

Kit Name: 2-AB Labeling Kit

Kit PN: GKK-404

This product is a multi-level kit, composed of the following modules and individual chemical components:

## **Kit Components**

Kit Component Part Number	Kit Component Name	Qty
WS0024	Vial A (2-AB Dye), 5 mg	2 Vials
WS0025	Vial B (DMSO), 350 μl	2 Vials
WS0026	Vial C (Acetic Acid), 300 μl	2 Vials
WS0027	Vial D (Reductant), 6 mg	2 Vials

SDSs for each component follow this cover sheet.

### **Transportation Information for the Kit:**

#### **Proper Shipping Names:**

рот	IATA/ICAO	China	
UN3316	UN3316	UN3316	
Chemical Kits	Chemical Kit	Chemical Kit	





#### 1 Identification

· Product identifier

· Trade name: Vial A (2-AB Dye)

· Article number: WS0024

• CAS Number: 88-68-6 • EC number: 201-851-2

- Relevant identified uses of the substance or mixture and uses advised against
- · Application of the substance / the mixture Reagents and Standards for Analytical Chemical Laboratory Use
- · Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

Agilent Technologies Australia Pty Ltd 679 Springvale Road

Mulgrave

Victoria 3170, Australia

- Email: pdl-msds\_author@agilent.com • Phone number: 1800 802 402
- · Emergency telephone number: CHEMTREC®: +(61)-290372994

## 2 Hazard(s) Identification

· Classification of the substance or mixture



GHS07

Acute Tox. 4 H302 Harmful if swallowed.

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2A H319 Causes serious eye irritation.

Skin Sens. 1B H317 May cause an allergic skin reaction.
STOT SE 3 H335 May cause respiratory irritation.

- · Label elements
- · GHS label elements The substance is classified and labelled according to the Globally Harmonised System (GHS).
- · Hazard pictograms



GHS07

- · Signal word Warning
- Hazard-determining components of labelling: anthranilamide
- · Hazard statements

Harmful if swallowed.

Causes skin irritation.

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Trade name: Vial A (2-AB Dye)

(Contd. of page 1)

Causes serious eye irritation.

May cause an allergic skin reaction.

May cause respiratory irritation.

#### · Precautionary statements

Avoid breathing dust/fume/gas/mist/vapours/spray.

Wash thoroughly after handling.

Do not eat, drink or smoke when using this product.

Use only outdoors or in a well-ventilated area.

Contaminated work clothing should not be allowed out of the workplace.

Wear protective gloves / eve protection / face protection.

IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.

Rinse mouth.

IF ON SKIN: Wash with plenty of water.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Take off contaminated clothing and wash it before reuse.

If skin irritation or rash occurs: Get medical advice/attention.

Specific treatment (see on this label).

If eye irritation persists: Get medical advice/attention.

Wash contaminated clothing before reuse.

Store in a well-ventilated place. Keep container tightly closed.

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

- Other hazards
- Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · vPvB: Not applicable.

## 3 Composition and Information on Ingredients

- · Chemical characterisation: Substances
- CAS No. Description
- 88-68-6 anthranilamide
- · Identification number(s)
- · EC number: 201-851-2

#### **4 First Aid Measures**

- Description of first aid measures
- · General information:

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

· After inhalation:

Supply fresh air and to be sure call for a doctor.

In case of unconsciousness place patient stably in side position for transportation.

- · After skin contact: Immediately wash with water and soap and rinse thoroughly.
- · After eye contact: Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- · After swallowing: Call for a doctor immediately.
- · Information for doctor:
- · Most important symptoms and effects, both acute and delayed No further relevant information available.

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Trade name: Vial A (2-AB Dye)

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· Indication of any immediate medical attention and special treatment needed No further relevant information available.

### **5 Fire Fighting Measures**

- · Extinguishing media
- · Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions.
- · Special hazards arising from the substance or mixture No further relevant information available.
- Advice for firefighters
- · Protective equipment: No special measures required.

