

SAFETY DATA SHEET

Rapid Resolution Selectivity Method Development Kit, Part Number 5190-1435

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 Selectivity Method Development Kit, Part Number 5190-1435		
Part no. (chemical kit)	: 5190-1435		
Part no.	: Eclipse Plus C18		959961-902
	: Eclipse Plus Phenyl-Hexyl		959961-912
	: ZORBAX Bonus-RP		864668-901

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

Identified uses	: Analytical chemistry. HPLC column Solvent volume: < 10 ml		
	: Eclipse Plus C18		3.5 um, 4.6 x 100 mm
	: Eclipse Plus Phenyl-Hexyl		4.6 x 100 mm, 3.5 um
	: ZORBAX Bonus-RP		4.6 x 100 mm, 3.5 um
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	: Eclipse Plus C18	Mixture (encapsulated in article)
	: Eclipse Plus Phenyl-Hexyl	Mixture (encapsulated in article)
	: ZORBAX Bonus-RP	Mixture (encapsulated in article)

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

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

Eclipse Plus Phenyl-

SECTION 2: Hazards identification

Hexyl

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

ZORBAX Bonus-RP

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

Eclipse Plus C18	The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.
Eclipse Plus Phenyl-Hexyl	The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.
ZORBAX Bonus-RP	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

: Eclipse Plus C18



Eclipse Plus Phenyl-Hexyl



ZORBAX Bonus-RP



Signal word

: Eclipse Plus C18	Danger
Eclipse Plus Phenyl-Hexyl	Danger
ZORBAX Bonus-RP	Danger

Hazard statements

: 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.
Eclipse Plus Phenyl-Hexyl	H225 - Highly flammable liquid and vapour. H319 - Causes serious eye irritation.
ZORBAX Bonus-RP	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

: Eclipse Plus 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. P270 - Do not eat, drink or smoke when using this product.
Eclipse Plus Phenyl-Hexyl	P280 - Wear eye or face protection. P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
ZORBAX Bonus-RP	P280 - Wear protective gloves and protective clothing.

SECTION 2: Hazards identification

		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	: Eclipse Plus C18 Eclipse Plus Phenyl-Hexyl ZORBAX Bonus-RP	P308 + P311 - IF exposed or concerned: Call a POISON CENTER or doctor. P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313 - If eye irritation persists: Get medical advice or attention. P308 + P311 - IF exposed or concerned: Call a POISON CENTER or doctor.
Storage	: Eclipse Plus C18 Eclipse Plus Phenyl-Hexyl ZORBAX Bonus-RP	Not applicable. Not applicable.
Disposal	: Eclipse Plus C18 Eclipse Plus Phenyl-Hexyl ZORBAX Bonus-RP	Not applicable. P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations. P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations. P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
Hazardous ingredients	: Eclipse Plus C18 ZORBAX Bonus-RP	methanol methanol
Supplemental label elements	: Eclipse Plus C18 Eclipse Plus Phenyl-Hexyl ZORBAX Bonus-RP	Not applicable. Not applicable. Not applicable.
Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles	: Eclipse Plus C18 Eclipse Plus Phenyl-Hexyl ZORBAX Bonus-RP	Not applicable. Not applicable. Not applicable.
<u>Special packaging requirements</u>		
Tactile warning of danger	: Eclipse Plus C18 Eclipse Plus Phenyl-Hexyl ZORBAX Bonus-RP	Not applicable. Not applicable. Not applicable.
2.3 Other hazards		
Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII	: Eclipse Plus C18 Eclipse Plus Phenyl-Hexyl ZORBAX Bonus-RP	This mixture does not contain any substances that are assessed to be a PBT or a vPvB. This mixture does not contain any substances that are assessed to be a PBT or a vPvB. 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	: Eclipse Plus C18 Eclipse Plus Phenyl-Hexyl ZORBAX Bonus-RP	None known. None known. 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 : Eclipse Plus C18 Mixture (encapsulated in article)
 Eclipse Plus Phenyl-Hexyl Mixture (encapsulated in article)
 ZORBAX Bonus-RP Mixture (encapsulated in article)

