# **SAFETY DATA SHEET**



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

### Section 1. Identification

This product is considered an article. This Safety Data Sheet is written based on the encapsulated substance or mixture in this article.

1.1 Product identifier

Product name : 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

Validation date : 6/1/2021

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

Material uses : Analytical chemistry.

HPLC column

Solvent volume: < 10 mL

ZORBAX Extend C18 3.5 um, 4.6 x 100 mm SB-C18 Rapid Res 3.5 um, 4.6 x 100 mm Eclipse Plus C18 3.5 um, 4.6 x 100 mm

1.3 Details of the supplier of the safety data sheet

**Supplier/Manufacturer**: Agilent Technologies, Inc.

5301 Stevens Creek Blvd Santa Clara, CA 95051, USA

800-227-9770

1.4 Emergency telephone number

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

### Section 2. Hazards identification

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

2.1 Classification of the substance or mixture

OSHA/HCS status : ZORBAX Extend C18 This material is considered hazardous by the OSHA

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

SB-C18 Rapid Res This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Eclipse Plus C18 This material is considered hazardous by the OSHA

Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture

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

H315 SKIN IRRITATION - Category 2 H319 EYE IRRITATION - Category 2A

H360 TOXIC TO REPRODUCTION - Category 1B

H370 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 1
H335 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract

irritation) - Category 3

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### Section 2. Hazards identification

H336 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) -

Category 3

SB-C18 Rapid Res

H225 FLAMMABLE LIQUIDS - Category 2
H302 ACUTE TOXICITY (oral) - Category 4
H312 ACUTE TOXICITY (dermal) - Category 4
H332 ACUTE TOXICITY (inhalation) - Category 4

H315 SKIN IRRITATION - Category 2
H319 EYE IRRITATION - Category 2A

H360 TOXIC TO REPRODUCTION - Category 1B

H370 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 1
H335 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract

irritation) - Category 3

H336 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) -

Category 3

**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

H315 SKIN IRRITATION - Category 2
H319 EYE IRRITATION - Category 2A

H360 TOXIC TO REPRODUCTION - Category 1B

H370 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 1
H335 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract

irritation) - Category 3

H336 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) -

Category 3

2.2 GHS label elements

Hazard pictograms : ZORBAX Extend C18

SB-C18 Rapid Res

Eclipse Plus C18

Signal word : ZORBAX Extend C18

SB-C18 Rapid Res Eclipse Plus C18

Hazard statements : ZORBAX Extend C18





Danger Danger Danger

H225 - Highly flammable liquid and vapor. H302 + H312 + H332 - Harmful if swallowed, in

contact with skin or if inhaled. H315 - Causes skin irritation.

H319 - Causes serious eye irritation. H335 - May cause respiratory irritation. H336 - May cause drowsiness or dizziness.

H360 - May damage fertility or the unborn child. H370 - Causes damage to organs. (central nervous

system (CNS), optic nerve)

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### Section 2. Hazards identification

SB-C18 Rapid Res H225 - Highly flammable liquid and vapor.

H302 + H312 + H332 - Harmful if swallowed, in

contact with skin or if inhaled. H315 - Causes skin irritation.

H319 - Causes serious eye irritation. H335 - May cause respiratory irritation. H336 - May cause drowsiness or dizziness.

H360 - May damage fertility or the unborn child.

H370 - Causes damage to organs. (central nervous

system (CNS), optic nerve)

Eclipse Plus C18 H225 - Highly flammable liquid and vapor.

H302 + H312 + H332 - Harmful if swallowed, in

contact with skin or if inhaled. H315 - Causes skin irritation.

H319 - Causes serious eye irritation.
H335 - May cause respiratory irritation.
H336 - May cause drowsiness or dizziness.
H360 - May damage fertility or the unborn child.
H370 - Causes damage to organs. (central nervous

system (CNS), optic nerve)

**Precautionary statements** 

Prevention : ZORBAX Extend C18 P201 - Obtain special instructions before use.

P280 - Wear protective gloves, protective clothing

and eye or face protection.

P210 - Keep away from heat, hot surfaces, sparks,

open flames and other ignition sources. No

smoking.

SB-C18 Rapid Res P201 - Obtain special instructions before use.

P280 - Wear protective gloves, protective clothing

and eye or face protection.

P210 - Keep away from heat, hot surfaces, sparks,

open flames and other ignition sources. No

smoking.

Eclipse Plus C18 P201 - Obtain special instructions before use.

P280 - Wear protective gloves, protective clothing

and eye or face protection.

P210 - Keep away from heat, hot surfaces, sparks,

open flames and other ignition sources. No

smoking.

Response : ZÓRBAX Extend C18 P308 + P311 - IF exposed: Call a POISON

CENTER or doctor.

SB-C18 Rapid Res P308 + P311 - IF exposed: Call a POISON

CENTER or doctor.

Eclipse Plus C18 P308 + P311 - IF exposed: Call a POISON

CENTER or doctor.