#### **6 Accidental Release Measures**

- · Personal precautions, protective equipment and emergency procedures
- Wear protective gloves / eye protection / face protection.
- · Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- Methods and material for containment and cleaning up:

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

### 7 Handling and Storage

- · Handling:
- · Precautions for safe handling Prevent formation of dust.
- · Information about fire and explosion protection: No special measures required.
- · Conditions for safe storage, including any incompatibilities
- · Storage:
- · Requirements to be met by storerooms and receptacles: No special requirements.
- Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: Keep container tightly sealed.
- · Specific end use(s) No further relevant information available.

### 8 Exposure controls and personal protection

- Additional information about design of technical facilities: No further data; see item 7.
- · Control parameters
- Ingredients with limit values that require monitoring at the workplace: Not required.
- · Additional information: The lists valid during the making were used as basis.
- · Exposure controls
- · Personal protective equipment:
- General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

(Contd. on page 4)

Trade name: Vial A (2-AB Dye)

(Contd. of page 3)

Avoid contact with the eyes and skin.

#### · Respiratory protection:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

#### · Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

#### · Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection:



Tightly sealed goggles

# 9 Physical and Chemical Properties

- · Information on basic physical and chemical properties
- · General Information

· Odour threshold:

· Appearance: Form: Colour:

· Odour:

pH-value: Not applicable.
 Change in condition
 Melting point/freezing point:
 Initial boiling point and boiling range: Undetermined.
 Flash point: 198 °C
 Flammability (solid, gas): Product is not flammable.

• Explosive properties: Product does not present an explosion hazard.

Powder

Whitish

Characteristic

Not determined.

Not determined.

Not determined.

• Explosion limits:

· Decomposition temperature:

· Auto-ignition temperature:

Lower:Not determined.Upper:Not determined.

Vapour pressure: Not applicable.
 Density at 20 °C: 1.233 g/cm³

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# Safety Data Sheet according to WHS Regulations

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Trade name: Vial A (2-AB Dye)

		(Contd. of page 4)
· Relative density	Not determined.	
· Vapour density	Not applicable.	
Evaporation rate	Not applicable.	
· Solubility in / Miscibility with		
water:	Insoluble.	
· Partition coefficient: n-octanol/water: Not determined.		
· Viscosity:		
Dynamic:	Not applicable.	
Kinematic:	Not applicable.	

No further relevant information available.

## 10 Stability and Reactivity

- · Reactivity No further relevant information available.
- · Chemical stability

Solids content:

Other information

• Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

100.0 %

- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

# 11 Toxicological Information

- · Information on toxicological effects
- · Acute toxicity
- · Primary irritant effect:
- · Skin corrosion/irritation Irritant to skin and mucous membranes.
- · Serious eye damage/irritation Irritating effect.
- · Respiratory or skin sensitisation Sensitisation possible through skin contact.

## 12 Ecological Information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Behaviour in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- · Additional ecological information:
- · General notes:

Water hazard class 1 (German Regulation) (Assessment by list): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · vPvB: Not applicable.

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Revision Date: 24.04.2019 Issue Date: 24.04.2019

Trade name: Vial A (2-AB Dye)

• Other adverse effects No further relevant information available.

(Contd. of page 5)

### 13 Disposal considerations

- · Waste treatment methods
- **Recommendation** Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- · Uncleaned packaging:
- · Recommendation: Disposal must be made according to official regulations.

## **14 Transport information**

Not Regulated, De minimis Quantities

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· ADG, ADN, IMDG, IATA

not regulated

· UN proper shipping name

· ADG, ADN, IMDG, IATA

not regulated

· Transport hazard class(es)

· ADG, ADN, IMDG, IATA

· Class

not regulated

· Packing group

· ADG, IMDG, IATA

not regulated

· Environmental hazards:

Not applicable.

· Special precautions for user

Not applicable.

· Transport in bulk according to Annex II of Marpol and

the IBC Code

Not applicable.

UN "Model Regulation":

not regulated

## 15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Australian Inventory of Chemical Substances

Substance is not listed.