Product/ingredient name	Identifiers	%	Classification	Specific Conc. Limits, M-factors and ATEs	Type
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)	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 Phenyl-Hexyl acetonitrile	EC: 200-835-2 CAS: 75-05-8 Index: 608-001-00-3	≥10 - <25	Flam. Liq. 2, H225 Acute Tox. 4, H302 Acute Tox. 4, H312 Acute Tox. 4, H332 Eye Irrit. 2, H319	ATE [Oral] = 500 mg/kg ATE [Dermal] = 1100 mg/kg ATE [Inhalation (vapours)] = 11 mg/l	[1] [2]
ZORBAX Bonus-RP 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) 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

SECTION 3: Composition/information on ingredients

Eclipse Plus C18	[1] Substance classified with a health or environmental hazard [2] Substance with a workplace exposure limit
Eclipse Plus Phenyl-Hexyl	[1] Substance classified with a health or environmental hazard [2] Substance with a workplace exposure limit
ZORBAX Bonus-RP	[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	: 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.
	Eclipse Plus Phenyl-Hexyl	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.
	ZORBAX Bonus-RP	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	: 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.
	Eclipse Plus Phenyl-Hexyl	Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
	ZORBAX Bonus-RP	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.

SECTION 4: First aid measures

Skin contact	: Eclipse Plus 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.
	Eclipse Plus Phenyl-Hexyl	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.
	ZORBAX Bonus-RP	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.
Ingestion	: 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.
	Eclipse Plus Phenyl-Hexyl	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 adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
	ZORBAX Bonus-RP	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	: 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.
	Eclipse Plus Phenyl-Hexyl	No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.
	ZORBAX Bonus-RP	No action shall be taken involving any personal risk or

SECTION 4: First aid measures

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.

4.2 Most important symptoms and effects, both acute and delayed

Potential acute health effects

Eye contact	: Eclipse Plus C18 Eclipse Plus Phenyl-Hexyl ZORBAX Bonus-RP	No known significant effects or critical hazards. Causes serious eye irritation.
Inhalation	: Eclipse Plus C18 Eclipse Plus Phenyl-Hexyl ZORBAX Bonus-RP	No known significant effects or critical hazards. Harmful if inhaled. Causes damage to organs following a single exposure if inhaled. No known significant effects or critical hazards. Harmful if inhaled. Causes damage to organs following a single exposure if inhaled.
Skin contact	: Eclipse Plus C18 Eclipse Plus Phenyl-Hexyl ZORBAX Bonus-RP	Harmful in contact with skin. Causes damage to organs following a single exposure in contact with skin. No known significant effects or critical hazards. Harmful in contact with skin. Causes damage to organs following a single exposure in contact with skin.
Ingestion	: Eclipse Plus C18 Eclipse Plus Phenyl-Hexyl ZORBAX Bonus-RP	Harmful if swallowed. Causes damage to organs following a single exposure if swallowed. No known significant effects or critical hazards. Harmful if swallowed. Causes damage to organs following a single exposure if swallowed.

Over-exposure signs/symptoms

Eye contact	: Eclipse Plus C18 Eclipse Plus Phenyl-Hexyl ZORBAX Bonus-RP	No specific data. Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	: Eclipse Plus C18 Eclipse Plus Phenyl-Hexyl ZORBAX Bonus-RP	No specific data. No specific data. No specific data.
Skin contact	: Eclipse Plus C18 Eclipse Plus Phenyl-Hexyl ZORBAX Bonus-RP	No specific data. No specific data. No specific data.
Ingestion	: Eclipse Plus C18 Eclipse Plus Phenyl-Hexyl ZORBAX Bonus-RP	No specific data. No specific data. No specific data.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician	: Eclipse Plus C18 Eclipse Plus Phenyl-Hexyl ZORBAX Bonus-RP	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
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SECTION 4: First aid measures