Storage: ZORBAX Extend C18 P403 + P235 - Store in a well-ventilated place.

Keep cool.

SB-C18 Rapid Res P403 + P235 - Store in a well-ventilated place.

Keep cool.

Eclipse Plus C18 P403 + P235 - Store in a well-ventilated place.

Keep cool.

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.

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### Section 2. Hazards identification

Supplemental label : ZORBA: elements : SB-C18

: ZORBAX Extend C18 None known. SB-C18 Rapid Res None known. Eclipse Plus C18 None known.

2.3 Other hazards

Hazards not otherwise classified

: 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.

Substance/mixture

: ZORBAX Extend C18 SB-C18 Rapid Res Eclipse Plus C18

Mixture (encapsulated in article)
Mixture (encapsulated in article)
Mixture (encapsulated in article)

Ingredient name	%	CAS number
ZORBAX Extend C18 Methanol	≥25 - <30	67-56-1
SB-C18 Rapid Res Methanol	≥10 - ≤25	67-56-1
Eclipse Plus C18 Methanol	≥25 - <30	67-56-1

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.

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

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

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

### Section 4. First aid measures

#### 4.1 Description of necessary first aid measures

Eye contact : 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

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Inhalation : ZORBAX Extend C18

medical attention. If necessary, call a poison center or physician.

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.

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.

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.

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.

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

SB-C18 Rapid Res

Eclipse Plus C18

Skin contact : ZORBAX Extend C18

SB-C18 Rapid Res

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Eclipse Plus C18

Ingestion : ZORBAX Extend C18

SB-C18 Rapid Res

Eclipse Plus C18

necessary, call a poison center or physician. Wash clothing 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.

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

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

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

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

Potential acute health effects

Eye contact : ZORBAX Extend C18 Causes serious eye irritation.

SB-C18 Rapid Res Causes serious eye irritation. Eclipse Plus C18 Causes serious eye irritation.

Inhalation : ZORBAX Extend C18 Harmful if inhaled. Causes damage to organs

following a single exposure if inhaled. Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness. May cause

respiratory irritation.

SB-C18 Rapid Res Harmful if inhaled. Causes damage to organs

following a single exposure if inhaled. Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness. May cause

respiratory irritation.

Eclipse Plus C18 Harmful if inhaled. Causes damage to organs

following a single exposure if inhaled. Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness. May cause

respiratory irritation.

Skin contact : ZORBAX Extend C18 Harmful in contact with skin. Causes damage to

organs following a single exposure in contact with

skin. Causes skin irritation.

SB-C18 Rapid Res Harmful in contact with skin. Causes damage to

organs following a single exposure in contact with

skin. Causes skin irritation.

Eclipse Plus C18 Harmful in contact with skin. Causes damage to

organs following a single exposure in contact with

skin. Causes skin irritation.

Ingestion : ZORBAX Extend C18 Harmful if swallowed. Causes damage to organs

SB-C18 Rapid Res

Eclipse Plus C18

following a single exposure if swallowed. Can cause central nervous system (CNS) depression.

Harmful if swallowed. Causes damage to organs following a single exposure if swallowed. Can cause central nervous system (CNS) depression.

Harmful if swallowed. Causes damage to organs following a single exposure if swallowed. Can

cause central nervous system (CNS) depression.

Over-exposure signs/symptoms

**Eye contact**: ZORBAX Extend C18 Adverse symptoms may include the following:

pain or irritation

watering redness

SB-C18 Rapid Res Adverse symptoms may include the following:

pain or irritation

watering redness

Eclipse Plus C18 Adverse symptoms may include the following:

pain or irritation

watering redness

Inhalation : ZORBAX Extend C18 Adverse symptoms may include the following:

respiratory tract irritation

coughing

nausea or vomiting

headache

drowsiness/fatigue dizziness/vertigo

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unconsciousness

reduced fetal weight increase in fetal deaths

skeletal malformations

SB-C18 Rapid Res Adverse symptoms may include the following:

respiratory tract irritation

coughing

nausea or vomiting

headache

drowsiness/fatigue dizziness/vertigo unconsciousness reduced fetal weight increase in fetal deaths skeletal malformations

Eclipse Plus C18 Adverse symptoms may include the following:

respiratory tract irritation

coughing

nausea or vomiting

headache

drowsiness/fatigue dizziness/vertigo unconsciousness reduced fetal weight increase in fetal deaths skeletal malformations

Skin contact : ZORBAX Extend C18 Adverse symptoms may include the following:

irritation redness

reduced fetal weight increase in fetal deaths skeletal malformations

SB-C18 Rapid Res Adverse symptoms may include the following:

irritation redness

reduced fetal weight increase in fetal deaths skeletal malformations

Eclipse Plus C18 Adverse symptoms may include the following:

irritation redness

reduced fetal weight increase in fetal deaths skeletal malformations

**Ingestion**: ZORBAX Extend C18 Adverse symptoms may include the following:

reduced fetal weight increase in fetal deaths skeletal malformations

SB-C18 Rapid Res Adverse symptoms may include the following:

reduced fetal weight increase in fetal deaths skeletal malformations

Eclipse Plus C18 Adverse symptoms may include the following:

reduced fetal weight increase in fetal deaths skeletal malformations

4.3 Indication of immediate medical attention and special treatment needed, if necessary

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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

SB-C18 Rapid Res Eclipse Plus C18

SB-C18 Rapid Res

No specific treatment. No specific treatment. No specific treatment.