· Standard for the Uniform Scheduling of Medicines and Poisons

Substance is not listed.

• GHS label elements The substance is classified and labelled according to the Globally Harmonised System (GHS).

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# Safety Data Sheet according to WHS Regulations

Revision Date: 24.04.2019 Issue Date: 24.04.2019

Trade name: Vial A (2-AB Dye)

#### · Hazard pictograms



#### · Signal word Warning

#### · Hazard-determining components of labelling:

anthranilamide

#### · Hazard statements

Harmful if swallowed.

Causes skin irritation.

Causes serious eye irritation.

May cause an allergic skin reaction.

May cause respiratory irritation.

#### · Precautionary statements

Avoid breathing dust/fume/gas/mist/vapours/spray.

Wash thoroughly after handling.

Do not eat, drink or smoke when using this product.

Use only outdoors or in a well-ventilated area.

Contaminated work clothing should not be allowed out of the workplace.

Wear protective gloves / eye protection / face protection.

IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.

Rinse mouth.

IF ON SKIN: Wash with plenty of water.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Take off contaminated clothing and wash it before reuse.

If skin irritation or rash occurs: Get medical advice/attention.

Specific treatment (see on this label).

If eye irritation persists: Get medical advice/attention.

Wash contaminated clothing before reuse.

Store in a well-ventilated place. Keep container tightly closed.

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

- Directive 2012/18/EU
- · Named dangerous substances ANNEX I Substance is not listed.
- Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

### 16 Other information

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.

#### · Abbreviations and acronyms:

Acute Tox. 4: Acute toxicity – Category 4

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Irrit. 2A: Serious eye damage/eye irritation - Category 2A

Skin Sens. 1B: Skin sensitisation - Category 1B

STOT SE 3: Specific target organ toxicity (single exposure) - Category 3





Revision Date: 24.04.2019 Issue Date: 24.04.2019

#### 1 Identification

· Product identifier

· Trade name: Vial B (DMSO)

· Article number: WS0025

· CAS Number: 67-68-5 · EC number: 200-664-3

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

· Application of the substance / the mixture Reagents and Standards for Analytical Chemical Laboratory Use

· Details of the supplier of the safety data sheet

· Manufacturer/Supplier:

Agilent Technologies Australia Pty Ltd 679 Springvale Road Mulgrave

Victoria 3170, Australia

· Email: pdl-msds author@agilent.com · Phone number: 1800 802 402

· Emergency telephone number: CHEMTREC®: +(61)-290372994

## 2 Hazard(s) Identification

Classification of the substance or mixture



Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2A H319 Causes serious eye irritation.

- · Label elements
- · GHS label elements The substance is classified and labelled according to the Globally Harmonised System (GHS).
- · Hazard pictograms



- · Signal word Warning
- · Hazard statements

Causes skin irritation.

Causes serious eye irritation.

**Precautionary statements** 

Wash thoroughly after handling.

Wear protective gloves / eye protection / face protection.

IF ON SKIN: Wash with plenty of water.

Specific treatment (see on this label).

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. (Contd. on page 2)

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Trade name: Vial B (DMSO)

(Contd. of page 1)

If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. If eye irritation persists: Get medical advice/attention.

- Other hazards
- · Results of PBT and vPvB assessment
- PBT: Not applicable.vPvB: Not applicable.

## 3 Composition and Information on Ingredients

· Chemical characterisation: Substances

· CAS No. Description 67-68-5 dimethyl sulfoxide · Identification number(s) · EC number: 200-664-3

### **4 First Aid Measures**

- Description of first aid measures
- After inhalation: In case of unconsciousness place patient stably in side position for transportation.
- · After skin contact: Immediately wash with water and soap and rinse thoroughly.
- · After eye contact: Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- · After swallowing: If symptoms persist consult doctor.
- Information for doctor:
- · Most important symptoms and effects, both acute and delayed No further relevant information available.
- Indication of any immediate medical attention and special treatment needed No further relevant information available.