Specific treatments	: Eclipse Plus C18	No specific treatment.
	Eclipse Plus Phenyl-Hexyl	No specific treatment.
	ZORBAX Bonus-RP	No specific treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media	: Eclipse Plus C18	Use dry chemical, CO ₂ , water spray (fog) or foam.
	Eclipse Plus Phenyl-Hexyl	Use dry chemical, CO ₂ , water spray (fog) or foam.
	ZORBAX Bonus-RP	Use dry chemical, CO ₂ , water spray (fog) or foam.
Unsuitable extinguishing media	: Eclipse Plus C18	Do not use water jet.
	Eclipse Plus Phenyl-Hexyl	Do not use water jet.
	ZORBAX Bonus-RP	Do not use water jet.

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture	: 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.
	Eclipse Plus Phenyl-Hexyl	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.
	ZORBAX Bonus-RP	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	: Eclipse Plus C18	Decomposition products may include the following materials: carbon dioxide carbon monoxide metal oxide/oxides Formaldehyde.
	Eclipse Plus Phenyl-Hexyl	Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides metal oxide/oxides cyanides
	ZORBAX Bonus-RP	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	: 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.
	Eclipse Plus Phenyl-Hexyl	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.
	ZORBAX Bonus-RP	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.

SECTION 5: Firefighting measures

Special protective equipment for fire-fighters

: Eclipse Plus C18

Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

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 Phenyl-Hexyl

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.

ZORBAX Bonus-RP

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

: 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.

Eclipse Plus Phenyl-Hexyl

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.

ZORBAX Bonus-RP

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

: 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".

Eclipse Plus Phenyl-Hexyl

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".

ZORBAX Bonus-RP

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".

SECTION 6: Accidental release measures

6.2 Environmental precautions

: 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).
Eclipse Plus Phenyl-Hexyl	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).
ZORBAX Bonus-RP	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

6.3 Methods and material for containment and cleaning up

Methods for cleaning up

: 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.
Eclipse Plus Phenyl-Hexyl	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.
ZORBAX Bonus-RP	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

: 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. 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 Phenyl-Hexyl	Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapour or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a

SECTION 7: Handling and storage

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.

ZORBAX Bonus-RP

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.

Advice on general occupational hygiene

: 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.

Eclipse Plus Phenyl-Hexyl

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.

ZORBAX Bonus-RP

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

: 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.

Eclipse Plus Phenyl-Hexyl

Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Eliminate all ignition sources. Separate from oxidising materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept

SECTION 7: Handling and storage

ZORBAX Bonus-RP

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.

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.

Seveso Directive - Reporting thresholds

Danger criteria

Category	Notification and MAPP threshold	Safety report threshold
Eclipse Plus C18 H3 P5c	50 tonne 5000 tonne	200 tonne 50000 tonne
Eclipse Plus Phenyl-Hexyl P5c	5000 tonne	50000 tonne
ZORBAX Bonus-RP H3 P5c	50 tonne 5000 tonne	200 tonne 50000 tonne

7.3 Specific end use(s)

Recommendations	: Eclipse Plus C18 Eclipse Plus Phenyl-Hexyl ZORBAX Bonus-RP	Industrial applications, Professional applications. Industrial applications, Professional applications. Industrial applications, Professional applications.
Industrial sector specific solutions	: Eclipse Plus C18 Eclipse Plus Phenyl-Hexyl ZORBAX Bonus-RP	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
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.
Eclipse Plus Phenyl-Hexyl acetonitrile	NAOSH (Ireland, 5/2021). Absorbed through skin. Notes: EU derived Occupational Exposure Limit Values OELV: 40 ppm 8 hours.