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.

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 water

before removing it, or wear gloves.

See toxicological information (Section 11)

# Section 5. Fire-fighting measures

#### 5.1 Extinguishing media

Suitable extinguishing media

: ZORBAX Extend C18 SB-C18 Rapid Res Eclipse Plus C18 Use dry chemical,  $CO_2$ , water spray (fog) or foam. Use dry chemical,  $CO_2$ , water spray (fog) or foam. Use dry chemical,  $CO_2$ , water spray (fog) or foam.

Unsuitable extinguishing media

ZORBAX Extend C18 SB-C18 Rapid Res Eclipse Plus C18 Do not use water jet. Do not use water jet. Do not use water jet.

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

Specific hazards arising from the chemical

: ZORBAX Extend C18

Highly flammable liquid and vapor. 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 vapor. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the

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# Section 5. Fire-fighting measures

container may burst, with the risk of a subsequent

explosion.

Eclipse Plus C18 Highly flammable liquid and vapor. 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 thermal** decomposition products : ZORBAX Extend C18

Decomposition products may include the following

materials:

carbon dioxide carbon monoxide metal oxide/oxides Formaldehyde.

Decomposition products may include the following SB-C18 Rapid Res

> 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 protective actions** 

for fire-fighters

: ZORBAX Extend C18

SB-C18 Rapid Res

Eclipse Plus C18

**Special protective** equipment for fire-fighters

: ZORBAX Extend C18

SB-C18 Rapid Res

Eclipse Plus C18

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus

(SCBA) with a full face-piece operated in positive

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.

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.

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pressure mode.

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus

(SCBA) with a full face-piece operated in positive

pressure mode.

Fire-fighters should wear appropriate protective

equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive

pressure mode.

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### Section 6. Accidental release measures

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

For non-emergency

: ZORBAX Extend C18

personnel

SB-C18 Rapid Res

Eclipse Plus C18

For emergency responders: ZORBAX Extend C18

SB-C18 Rapid Res

Eclipse Plus C18

**6.2 Environmental** precautions

: ZORBAX Extend C18

SB-C18 Rapid Res

Eclipse Plus C18

unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment. No action shall be taken involving any personal risk or without suitable training. Evacuate

No action shall be taken involving any personal

risk or without suitable training. Evacuate

surrounding areas. Keep unnecessary and

surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment. No action shall be taken involving any personal

risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel". If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel". If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers,

waterways, soil or air).

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers,

waterways, soil or air).

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Inform the relevant authorities if the product has caused environmental pollution (sewers,

waterways, soil or air).

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### Section 6. Accidental release measures

#### 6.3 Methods and materials for containment and cleaning up

Methods for cleaning up : ZORBAX Extend C18

SB-C18 Rapid Res

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 watersoluble. 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. 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 watersoluble. 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. 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 watersoluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

# Section 7. Handling and storage

7.1 Precautions for safe handling

Protective measures : ZORBAX Extend C18

SB-C18 Rapid Res

Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor 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 explosionproof 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.

Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor 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

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# Section 7. Handling and storage

Eclipse Plus C18

Advice on general occupational hygiene

: ZORBAX Extend C18

SB-C18 Rapid Res

Eclipse Plus C18

7.2 Conditions for safe storage, including any incompatibilities

: ZORBAX Extend C18

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.

Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor 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 explosionproof 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.

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. 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. 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.

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 oxidizing materials. Keep container tightly closed and sealed until ready for

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# Section 7. Handling and storage

SB-C18 Rapid Res

Eclipse Plus C18

use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use. 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 oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use. 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 oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

#### 7.3 Specific end use(s)

Recommendations : ZORBAX Extend C18

SB-C18 Rapid Res

Eclipse Plus C18

Eclipse Plus C18

Industrial sector specific solutions

: ZORBAX Extend C18 SB-C18 Rapid Res

Industrial applications, Professional applications. Industrial applications, Professional applications. Industrial applications, Professional applications.

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

Ingredient name	Exposure limits
ZORBAX Extend C18	
Methanol	ACGIH TLV (United States, 3/2020).
	Absorbed through skin.
	TWA: 200 ppm 8 hours.
	TWA: 262 mg/m <sup>3</sup> 8 hours.
	STEL: 250 ppm 15 minutes.
	STEL: 328 mg/m³ 15 minutes.
	OSHA PEL 1989 (United States, 3/1989).
	Absorbed through skin.