### 5 Fire Fighting Measures

- · Extinguishing media
- Suitable extinguishing agents: CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- · Special hazards arising from the substance or mixture No further relevant information available.
- · Advice for firefighters
- · Protective equipment: No special measures required.

#### **6 Accidental Release Measures**

· Personal precautions, protective equipment and emergency procedures

Wear protective gloves / eye protection / face protection.

Environmental precautions:

Dilute with plenty of water.

Do not allow to enter sewers/ surface or ground water.

· Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

(Contd. on page 3)

Trade name: Vial B (DMSO)

See Section 13 for disposal information.

(Contd. of page 2)

## 7 Handling and Storage

- · Handling:
- · Precautions for safe handling No special precautions are necessary if used correctly.
- Information about fire and explosion protection: No special measures required.
- · Conditions for safe storage, including any incompatibilities
- · Storage:
- · Requirements to be met by storerooms and receptacles: No special requirements.
- · Information about storage in one common storage facility: Not required.
- Further information about storage conditions: Keep container tightly sealed.
- · Specific end use(s) No further relevant information available.

### 8 Exposure controls and personal protection

- · Additional information about design of technical facilities: No further data; see item 7.
- · Control parameters
- Ingredients with limit values that require monitoring at the workplace: Not required.
- · Additional information: The lists valid during the making were used as basis.
- · Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

- · Respiratory protection: Not required.
- · Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection:



Tightly sealed goggles

- AU

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Trade name: Vial B (DMSO)

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## 9 Physical and Chemical Properties

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General Information

· Appearance:

· pH-value:

Form: Liquid
Colour: Colourless
Odour: Odourless
Odour threshold: Not determined.

· Change in condition

Melting point/freezing point:18.45 ℃Initial boiling point and boiling range:18.9 ℃

· Flash point: 95 ℃

· Flammability (solid, gas): Not applicable.

· Ignition temperature: 270 °C

· Decomposition temperature: Not determined.

· Auto-ignition temperature: Not determined.

• **Explosive properties:** Product does not present an explosion hazard.

Not determined.

· Explosion limits:

 Lower:
 1.8 Vol %

 Upper:
 63 Vol %

 • Vapour pressure at 20 °C:
 2.5 hPa

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Density at 20 °C:
 Relative density
 Vapour density
 Not determined.
 Not determined.

• Evaporation rate Not determined.

· Solubility in / Miscibility with

vater: Fully miscible.

· Partition coefficient: n-octanol/water: Not determined.

· Viscosity:

Dynamic at 20 ℃:198 mPasKinematic:Not determined.Organic solvents:100.0 %

Solids content: 0.0 %

• Other information No further relevant information available.

## 10 Stability and Reactivity

- · Reactivity No further relevant information available.
- · Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known.

(Contd. on page 5)

Trade name: Vial B (DMSO)

(Contd. of page 4)

- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

### 11 Toxicological Information

- · Information on toxicological effects
- · Acute toxicity

· LD/LC50 values relevant for classification:

#### 67-68-5 dimethyl sulfoxide

Oral	LD50	14,500 mg/kg (rat)
	LD50	>5,000 mg/kg (rabbit)
Inhalative	LC50/4 h	40,250 mg/l (rat)

- · Primary irritant effect:
- · Skin corrosion/irritation Irritant to skin and mucous membranes.
- · Serious eye damage/irritation Irritating effect.
- · Respiratory or skin sensitisation No sensitising effects known.

### 12 Ecological Information

- · Toxicity
- · Aquatic toxicity:

#### 67-68-5 dimethyl sulfoxide

EC50 mg/kg (daphnia)

- · Persistence and degradability No further relevant information available.
- · Behaviour in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- Additional ecological information:
- General notes:

Water hazard class 1 (German Regulation) (Assessment by list): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

- · Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.
- · Other adverse effects No further relevant information available.

### 13 Disposal considerations

- · Waste treatment methods
- \* Recommendation Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- · Uncleaned packaging:
- · Recommendation: Disposal must be made according to official regulations.

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Trade name: Vial B (DMSO)

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\* Recommended cleansing agents: Water, if necessary together with cleansing agents.