SECTION 8: Exposure controls/personal protection

<p>ZORBAX Bonus-RP Methanol</p>	<p>OELV: 70 mg/m³ 8 hours.</p> <p>NAOSH (Ireland, 5/2021). Absorbed through skin. Notes: EU derived Occupational Exposure Limit Values OELV: 200 ppm 8 hours. OELV: 260 mg/m³ 8 hours.</p>
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Biological exposure indices

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

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
<p>Eclipse Plus C18 Methanol</p>	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

SECTION 8: Exposure controls/personal protection

Eclipse Plus Phenyl-Hexyl acetonitrile	DNEL	Long term Oral	0.4 mg/kg bw/day	General population	Systemic
	DNEL	Short term Oral	0.6 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	1.2 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	2.4 mg/m ³	General population	Systemic
ZORBAX Bonus-RP 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

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

SECTION 8: Exposure controls/personal 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	: Eclipse Plus C18 Eclipse Plus Phenyl-Hexyl ZORBAX Bonus-RP	Solid. (containing flammable liquid) Solid.(containing flammable liquid) Solid.(containing flammable liquid)
Colour	: Eclipse Plus C18 Eclipse Plus Phenyl-Hexyl ZORBAX Bonus-RP	Not available. Not available. Not available.
Odour	: Eclipse Plus C18 Eclipse Plus Phenyl-Hexyl ZORBAX Bonus-RP	Not available. Not available. Not available.
Odour threshold	: Eclipse Plus C18 Eclipse Plus Phenyl-Hexyl ZORBAX Bonus-RP	Not available. Not available. Not available.
Melting point/freezing point	: Eclipse Plus C18 Eclipse Plus Phenyl-Hexyl ZORBAX Bonus-RP	Not available. Not available. Not available.
Initial boiling point and boiling range	: Eclipse Plus C18 Eclipse Plus Phenyl-Hexyl ZORBAX Bonus-RP	Not available. Not available. Not available.
Flammability	: Eclipse Plus C18 Eclipse Plus Phenyl-Hexyl ZORBAX Bonus-RP	Not applicable. Not applicable. Not applicable.
Upper/lower flammability or explosive limits	: Eclipse Plus C18 Eclipse Plus Phenyl-Hexyl ZORBAX Bonus-RP	Not available. Not available. Not available.

SECTION 9: Physical and chemical properties

Flash point : Eclipse Plus C18 Closed cup: -18 to 23°C [Based on solvent.]
 Eclipse Plus Phenyl-Hexyl Closed cup: -18 to 23°C [Based on solvent.]
 ZORBAX Bonus-RP Closed cup: -18 to 23°C [Based on solvent.]

Auto-ignition temperature :

Ingredient name	°C	Method
Eclipse Plus C18		
methanol	455	DIN 51794
Eclipse Plus Phenyl-Hexyl		
acetonitrile	524	-
ZORBAX Bonus-RP		
methanol	455	DIN 51794

Decomposition temperature : Eclipse Plus C18 Not available.
 Eclipse Plus Phenyl-Hexyl Not available.
 ZORBAX Bonus-RP Not available.

pH : Eclipse Plus C18 Not available.
 Eclipse Plus Phenyl-Hexyl Not available.
 ZORBAX Bonus-RP Not available.

Viscosity : Eclipse Plus C18 Not available.
 Eclipse Plus Phenyl-Hexyl Not available.
 ZORBAX Bonus-RP Not available.

Solubility(ies) :

Media	Result
Eclipse Plus C18	
Mobile phase	Soluble
Stationary phase	Insoluble
Eclipse Plus Phenyl-Hexyl	
Mobile phase	Soluble
Stationary phase	Insoluble
ZORBAX Bonus-RP	
Mobile phase	Soluble
Stationary phase	Insoluble

Partition coefficient: n-octanol/water : Eclipse Plus C18 Not applicable.
 Eclipse Plus Phenyl-Hexyl Not applicable.
 ZORBAX Bonus-RP Not applicable.