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# Section 8. Exposure controls/personal protection

TWA: 200 ppm 8 hours. TWA: 260 mg/m<sup>3</sup> 8 hours. STEL: 250 ppm 15 minutes. STEL: 325 mg/m<sup>3</sup> 15 minutes.

NIOSH REL (United States, 10/2016).

#### Absorbed through skin.

TWA: 200 ppm 10 hours. TWA: 260 mg/m<sup>3</sup> 10 hours. STEL: 250 ppm 15 minutes. STEL: 325 mg/m<sup>3</sup> 15 minutes. OSHA PEL (United States, 5/2018).

TWA: 200 ppm 8 hours. TWA: 260 mg/m<sup>3</sup> 8 hours.

#### SB-C18 Rapid Res

Methanol

#### ACGIH TLV (United States, 3/2020).

#### Absorbed through skin.

TWA: 200 ppm 8 hours. TWA: 262 mg/m<sup>3</sup> 8 hours. STEL: 250 ppm 15 minutes. STEL: 328 mg/m<sup>3</sup> 15 minutes.

#### OSHA PEL 1989 (United States, 3/1989).

#### Absorbed through skin.

TWA: 200 ppm 8 hours. TWA: 260 mg/m<sup>3</sup> 8 hours. STEL: 250 ppm 15 minutes. STEL: 325 mg/m<sup>3</sup> 15 minutes.

#### NIOSH REL (United States, 10/2016).

#### Absorbed through skin.

TWA: 200 ppm 10 hours. TWA: 260 mg/m<sup>3</sup> 10 hours. STEL: 250 ppm 15 minutes. STEL: 325 mg/m<sup>3</sup> 15 minutes. OSHA PEL (United States, 5/2018).

TWA: 200 ppm 8 hours. TWA: 260 mg/m<sup>3</sup> 8 hours.

#### **Eclipse Plus C18**

Methanol

# ACGIH TLV (United States, 3/2020).

### Absorbed through skin.

TWA: 200 ppm 8 hours. TWA: 262 mg/m<sup>3</sup> 8 hours. STEL: 250 ppm 15 minutes. STEL: 328 mg/m<sup>3</sup> 15 minutes.

### OSHA PEL 1989 (United States, 3/1989).

#### Absorbed through skin.

TWA: 200 ppm 8 hours. TWA: 260 mg/m<sup>3</sup> 8 hours. STEL: 250 ppm 15 minutes. STEL: 325 mg/m<sup>3</sup> 15 minutes.

#### NIOSH REL (United States, 10/2016).

#### Absorbed through skin.

TWA: 200 ppm 10 hours. TWA: 260 mg/m<sup>3</sup> 10 hours. STEL: 250 ppm 15 minutes. STEL: 325 mg/m<sup>3</sup> 15 minutes. OSHA PEL (United States, 5/2018).

TWA: 200 ppm 8 hours. TWA: 260 mg/m<sup>3</sup> 8 hours.

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# Section 8. Exposure controls/personal protection

#### **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.

**Environmental exposure** controls

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

#### **Individual protection measures**

**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.

Other skin protection

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

**Respiratory protection** 

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

# Section 9. Physical and chemical properties

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

#### **Appearance**

Odor

Physical state : ZORBAX Extend C18 Solid. (containing flammable liquid)

SB-C18 Rapid Res Solid. (containing flammable liquid)
Eclipse Plus C18 Solid. (containing flammable liquid)

Color : ZORBAX Extend C18 Not available.

SB-C18 Rapid Res
Eclipse Plus C18
Not available.

ZORBAX Extend C18
SB-C18 Rapid Res
Eclipse Plus C18
Not available.
Not available.
Not available.
Not available.

Odor threshold : ZORBAX Extend C18 Not available. SB-C18 Rapid Res Not available.

SB-C18 Rapid Res Not available. Eclipse Plus C18 Not available.

pH :

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# Section 9. Physical and chemical properties

ZORBAX Extend C18
SB-C18 Rapid Res
Eclipse Plus C18
Not available.

ZORBAX Extend C18
SB-C18 Rapid Res
SB-C18 Rapid Res
Eclipse Plus C18
Not available.

Not available.

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 (-0.4 to 73.4°F)
SB-C18 Rapid Res Closed cup: -18 to 23°C (-0.4 to 73.4°F)

Eclipse Plus C18 Closed cup: -18 to 23°C (-0.4 to 73.4°F)

**Evaporation rate** : ZORBAX Extend C18 Not available. SB-C18 Rapid Res Not available.

Eclipse Plus C18 Not available.

Flammability (solid, gas) : ZORBAX Extend C18 Contains: Flammable liquid

SB-C18 Rapid Res Contains: Flammable liquid Eclipse Plus C18 Contains: Flammable liquid

Lower and upper explosive

(flammable) limits

Vapor density

octanol/water

**Decomposition temperature** 

**Melting point** 

**Boiling point** 

: ZORBAX Extend C18 Not available. SB-C18 Rapid Res Not available. Eclipse Plus C18 Not available.