14 Transport information	
Not Regulated, De minimis Quantities	
· UN-Number · ADG, ADN, IMDG, IATA	not regulated
· UN proper shipping name · ADG, ADN, IMDG, IATA	not regulated
· Transport hazard class(es)	
· ADG, ADN, IMDG, IATA · Class	not regulated
· Packing group · ADG, IMDG, IATA	not regulated
· Environmental hazards:	Not applicable.
· Special precautions for user	Not applicable.
Transport in bulk according to Annex II of the IBC Code	f Marpol and Not applicable.
· UN "Model Regulation":	not regulated

## 15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Australian Inventory of Chemical Substances

Substance is listed.

· Standard for the Uniform Scheduling of Medicines and Poisons

S4, S6

- · GHS label elements The substance is classified and labelled according to the Globally Harmonised System (GHS).
- · Hazard pictograms



GHS07

- · Signal word Warning
- · Hazard statements

Causes skin irritation.

Causes serious eye irritation.

· Precautionary statements

Wash thoroughly after handling.

Wear protective gloves / eye protection / face protection.

IF ON SKIN: Wash with plenty of water.

Specific treatment (see on this label).

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Trade name: Vial B (DMSO)

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IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If skin irritation occurs: Get medical advice/attention.

Take off contaminated clothing and wash it before reuse.

If eye irritation persists: Get medical advice/attention.

- · Directive 2012/18/EU
- · Named dangerous substances ANNEX I Substance is not listed.
- · Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

### 16 Other information

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.

Abbreviations and acronyms:

Skin Irrit. 2: Skin corrosion/irritation – Category 2 Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A

AU





Revision Date: 24.04.2019 Issue Date: 24.04.2019

### 1 Identification

- · Product identifier
- · Trade name: Vial C (Acetic Acid)
- · Article number: WS0026
- · CAS Number:
- 64-19-7
- · EC number:
- 200-580-7
- · Index number:

607-002-00-6

- Relevant identified uses of the substance or mixture and uses advised against
- · Application of the substance / the mixture Reagents and Standards for Analytical Chemical Laboratory Use
- Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

Agilent Technologies Australia Pty Ltd

679 Springvale Road

Mulgrave

Victoria 3170, Australia

- · Email: pdl-msds\_author@agilent.com
- · Phone number: 1800 802 402
- · Emergency telephone number: CHEMTREC®: +(61)-290372994

### 2 Hazard(s) Identification

· Classification of the substance or mixture



GHS02 flame

Flam. Liq. 3 H226 Flammable liquid and vapour.



GHS05 corrosion

Skin Corr. 1A H314 Causes severe skin burns and eye damage.



GHS07

Acute Tox. 4 H312 Harmful in contact with skin.

- · Label elements
- · GHS label elements The substance is classified and labelled according to the Globally Harmonised System (GHS).

(Contd. on page 2)

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Trade name: Vial C (Acetic Acid)

Hazard pictograms









GHS02

GHS05

GHS07

#### · Signal word Danger

#### · Hazard-determining components of labelling:

acetic acid

#### Hazard statements

Flammable liquid and vapour.

Harmful in contact with skin.

Causes severe skin burns and eye damage.

#### · Precautionary statements

Keep away from heat/sparks/open flames/hot surfaces. No smoking.

Keep container tightly closed.

Ground/bond container and receiving equipment.

Use explosion-proof electrical/ventilating/lighting equipment.

Use only non-sparking tools.

Take precautionary measures against static discharge.

Do not breathe dusts or mists.

Wash thoroughly after handling.

Wear protective gloves/protective clothing/eye protection/face protection.

IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.

Specific treatment (see on this label).

Take off contaminated clothing and wash it before reuse.

Wash contaminated clothing before reuse.

In case of fire: Use for extinction: CO2, powder or water spray.

Store in a well-ventilated place. Keep cool.

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

- Other hazards
- · Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.