Vapour pressure :

Ingredient name	Vapour Pressure at 20°C			Vapour pressure at 50°C		
	mm Hg	kPa	Method	mm Hg	kPa	Method
Eclipse Plus C18						
methanol	126.96329	16.9	-	-	-	-
water	17.5	2.3	-	92.258	12.3	-
Eclipse Plus Phenyl-Hexyl						
acetonitrile	70.88853	9.5	-	-	-	-
water	17.5	2.3	-	92.258	12.3	-

SECTION 9: Physical and chemical properties

	ZORBAX Bonus-RP						
	methanol	126.96329	16.9	-	-	-	-
	water	17.5	2.3	-	92.258	12.3	-

Evaporation rate	:	Eclipse Plus C18	Not available.
		Eclipse Plus Phenyl-Hexyl	Not available.
		ZORBAX Bonus-RP	Not available.
Relative density	:	Eclipse Plus C18	Not available.
		Eclipse Plus Phenyl-Hexyl	Not available.
		ZORBAX Bonus-RP	Not available.
Vapour density	:	Eclipse Plus C18	Not available.
		Eclipse Plus Phenyl-Hexyl	Not available.
		ZORBAX Bonus-RP	Not available.
Explosive properties	:	Eclipse Plus C18	Not available.
		Eclipse Plus Phenyl-Hexyl	Not available.
		ZORBAX Bonus-RP	Not available.
Oxidising properties	:	Eclipse Plus C18	Not available.
		Eclipse Plus Phenyl-Hexyl	Not available.
		ZORBAX Bonus-RP	Not available.
Particle characteristics			
Median particle size	:	Eclipse Plus C18	Not applicable.
		Eclipse Plus Phenyl-Hexyl	Not applicable.
		ZORBAX Bonus-RP	Not applicable.

9.2 Other information

No additional information.

SECTION 10: Stability and reactivity

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

SECTION 10: Stability and reactivity

10.4 Conditions to avoid	: Eclipse Plus C18 Eclipse Plus Phenyl-Hexyl ZORBAX Bonus-RP	Avoid all possible sources of ignition (spark or flame). Do not pressurise, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Avoid all possible sources of ignition (spark or flame). Do not pressurise, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Avoid all possible sources of ignition (spark or flame). Do not pressurise, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.
10.5 Incompatible materials	: Eclipse Plus C18 Eclipse Plus Phenyl-Hexyl ZORBAX Bonus-RP	Reactive or incompatible with the following materials: oxidising materials Reactive or incompatible with the following materials: oxidising materials Reactive or incompatible with the following materials: oxidising materials
10.6 Hazardous decomposition products	: Eclipse Plus C18 Eclipse Plus Phenyl-Hexyl ZORBAX Bonus-RP	Under normal conditions of storage and use, hazardous decomposition products should not be produced. Under normal conditions of storage and use, hazardous decomposition products should not be produced. Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
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	-
Eclipse Plus Phenyl-Hexyl acetonitrile	LC50 Inhalation Vapour	Rat	17100 ppm	4 hours
	LD50 Oral	Rat	2460 mg/kg	-
ZORBAX Bonus-RP 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

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapours) (mg/l)	Inhalation (dusts and mists) (mg/l)

SECTION 11: Toxicological information

Eclipse Plus C18 Eclipse Plus C18 Methanol	366.3 100	1098.9 300	N/A N/A	11.0 3	N/A N/A
Eclipse Plus Phenyl-Hexyl Eclipse Plus Phenyl-Hexyl acetonitrile	2475.2 500	5445.5 1100	N/A N/A	54.5 11	N/A N/A
ZORBAX Bonus-RP ZORBAX Bonus-RP Methanol	434.8 100	1304.3 300	N/A N/A	13.0 3	N/A N/A

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
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	-
Eclipse Plus Phenyl-Hexyl acetonitrile	Eyes - Moderate irritant	Rabbit	-	24 hours 100 uL	-
ZORBAX Bonus-RP 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)

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

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

SECTION 11: Toxicological information

Not available.

Information on likely routes of exposure : Eclipse Plus C18 Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.
 Eclipse Plus Phenyl-Hexyl Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.
 ZORBAX Bonus-RP Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.