Vapor pressure: ZORBAX Extend C18Not available.SB-C18 Rapid ResNot available.

Eclipse Plus C18

ZORBAX Extend C18

SB-C18 Rapid Res
Eclipse Plus C18

Not available.
Not available.
Not available.

Relative density : ZORBAX Extend C18 Not available.

SB-C18 Rapid Res Not available. Eclipse Plus C18 Not available.

Solubility : ZORBAX Extend C18 Mobile phase: Soluble

SB-C18 Rapid Res
SB-C18 Rapid Res
Mobile phase: Soluble
Stationary phase: Insoluble

Eclipse Plus C18 Mobile phase: Soluble Stationary phase: Insoluble

Not available.

Partition coefficient: n- : ZORBAX Extend C18

SB-C18 Rapid Res Not available. Eclipse Plus C18 Not available.

Auto-ignition temperature : ZORBAX Extend C18 Not available.

SB-C18 Rapid Res Not available. Eclipse Plus C18 Not available. 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.

SB-C18 Rapid Res Not available.
Eclipse Plus C18 Not available.
Not available.

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### 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.

10.4 Conditions to avoid : ZORBAX Extend C18 Avoid all possible sources of ignition (spark or

flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources

of ignition.

SB-C18 Rapid Res Avoid all possible sources of ignition (spark or

flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources

of ignition.

Eclipse Plus C18 Avoid all possible sources of ignition (spark or

flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources

of ignition.

10.5 Incompatible materials : ZORBAX Extend C18 Reactive or incompatible with the following

materials:

oxidizing materials

SB-C18 Rapid Res Reactive or incompatible with the following

materials:

oxidizing materials

Eclipse Plus C18 Reactive or incompatible with the following

materials:

oxidizing 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.

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### 11.1 Information on toxicological effects

### **Acute toxicity**

Product/ingredient name	Result	Species	Dose	Exposure
ZORBAX Extend C18				
Methanol	LC50 Inhalation Vapor	Rat	189.95 mg/l	1 hours
	LC50 Inhalation Vapor	Rat	145000 ppm	1 hours
	LC50 Inhalation Vapor	Rat	83.84 mg/l	4 hours
	LC50 Inhalation Vapor	Rat	64000 ppm	4 hours
	LD50 Dermal	Rabbit	15800 mg/kg	-
	LD50 Oral	Rat	5600 mg/kg	-
SB-C18 Rapid Res				
Methanol	LC50 Inhalation Vapor	Rat	189.95 mg/l	1 hours
	LC50 Inhalation Vapor	Rat	145000 ppm	1 hours
	LC50 Inhalation Vapor	Rat	83.84 mg/l	4 hours
	LC50 Inhalation Vapor	Rat	64000 ppm	4 hours
	LD50 Dermal	Rabbit	15800 mg/kg	-
	LD50 Oral	Rat	5600 mg/kg	-
Eclipse Plus C18				
Methanol	LC50 Inhalation Vapor	Rat	189.95 mg/l	1 hours
	LC50 Inhalation Vapor	Rat	145000 ppm	1 hours
	LC50 Inhalation Vapor	Rat	83.84 mg/l	4 hours
	LC50 Inhalation Vapor	Rat	64000 ppm	4 hours
	LD50 Dermal	Rabbit	15800 mg/kg	-
	LD50 Oral	Rat	5600 mg/kg	-

#### **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	-

### **Sensitization**

Not available.

### **Mutagenicity**

Conclusion/Summary

: Not available.

**Carcinogenicity** 

Conclusion/Summary

**Reproductive toxicity** 

: Not available.

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Conclusion/Summary : Not available.

**Teratogenicity** 

Conclusion/Summary: Not available.

Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
ZORBAX Extend C18 Methanol	Category 1	-	central nervous
	Category 3		system (CNS), optic nerve Respiratory tract
	Category 3		irritation Narcotic effects
SB-C18 Rapid Res Methanol	Category 1	-	central nervous system (CNS),
	Category 3		optic nerve Respiratory tract irritation
	Category 3		Narcotic effects
Eclipse Plus C18 Methanol	Category 1	-	central nervous system (CNS), optic nerve
	Category 3		Respiratory tract irritation
	Category 3		Narcotic effects

Specific target organ toxicity (repeated exposure)

Not available.

#### **Aspiration hazard**

Not available.

Information on the likely

routes of exposure

: ZORBAX Extend C18 Ro

Routes of entry anticipated: Oral, Dermal,

Inhalation.

SB-C18 Rapid Res Routes of entry anticipated: Oral, Dermal,

Inhalation.

Eclipse Plus C18 Routes of entry anticipated: Oral, Dermal,

Inhalation.

Potential acute health effects

Eye contact : ZORBAX Extend C18 Causes serious eye irritation.

SB-C18 Rapid Res

Causes serious eye irritation.

Eclipse Plus C18

Causes serious eye irritation.