# 3 Composition and Information on Ingredients

· Chemical characterisation: Substances

· CAS No. Description

64-19-7 acetic acid

· Identification number(s)

· EC number: 200-580-7

· Index number: 607-002-00-6

Trade name: Vial C (Acetic Acid)

(Contd. of page 2)

#### **4 First Aid Measures**

- Description of first aid measures
- · General information: Immediately remove any clothing soiled by the product.
- After inhalation: In case of unconsciousness place patient stably in side position for transportation.
- · After skin contact: Immediately wash with water and soap and rinse thoroughly.
- · After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
- After swallowing: Drink plenty of water and provide fresh air. Call for a doctor immediately.
- · Information for doctor:
- · Most important symptoms and effects, both acute and delayed No further relevant information available.
- · Indication of any immediate medical attention and special treatment needed No further relevant information available.

### **5 Fire Fighting Measures**

- · Extinguishing media
- Suitable extinguishing agents: CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- · Special hazards arising from the substance or mixture No further relevant information available.
- · Advice for firefighters
- · Protective equipment: No special measures required.

### **6 Accidental Release Measures**

· Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

Environmental precautions:

Dilute with plenty of water.

Do not allow to enter sewers/ surface or ground water.

· Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Use neutralising agent.

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

## 7 Handling and Storage

- · Handling:
- · Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

Information about fire - and explosion protection:

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

(Contd. on page 4)

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Trade name: Vial C (Acetic Acid)

(Contd. of page 3)

- Conditions for safe storage, including any incompatibilities
- Storage:
- · Requirements to be met by storerooms and receptacles: No special requirements.
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: Keep container tightly sealed.
- Specific end use(s) No further relevant information available.

### 8 Exposure controls and personal protection

- · Additional information about design of technical facilities: No further data; see item 7.
- · Control parameters
- · Ingredients with limit values that require monitoring at the workplace:

#### 64-19-7 acetic acid

NES Short-term value: 37 mg/m³, 15 ppm Long-term value: 25 mg/m³, 10 ppm WES Short-term value: 37 mg/m³, 15 ppm Long-term value: 25 mg/m³, 10 ppm

· Additional information: The lists valid during the making were used as basis.

- · Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

· Respiratory protection:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection:



Tightly sealed goggles

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## 9 Physical and Chemical Properties

· Information on	hasic physica	I and chemical	properties
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· General Information

· Appearance:

Form: Fluid
Colour: Colourless
Odour: Pungent
Odour threshold: Not determined.

· pH-value:

· Change in condition

Melting point/freezing point:16.6 ℃Initial boiling point and boiling range:118 ℃

· Flash point: 40 ℃

· Flammability (solid, gas): Not applicable.

· Ignition temperature: 485 ℃

· Decomposition temperature: Not determined.

· Auto-ignition temperature: Not determined.

Explosive properties: Product is not explosive. However, formation of explosive air/vapour mixtures are

possible.

2.5

· Explosion limits:

**Lower:** 4 Vol % **Upper:** 17 Vol %

· Vapour pressure at 20 °C: 16 hPa

Density at 20 °C:
 Relative density
 Vapour density
 Evaporation rate
 1.05 g/cm³
 Not determined.
 Not determined.
 Not determined.

· Solubility in / Miscibility with

water: Fully miscible.

· Partition coefficient: n-octanol/water: Not determined.

· Viscosity:

Dynamic at 20 °C:

Kinematic:

Organic solvents:

Solids content:

1.24 mPas

Not determined.

100.0 %

• Other information No further relevant information available.

## 10 Stability and Reactivity

- · Reactivity No further relevant information available.
- · Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

(Contd. on page 6)

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Trade name: Vial C (Acetic Acid)

(Contd. of page 5)

- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

### 11 Toxicological Information

- Information on toxicological effects
- · Acute toxicity

• I D/I	C50 values	rolovant for	classification:
LU/L	Cou values	s relevant ioi	Ciassilication.