Potential acute health effects

Inhalation : Eclipse Plus C18 Harmful if inhaled. Causes damage to organs following a single exposure if inhaled.
 Eclipse Plus Phenyl-Hexyl No known significant effects or critical hazards.
 ZORBAX Bonus-RP Harmful if inhaled. Causes damage to organs following a single exposure if inhaled.

Ingestion : Eclipse Plus C18 Harmful if swallowed. Causes damage to organs following a single exposure if swallowed.
 Eclipse Plus Phenyl-Hexyl No known significant effects or critical hazards.
 ZORBAX Bonus-RP Harmful if swallowed. Causes damage to organs following a single exposure if swallowed.

Skin contact : Eclipse Plus C18 Harmful in contact with skin. Causes damage to organs following a single exposure in contact with skin.
 Eclipse Plus Phenyl-Hexyl No known significant effects or critical hazards.
 ZORBAX Bonus-RP Harmful in contact with skin. Causes damage to organs following a single exposure in contact with skin.

Eye contact : Eclipse Plus C18 No known significant effects or critical hazards.
 Eclipse Plus Phenyl-Hexyl Causes serious eye irritation.
 ZORBAX Bonus-RP No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation : Eclipse Plus C18 No specific data.
 Eclipse Plus Phenyl-Hexyl No specific data.
 ZORBAX Bonus-RP No specific data.

Ingestion : Eclipse Plus C18 No specific data.
 Eclipse Plus Phenyl-Hexyl No specific data.
 ZORBAX Bonus-RP No specific data.

Skin contact : Eclipse Plus C18 No specific data.
 Eclipse Plus Phenyl-Hexyl No specific data.
 ZORBAX Bonus-RP No specific data.

Eye contact : Eclipse Plus C18 No specific data.
 Eclipse Plus Phenyl-Hexyl Adverse symptoms may include the following:
 pain or irritation
 watering
 redness
 ZORBAX Bonus-RP No specific data.

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.

SECTION 11: Toxicological information

Potential delayed effects : Not available.

Potential chronic health effects

Conclusion/Summary : Not available.

General	: Eclipse Plus C18	No known significant effects or critical hazards.
	Eclipse Plus Phenyl-Hexyl	No known significant effects or critical hazards.
	ZORBAX Bonus-RP	No known significant effects or critical hazards.
Carcinogenicity	: Eclipse Plus C18	No known significant effects or critical hazards.
	Eclipse Plus Phenyl-Hexyl	No known significant effects or critical hazards.
	ZORBAX Bonus-RP	No known significant effects or critical hazards.
Mutagenicity	: Eclipse Plus C18	No known significant effects or critical hazards.
	Eclipse Plus Phenyl-Hexyl	No known significant effects or critical hazards.
	ZORBAX Bonus-RP	No known significant effects or critical hazards.
Reproductive toxicity	: Eclipse Plus C18	No known significant effects or critical hazards.
	Eclipse Plus Phenyl-Hexyl	No known significant effects or critical hazards.
	ZORBAX Bonus-RP	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

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.

ZORBAX Bonus-RP

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
Eclipse Plus 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
Eclipse Plus Phenyl-Hexyl acetonitrile	Acute IC50 3685000 µg/l Fresh water	Aquatic plants - <i>Lemna minor</i>	96 hours
	Acute LC50 3600000 µg/l Fresh water	Daphnia - <i>Daphnia magna</i>	48 hours
	Acute LC50 1000000 µg/l Fresh water	Fish - <i>Pimephales promelas</i>	96 hours
	Chronic NOEC 1000000 µg/l Fresh water	Aquatic plants - <i>Lemna minor</i>	96 hours
	Chronic NOEC 160000 µg/l Fresh water	Daphnia - <i>Daphnia magna</i>	21 days
ZORBAX Bonus-RP 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

