to organs following a single exposure if swallowed.
 SB-C18 Rapid Res Harmful if swallowed. Causes damage to organs following a single exposure if swallowed.
 Eclipse Plus C18 Harmful if swallowed. Causes damage to organs following a single exposure if swallowed.

Skin contact : ZORBAX Extend C18 Harmful in contact with skin. Causes damage to organs following a single exposure in contact with skin.
 SB-C18 Rapid Res Harmful in contact with skin. Causes damage to organs following a single exposure in contact with skin.
 Eclipse Plus C18 Harmful in contact with skin. Causes damage to organs following a single exposure in contact with skin.

Eye contact : ZORBAX Extend C18 No known significant effects or critical hazards.
 SB-C18 Rapid Res No known significant effects or critical hazards.
 Eclipse Plus C18 No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation : ZORBAX Extend C18 No specific data.
 SB-C18 Rapid Res No specific data.
 Eclipse Plus C18 No specific data.

Ingestion : ZORBAX Extend C18 No specific data.
 SB-C18 Rapid Res No specific data.
 Eclipse Plus C18 No specific data.

Skin contact : ZORBAX Extend C18 No specific data.
 SB-C18 Rapid Res No specific data.
 Eclipse Plus C18 No specific data.

Eye contact : ZORBAX Extend C18 No specific data.
 SB-C18 Rapid Res No specific data.
 Eclipse Plus C18 No specific data.

SECTION 11: Toxicological information

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

Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

Conclusion/Summary : Not available.

General	ZORBAX Extend C18	No known significant effects or critical hazards.
	SB-C18 Rapid Res	No known significant effects or critical hazards.
	Eclipse Plus C18	No known significant effects or critical hazards.
Carcinogenicity	ZORBAX Extend C18	No known significant effects or critical hazards.
	SB-C18 Rapid Res	No known significant effects or critical hazards.
	Eclipse Plus C18	No known significant effects or critical hazards.
Mutagenicity	ZORBAX Extend C18	No known significant effects or critical hazards.
	SB-C18 Rapid Res	No known significant effects or critical hazards.
	Eclipse Plus C18	No known significant effects or critical hazards.
Reproductive toxicity	ZORBAX Extend C18	No known significant effects or critical hazards.
	SB-C18 Rapid Res	No known significant effects or critical hazards.
	Eclipse Plus C18	No known significant effects or critical hazards.

11.2 Information on other hazards

11.2.1 Endocrine disrupting properties

Not available.

11.2.2 Other information

ZORBAX Extend C18	Adverse symptoms may include the following: blurred or double vision,. Eye contact can result in corneal damage or blindness. Repeated or prolonged exposure to the substance can produce liver damage. Narcotic effect. May cause nervous system disturbances.
SB-C18 Rapid Res	Adverse symptoms may include the following: blurred or double vision,. Eye contact can result in corneal damage or blindness. Repeated or prolonged exposure to the substance can produce liver damage. Narcotic effect. May cause nervous system disturbances.
Eclipse Plus C18	Adverse symptoms may include the following: blurred or double vision, . Eye contact can result in corneal damage or blindness. Repeated or prolonged exposure to the substance can produce liver damage. Narcotic effect. May cause nervous system disturbances.

SECTION 12: Ecological information

12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
ZORBAX Extend C18 Methanol	Acute EC50 2736 mg/l Marine water	Algae - <i>Ulva pertusa</i>	96 hours
	Acute LC50 2500000 µg/l Marine water	Crustaceans - <i>Crangon crangon</i> - Adult	48 hours
	Acute LC50 3289 mg/l Fresh water	Daphnia - <i>Daphnia magna</i> - Neonate	48 hours
	Acute LC50 290 mg/l Fresh water	Fish - <i>Danio rerio</i> - Egg	96 hours
	Chronic NOEC 9.96 mg/l Marine water	Algae - <i>Ulva pertusa</i>	96 hours
SB-C18 Rapid Res			

SECTION 12: Ecological information

Methanol	Acute EC50 2736 mg/l Marine water	Algae - <i>Ulva pertusa</i>	96 hours
	Acute LC50 2500000 µg/l Marine water	Crustaceans - <i>Crangon crangon</i> - Adult	48 hours
	Acute LC50 3289 mg/l Fresh water	Daphnia - <i>Daphnia magna</i> - Neonate	48 hours
	Acute LC50 290 mg/l Fresh water	Fish - <i>Danio rerio</i> - Egg	96 hours
Eclipse Plus C18	Chronic NOEC 9.96 mg/l Marine water	Algae - <i>Ulva pertusa</i>	96 hours
	Acute EC50 2736 mg/l Marine water	Algae - <i>Ulva pertusa</i>	96 hours
	Acute LC50 2500000 µg/l Marine water	Crustaceans - <i>Crangon crangon</i> - Adult	48 hours
	Acute LC50 3289 mg/l Fresh water	Daphnia - <i>Daphnia magna</i> - Neonate	48 hours
Methanol	Acute LC50 290 mg/l Fresh water	Fish - <i>Danio rerio</i> - Egg	96 hours
	Chronic NOEC 9.96 mg/l Marine water	Algae - <i>Ulva pertusa</i>	96 hours

12.2 Persistence and degradability

Not available.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
ZORBAX Extend C18 Methanol	-	-	Readily
SB-C18 Rapid Res Methanol	-	-	Readily
Eclipse Plus C18 Methanol	-	-	Readily

12.3 Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
ZORBAX Extend C18 Methanol	-0.77	<10	Low
SB-C18 Rapid Res Methanol	-0.77	<10	Low
Eclipse Plus C18 Methanol	-0.77	<10	Low

12.4 Mobility in soil

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

Mobility : Not available.