Inhalation : ZORBAX Extend C18 Harmful if inhaled. Causes damage to organs

following a single exposure if inhaled. Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness. May cause

respiratory irritation.

SB-C18 Rapid Res Harmful if inhaled. Causes damage to organs

following a single exposure if inhaled. Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness. May cause

respiratory irritation.

Eclipse Plus C18 Harmful if inhaled. Causes damage to organs

following a single exposure if inhaled. Can cause

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central nervous system (CNS) depression. May

cause drowsiness or dizziness. May cause

respiratory irritation.

Skin contact : ZORBAX Extend C18 Harmful in contact with skin. Causes damage to

organs following a single exposure in contact with

skin. Causes skin irritation.

SB-C18 Rapid Res Harmful in contact with skin. Causes damage to

organs following a single exposure in contact with

skin. Causes skin irritation.

Eclipse Plus C18 Harmful in contact with skin. Causes damage to

organs following a single exposure in contact with

skin. Causes skin irritation.

Ingestion : ZORBAX Extend C18 Harmful if swallowed. Causes damage to organs

following a single exposure if swallowed. Can cause central nervous system (CNS) depression.

SB-C18 Rapid Res Harmful if swallowed. Causes damage to organs

following a single exposure if swallowed. Can cause central nervous system (CNS) depression.

Eclipse Plus C18 Harmful if swallowed. Causes damage to organs

following a single exposure if swallowed. Can cause central nervous system (CNS) depression.

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

Eye contact : ZORBAX Extend C18 Adverse symptoms may include the following:

pain or irritation

watering redness

SB-C18 Rapid Res Adverse symptoms may include the following:

pain or irritation

watering

redness

Eclipse Plus C18 Adverse symptoms may include the following:

pain or irritation

watering redness

Inhalation : ZORBAX Extend C18 Adverse symptoms may include the following:

respiratory tract irritation

coughing

nausea or vomiting

headache

drowsiness/fatigue dizziness/vertigo unconsciousness reduced fetal weight increase in fetal deaths skeletal malformations

SB-C18 Rapid Res Adverse symptoms may include the following:

respiratory tract irritation

coughing

nausea or vomiting

headache

drowsiness/fatigue dizziness/vertigo unconsciousness reduced fetal weight increase in fetal deaths skeletal malformations

Eclipse Plus C18 Adverse symptoms may include the following:

respiratory tract irritation

coughing

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nausea or vomiting

headache

drowsiness/fatigue dizziness/vertigo unconsciousness reduced fetal weight increase in fetal deaths skeletal malformations

Skin contact : ZORBAX Extend C18 Adverse symptoms may include the following:

irritation

redness

reduced fetal weight increase in fetal deaths skeletal malformations

SB-C18 Rapid Res Adverse symptoms may include the following:

irritation

redness

reduced fetal weight increase in fetal deaths skeletal malformations

Eclipse Plus C18 Adverse symptoms may include the following:

irritation redness

reduced fetal weight increase in fetal deaths skeletal malformations

Ingestion : ZORBAX Extend C18 Adverse symptoms may include the following:

reduced fetal weight increase in fetal deaths skeletal malformations

SB-C18 Rapid Res Adverse symptoms may include the following:

reduced fetal weight increase in fetal deaths skeletal malformations

Eclipse Plus C18 Adverse symptoms may include the following:

reduced fetal weight increase in fetal deaths skeletal malformations

#### Delayed and immediate effects and also chronic effects from short and long term exposure

**Short term exposure** 

Potential immediate : Not available.

effects

Potential delayed effects : Not available.

**Long term exposure** 

Potential immediate : Not available.

effects

Potential delayed effects : Not available.

Potential chronic health effects

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.

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Mutagenicity : ZORBAX Extend C18

SB-C18 Rapid Res Eclipse Plus C18

ZORBAX Extend C18

SB-C18 Rapid Res Eclipse Plus C18 No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.

May damage fertility or the unborn child. May damage fertility or the unborn child. May damage fertility or the unborn child.

#### **Numerical measures of toxicity**

#### **Acute toxicity estimates**

Reproductive toxicity

Product/ingredient name	Oral (mg/ kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/ I)
ZORBAX Extend C18					
ZORBAX Extend C18	366.3	1098.9	N/A	11	N/A
Methanol	100	300	N/A	3	N/A
SB-C18 Rapid Res					
SB-C18 Rapid Res	408.3	1225	N/A	12.2	N/A
Methanol	100	300	N/A	3	N/A
Eclipse Plus C18					
Eclipse Plus C18	366.3	1098.9	N/A	11	N/A
Methanol	100	300	N/A	3	N/A

Other information : PORBAX 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.

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.

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.