SECTION 12: Ecological information

	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

12.2 Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
Eclipse Plus Phenyl-Hexyl acetonitrile	OECD 310 Ready Biodegradability - CO2 in Sealed Vessels (Headspace Test)	70 % - Readily - 21 days	-	Activated sludge

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Eclipse Plus C18 Methanol	-	-	Readily
Eclipse Plus Phenyl-Hexyl acetonitrile	-	-	Readily
ZORBAX Bonus-RP Methanol	-	-	Readily

12.3 Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
Eclipse Plus C18 Methanol	-0.77	<10	Low
Eclipse Plus Phenyl-Hexyl acetonitrile	-0.34	3	Low
ZORBAX Bonus-RP 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 spilled 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]
Eclipse Plus C18 Eclipse Plus C18 Methanol		3 69
Eclipse Plus Phenyl-Hexyl Eclipse Plus Phenyl-Hexyl		3
ZORBAX Bonus-RP ZORBAX Bonus-RP Methanol		3 69

Label : Eclipse Plus C18 Not applicable.
 Eclipse Plus Phenyl-Hexyl Not applicable.
 ZORBAX Bonus-RP Not applicable.

Other EU regulations

Industrial emissions (integrated pollution prevention and control) - Air : Listed

Industrial emissions (integrated pollution prevention and control) - Water : Listed

Ozone depleting substances (1005/2009/EU)

Not listed.

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

Not listed.

Persistent Organic Pollutants

Not listed.

Seveso Directive

This product is controlled under the Seveso Directive.

Danger criteria

Category
Eclipse Plus C18 H3 P5c
Eclipse Plus Phenyl-Hexyl P5c
ZORBAX Bonus-RP H3 P5c

International regulations

SECTION 15: Regulatory information

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	: 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]

SECTION 16: Other information

Classification	Justification
<p>Eclipse Plus C18 Flam. Liq. 2, H225 Acute Tox. 4, H302 Acute Tox. 4, H312 Acute Tox. 4, H332 STOT SE 1, H370</p> <p>Eclipse Plus Phenyl-Hexyl Flam. Liq. 2, H225 Eye Irrit. 2, H319</p> <p>ZORBAX Bonus-RP Flam. Liq. 2, H225 Acute Tox. 4, H302 Acute Tox. 4, H312 Acute Tox. 4, H332 STOT SE 1, H370</p>	<p>Expert judgment Calculation method Calculation method Calculation method Calculation method</p> <p>Expert judgment Calculation method</p> <p>Expert judgment Calculation method Calculation method Calculation method Calculation method</p>

Full text of abbreviated H statements

<p>Eclipse Plus C18 H225 H301 H302 H311 H312 H331 H332 H370</p> <p>Eclipse Plus Phenyl-Hexyl H225 H302 H312 H319 H332</p> <p>ZORBAX Bonus-RP H225 H301 H302 H311 H312 H331 H332 H370</p>	<p>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.</p> <p>Highly flammable liquid and vapour. Harmful if swallowed. Harmful in contact with skin. Causes serious eye irritation. Harmful if inhaled.</p> <p>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.</p>
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Full text of classifications [CLP/GHS]

<p>Eclipse Plus C18 Acute Tox. 3 Acute Tox. 4 Flam. Liq. 2 STOT SE 1</p> <p>Eclipse Plus Phenyl-Hexyl Acute Tox. 4 Eye Irrit. 2 Flam. Liq. 2</p> <p>ZORBAX Bonus-RP Acute Tox. 3 Acute Tox. 4</p>	<p>ACUTE TOXICITY - Category 3 ACUTE TOXICITY - Category 4 FLAMMABLE LIQUIDS - Category 2 SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 1</p> <p>ACUTE TOXICITY - Category 4 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2 FLAMMABLE LIQUIDS - Category 2</p> <p>ACUTE TOXICITY - Category 3 ACUTE TOXICITY - Category 4</p>
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SECTION 16: Other information

Flam. Liq. 2 STOT SE 1	FLAMMABLE LIQUIDS - Category 2 SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 1
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Version : 1

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