#### 64-19-7 acetic acid

Oral LD50 3,310 mg/kg (rat)
Dermal LD50 1,060 mg/kg (rabbit)

- Primary irritant effect:
- · Skin corrosion/irritation Strong caustic effect on skin and mucous membranes.
- · Serious eye damage/irritation Strong caustic effect.
- · Respiratory or skin sensitisation No sensitising effects known.
- · Additional toxicological information:

Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

## 12 Ecological Information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- Behaviour in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- · Additional ecological information:
- · General notes:

Water hazard class 1 (German Regulation) (Assessment by list): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Must not reach sewage water or drainage ditch undiluted or unneutralised.

- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · **vPvB**: Not applicable.
- · Other adverse effects No further relevant information available.

# 13 Disposal considerations

- · Waste treatment methods
- \* Recommendation Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- · Uncleaned packaging:
- · Recommendation: Disposal must be made according to official regulations.

(Contd. on page 7)

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Trade name: Vial C (Acetic Acid)

the IBC Code

\* Recommended cleansing agents: Water, if necessary together with cleansing agents.

(Contd. of page 6)

### 14 Transport information Not Regulated, De minimis Quantities · UN-Number · ADG, IMDG, IATA UN2789 · UN proper shipping name · ADG 2789 ACETIC ACID, GLACIAL · IMDG, IATA ACETIC ACID, GLACIAL · Transport hazard class(es) · ADG · Class 8 Corrosive substances. · Label 8+3 · IMDG · Class 8 Corrosive substances. · Label 8/3 ·IATA · Class 8 Corrosive substances. · Label 8 (3) · Packing group · ADG, IMDG, IATA Ш · Environmental hazards: Not applicable. · Special precautions for user Warning: Corrosive substances. Danger code (Kemler): 83 · EMS Number: 8-04 · Segregation groups Acids · Stowage Category Α · Transport in bulk according to Annex II of Marpol and

Not applicable.

(Contd. on page 8)

1L

Trade name: Vial C (Acetic Acid)

(Contd. of page 7)

· Transport/Additional information:

· ADG

Limited quantities (LQ)Excepted quantities (EQ)

ities (LQ) 1L ntities (EQ) Code: E2

Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml

·IMDG

· Limited quantities (LQ)

· Excepted quantities (EQ) Code: E2

Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml

· UN "Model Regulation": UN 2789 ACETIC ACID, GLACIAL, 8 (3), II

## 15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Australian Inventory of Chemical Substances

Substance is listed.

· Standard for the Uniform Scheduling of Medicines and Poisons

S2, S5, S6

- · GHS label elements The substance is classified and labelled according to the Globally Harmonised System (GHS).
- · Hazard pictograms







GHS02

GHS05

GHS07

- · Signal word Danger
- · Hazard-determining components of labelling:

acetic acid

· Hazard statements

Flammable liquid and vapour.

Harmful in contact with skin.

Causes severe skin burns and eye damage.

· Precautionary statements

Keep away from heat/sparks/open flames/hot surfaces. No smoking.

Keep container tightly closed.

Ground/bond container and receiving equipment.

Use explosion-proof electrical/ventilating/lighting equipment.

Use only non-sparking tools.

Take precautionary measures against static discharge.

Do not breathe dusts or mists.

Wash thoroughly after handling.

Wear protective gloves/protective clothing/eye protection/face protection.

IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

(Contd. on page 9)

Trade name: Vial C (Acetic Acid)

(Contd. of page 8)

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.

Specific treatment (see on this label).

Take off contaminated clothing and wash it before reuse.

Wash contaminated clothing before reuse.

In case of fire: Use for extinction: CO2, powder or water spray.

Store in a well-ventilated place. Keep cool.

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

- · Directive 2012/18/EU
- · Named dangerous substances ANNEX I Substance is not listed.
- · Seveso category P5c FLAMMABLE LIQUIDS
- · Qualifying quantity (tonnes) for the application of lower-tier requirements 5,000 t
- · Qualifying quantity (tonnes) for the application of upper-tier requirements 50,000 t
- · Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

#### 16 Other information

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.