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

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		1	
	Acute LC50 2500000 µg/l Marine water	Crustaceans - Crangon crangon -	48 hours
		Adult	
	Acute LC50 3289 mg/l Fresh water	Daphnia - Daphnia magna -	48 hours
		Neonate	
	Acute LC50 290 mg/l Fresh water	Fish - Danio rerio - Egg	96 hours
	Chronic NOEC 9.96 mg/l Marine water	Algae - Ulva pertusa	96 hours
Eclipse Plus C18			
Methanol	Acute EC50 2736 mg/l Marine water	Algae - Ulva pertusa	96 hours
	Acute LC50 2500000 µg/l Marine water	Crustaceans - Crangon crangon -	48 hours
		Adult	
	Acute LC50 3289 mg/l Fresh water	Daphnia - Daphnia magna -	48 hours
		Neonate	
	Acute LC50 290 mg/l Fresh water	Fish - Danio rerio - Egg	96 hours
	Chronic NOEC 9.96 mg/l Marine water	Algae - Ulva pertusa	96 hours

#### 12.2 Persistence and degradability

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	LogPow	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 (Koc)

: Not available.

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

# Section 13. Disposal considerations

#### 13.1 Waste treatment methods

**Disposal methods** 

: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been

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# Section 13. Disposal considerations

cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

#### United States - RCRA Toxic hazardous waste "U" List

Ingredient	CAS#	Status	Reference number
ZORBAX Extend C18 Methanol (I); Methyl alcohol (I)	67-56-1	Listed	U154
SB-C18 Rapid Res Methanol (I); Methyl alcohol (I)	67-56-1	Listed	U154
Eclipse Plus C18 Methanol (I); Methyl alcohol (I)	67-56-1	Listed	U154

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

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

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

# **Section 14. Transport information**

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

DOT / TDG / Mexico / IMDG / : Not regulated.

**IATA** 

**Additional information** 

Remarks: Special provisions

DOT: 47 TDG: 56 MX: 216 IATA: A46 IMDG: 216

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.

Transport in bulk according : Not available.

to IMO instruments

# Section 15. Regulatory information

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

U.S. Federal regulations : TSCA 8(a) CDR Exempt/Partial exemption: Not determined

Clean Air Act Section 112 : Listed

(b) Hazardous Air Pollutants (HAPs)

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# Section 15. Regulatory information

**Clean Air Act Section 602** 

Class I Substances

: Not listed

Clean Air Act Section 602

: Not listed

Class II Substances

**DEA List I Chemicals** 

: Not listed

(Precursor Chemicals)

**DEA List II Chemicals** (Essential Chemicals) : Not listed

**SARA 302/304** 

**Composition/information on ingredients** 

No products were found.

: Not applicable. SARA 304 RQ

**SARA 311/312** 

FLAMMABLE LIQUIDS - Category 2 : ZORBAX Extend C18 Classification

SB-C18 Rapid Res

Eclipse Plus C18

ACUTE TOXICITY (oral) - Category 4 ACUTE TOXICITY (dermal) - Category 4 ACUTE TOXICITY (inhalation) - Category 4

SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A

TOXIC TO REPRODUCTION - Category 1B

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE)

(Respiratory tract irritation) - Category 3

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE)

(Narcotic effects) - Category 3 FLAMMABLE LIQUIDS - Category 2 ACUTE TOXICITY (oral) - Category 4

ACUTE TOXICITY (dermal) - Category 4 ACUTE TOXICITY (inhalation) - Category 4 SKIN IRRITATION - Category 2

EYE IRRITATION - Category 2A

TOXIC TO REPRODUCTION - Category 1B

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE)

(Respiratory tract irritation) - Category 3

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE)

(Narcotic effects) - Category 3 FLAMMABLE LIQUIDS - Category 2 ACUTE TOXICITY (oral) - Category 4

ACUTE TOXICITY (dermal) - Category 4 ACUTE TOXICITY (inhalation) - Category 4 SKIN IRRITATION - Category 2

EYE IRRITATION - Category 2A

TOXIC TO REPRODUCTION - Category 1B

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE)

(Respiratory tract irritation) - Category 3

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE)

(Narcotic effects) - Category 3

#### Composition/information on ingredients

Name	%	Classification
Organosilane bonded silica gel Methanol  SB-C18 Rapid Res	≥50 - ≤75 ≥25 - <30	COMBUSTIBLE DUSTS FLAMMABLE LIQUIDS - Category 2 ACUTE TOXICITY (oral) - Category 3 ACUTE TOXICITY (dermal) - Category 3 ACUTE TOXICITY (inhalation) - Category 3 SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A TOXIC TO REPRODUCTION - Category 1B SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 1 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3

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# **Section 15. Regulatory information**

Organosilane bonded silica gel	≥50 - ≤75	COMBUSTIBLE DUSTS
Methanol	≥10 - ≤25	FLAMMABLE LIQUIDS - Category 2 ACUTE TOXICITY (oral) - Category 3 ACUTE TOXICITY (dermal) - Category 3 ACUTE TOXICITY (inhalation) - Category 3 SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A TOXIC TO REPRODUCTION - Category 1B SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 1 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3
Eclipse Plus C18		
Organosilane bonded silica gel	≥50 - ≤75	COMBUSTIBLE DUSTS
Methanol	≥25 - <30	FLAMMABLE LIQUIDS - Category 2 ACUTE TOXICITY (oral) - Category 3 ACUTE TOXICITY (dermal) - Category 3 ACUTE TOXICITY (inhalation) - Category 3 SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A TOXIC TO REPRODUCTION - Category 1B SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 1 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3