12.5 Results of PBT and vPvB assessment

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

12.6 Endocrine disrupting properties

Not available.

12.7 Other adverse effects

No known significant effects or critical hazards.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

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

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

Packaging

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

Special precautions : This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

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

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

Additional information

Remarks: Special provisions

ADR: 216

IATA: A46

IMDG: 216

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

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

SECTION 15: Regulatory information

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

EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV - List of substances subject to authorisation

Annex XIV

None of the components are listed.

Substances of very high concern

None of the components are listed.

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

Product / Ingredient name	Identifiers	Designation [Usage]
ZORBAX Extend C18 ZORBAX Extend C18 Methanol		3 69
SB-C18 Rapid Res SB-C18 Rapid Res Methanol		3 69
Eclipse Plus C18 Eclipse Plus C18 Methanol		3 69

Label	: ZORBAX Extend C18 SB-C18 Rapid Res Eclipse Plus C18	Not applicable. Not applicable. Not applicable.
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Other EU regulations

Ozone depleting substances (1005/2009/EU)

Not listed.

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

Not listed.

Persistent Organic Pollutants

Not listed.

Seveso Directive

This product is controlled under the Seveso Directive.

Danger criteria

Category
ZORBAX Extend C18 H3 P5c
SB-C18 Rapid Res H3 P5c
Eclipse Plus C18 H3 P5c

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol

Not listed.

SECTION 15: Regulatory information

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Inventory list

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

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

SECTION 16: Other information

Indicates information that has changed from previously issued version.

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

Classification	Justification
ZORBAX Extend C18 Flam. Liq. 2, H225 Acute Tox. 4, H302 Acute Tox. 4, H312 Acute Tox. 4, H332 STOT SE 1, H370	Expert judgment Calculation method Calculation method Calculation method Calculation method
SB-C18 Rapid Res Flam. Liq. 2, H225 Acute Tox. 4, H302 Acute Tox. 4, H312 Acute Tox. 4, H332 STOT SE 1, H370	Expert judgment Calculation method Calculation method Calculation method Calculation method

SECTION 16: Other information

Eclipse Plus C18 Flam. Liq. 2, H225 Acute Tox. 4, H302 Acute Tox. 4, H312 Acute Tox. 4, H332 STOT SE 1, H370	Expert judgment Calculation method Calculation method Calculation method Calculation method
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Full text of abbreviated H statements

ZORBAX Extend C18 H225 H301 H302 H311 H312 H331 H332 H370 SB-C18 Rapid Res H225 H301 H302 H311 H312 H331 H332 H370 Eclipse Plus C18 H225 H301 H302 H311 H312 H331 H332 H370	Highly flammable liquid and vapour. Toxic if swallowed. Harmful if swallowed. Toxic in contact with skin. Harmful in contact with skin. Toxic if inhaled. Harmful if inhaled. Causes damage to organs. Highly flammable liquid and vapour. Toxic if swallowed. Harmful if swallowed. Toxic in contact with skin. Harmful in contact with skin. Toxic if inhaled. Harmful if inhaled. Causes damage to organs. Highly flammable liquid and vapour. Toxic if swallowed. Harmful if swallowed. Toxic in contact with skin. Harmful in contact with skin. Toxic if inhaled. Harmful if inhaled. Causes damage to organs.
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Full text of classifications [CLP/GHS]

ZORBAX Extend C18 Acute Tox. 3 Acute Tox. 4 Flam. Liq. 2 STOT SE 1 SB-C18 Rapid Res Acute Tox. 3 Acute Tox. 4 Flam. Liq. 2 STOT SE 1 Eclipse Plus C18 Acute Tox. 3 Acute Tox. 4 Flam. Liq. 2 STOT SE 1	ACUTE TOXICITY - Category 3 ACUTE TOXICITY - Category 4 FLAMMABLE LIQUIDS - Category 2 SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 1 ACUTE TOXICITY - Category 3 ACUTE TOXICITY - Category 4 FLAMMABLE LIQUIDS - Category 2 SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 1 ACUTE TOXICITY - Category 3 ACUTE TOXICITY - Category 4 FLAMMABLE LIQUIDS - Category 2 SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 1
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Date of issue/ Date of revision : 21/02/2024

Date of previous issue : No previous validation

SECTION 16: Other information

Version : 1

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