#### **SARA 313**

	Product name	CAS number	%
Form R - Reporting	ZORBAX Extend C18		
requirements	Methanol	67-56-1	≥25 - <30
	SB-C18 Rapid Res		
	Methanol	67-56-1	≥10 - ≤25
	Eclipse Plus C18		
	Methanol	67-56-1	≥25 - <30
Supplier notification	ZORBAX Extend C18		
	Methanol	67-56-1	≥25 - <30
	SB-C18 Rapid Res		
	Methanol	67-56-1	≥10 - ≤25
	Eclipse Plus C18		
	Methanol	67-56-1	≥25 - <30

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

### **State regulations**

Massachusetts : The following components are listed: METHANOL; METHYL ALCOHOL

New York : The following components are listed: Methanol

New Jersey : The following components are listed: METHYL ALCOHOL; METHANOL

Pennsylvania : The following components are listed: METHANOL

California Prop. 65

▲ WARNING: This product can expose you to Methanol, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

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# **Section 15. Regulatory information**

Ingredient name	No significant risk level	Maximum acceptable dosage level
ZORBAX Extend C18 Methanol	-	Yes.
SB-C18 Rapid Res Methanol	-	Yes.
Eclipse Plus C18 Methanol	-	Yes.

### **International regulations**

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

**Montreal Protocol** 

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

**UNECE Aarhus Protocol on POPs and Heavy Metals** 

Not listed.

**Inventory list** 

Australia : All components are listed or exempted.

Canada : Not determined.

China : All components are listed or exempted.

Europe : All components are listed or exempted.

Japan : Japan inventory (ENCS): All components are listed or exempted.

Japan inventory (ISHL): All components are listed or exempted.

New Zealand : All components are listed or exempted.

Philippines : Not determined.

Republic of Korea : Not determined.

**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.

### Section 16. Other information

#### **History**

Date of issue : 06/01/2021

Date of previous issue : 09/26/2018

Version : 4

**Date of issue :** 06/01/2021 **28/30** 

### Section 16. Other information

**Key to abbreviations** 

: ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL = International Convention for the Prevention of Pollution From Ships, 1973

as modified by the Protocol of 1978. ("Marpol" = marine pollution)

N/A = Not available UN = United Nations

#### Procedure used to derive the classification

Classification	Justification
ZORBAX Extend C18	
FLAMMABLE LIQUIDS - Category 2	On basis of test data
ACUTE TOXICITY (oral) - Category 4	Calculation method
ACUTE TOXICITY (dermal) - Category 4	Calculation method
ACUTE TOXICITY (inhalation) - Category 4	Calculation method
SKIN IRRITATION - Category 2	Calculation method
EYE IRRITATION - Category 2A	Calculation method
TOXIC TO REPRODUCTION - Category 1B	Calculation method
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 1	Calculation method
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract	Calculation method
irritation) - Category 3	
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) -	Calculation method
Category 3	
SB-C18 Rapid Res	
FLAMMABLE LIQUIDS - Category 2	On basis of test data
ACUTE TOXICITY (oral) - Category 4	Calculation method
ACUTE TOXICITY (dermal) - Category 4	Calculation method
ACUTE TOXICITY (inhalation) - Category 4	Calculation method
SKIN IRRITATION - Category 2	Calculation method
EYE IRRITATION - Category 2A	Calculation method
TOXIC TO REPRODUCTION - Category 1B	Calculation method
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 1	Calculation method
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract	Calculation method
irritation) - Category 3	
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) -	Calculation method
Category 3	
Eclipse Plus C18	
FLAMMABLE LIQUIDS - Category 2	On basis of test data
ACUTE TOXICITY (oral) - Category 4	Calculation method
ACUTE TOXICITY (dermal) - Category 4	Calculation method
ACUTE TOXICITY (inhalation) - Category 4	Calculation method
SKIN IRRITATION - Category 2	Calculation method
EYE IRRITATION - Category 2A	Calculation method
TOXIC TO REPRODUCTION - Category 1B	Calculation method
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 1	Calculation method
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract	Calculation method
irritation) - Category 3	Coloulation mathed
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) -	Calculation method
Category 3	

**▼** Indicates information that has changed from previously issued version.

#### **Notice to reader**

Date of issue: 06/01/2021 29/30 Rapid Resolution pH Method Development Kit, Part Number 5190-1436

### Section 16. Other information

Disclaimer: The information contained in this document is based on Agilent's state of knowledge at the time of preparation. No warranty as to its accurateness, completeness or suitability for a particular purpose is expressed or implied.

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