· Abbreviations and acronyms:

Flam. Liq. 3: Flammable liquids – Category 3 Acute Tox. 4: Acute toxicity – Category 4 Skin Corr. 1A: Skin corrosion/irritation – Category 1A

- AU





Revision Date: 07.05.2019 Issue Date: 24.04.2019

#### 1 Identification

· Product identifier

· Trade name: Vial D (Reductant)

· Article number: WS0027

· CAS Number: 25895-60-7 · EC number: 247-317-2

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

- · Application of the substance / the mixture Reagents and Standards for Analytical Chemical Laboratory Use
- · Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

Agilent Technologies Australia Pty Ltd 679 Springvale Road

Mulgrave

Victoria 3170, Australia

· Email: pdl-msds author@agilent.com

· Phone number: 1800 802 402

· Emergency telephone number: CHEMTREC®: +(61)-290372994

## 2 Hazard(s) Identification

Classification of the substance or mixture



GHS02 flame

H228 Flammable solid.

Water-react. 2 H261 In contact with water releases flammable gases.



GHS06 skull and crossbones

H301 Toxic if swallowed. Acute Tox. 3

Acute Tox. 3 H311 Toxic in contact with skin.

Acute Tox. 3 H331 Toxic if inhaled.



GHS05 corrosion

Skin Corr. 1B H314 Causes severe skin burns and eye damage.

Eye Dam. 1 H318 Causes serious eye damage.

· Label elements

· GHS label elements The substance is classified and labelled according to the Globally Harmonised System (GHS).

(Contd. on page 2)

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Trade name: Vial D (Reductant)

· Hazard pictograms

(Contd. of page 1)







GHS02

GHS05

GHS06

#### · Signal word Danger

#### · Hazard-determining components of labelling:

sodium cyanborohydride

#### · Hazard statements

Flammable solid.

In contact with water releases flammable gases.

Toxic if swallowed.

Toxic in contact with skin.

Toxic if inhaled.

Causes severe skin burns and eye damage.

#### · Precautionary statements

Keep away from heat/sparks/open flames/hot surfaces. No smoking.

Keep away from any possible contact with water, because of violent reaction and possible flash fire.

Handle and store contents under inert gas. Protect from moisture.

Ground/bond container and receiving equipment.

Use explosion-proof electrical/ventilating/lighting equipment.

Do not breathe dusts or mists.

Wash thoroughly after handling.

Do not eat, drink or smoke when using this product.

Use only outdoors or in a well-ventilated area.

Wear protective gloves/protective clothing/eye protection/face protection.

IF SWALLOWED: Immediately call a POISON CENTER/ doctor.

Specific treatment (see on this label).

IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

Call a POISON CENTER/doctor.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a POISON CENTER/doctor if you feel unwell.

Take off immediately all contaminated clothing and wash it before reuse.

Brush off loose particles from skin. Immerse in cool water/wrap in wet bandages.

In case of fire: Use for extinction: CO2, sand, extinguishing powder.

Store in a dry place. Store in a closed container.

Store in a well-ventilated place. Keep container tightly closed.

Dispose of contents/container in accordance with local/regional/national/international regulations.

#### Additional information:

Contact with acids liberates very toxic gas.

- Other hazards
- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · vPvB: Not applicable.

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Trade name: Vial D (Reductant)

(Contd. of page 2)

### 3 Composition and Information on Ingredients

- · Chemical characterisation: Substances
- · CAS No. Description

25895-60-7 sodium cyanborohydride

- · Identification number(s)
- · EC number: 247-317-2

#### **4 First Aid Measures**

- Description of first aid measures
- · General information:

Immediately remove any clothing soiled by the product.

Remove breathing equipment only after contaminated clothing have been completely removed.

In case of irregular breathing or respiratory arrest provide artificial respiration.

• After inhalation:

Supply fresh air or oxygen; call for doctor.

In case of unconsciousness place patient stably in side position for transportation.

- · After skin contact: Immediately wash with water and soap and rinse thoroughly.
- After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
- · After swallowing:

Do not induce vomiting; call for medical help immediately.

Drink plenty of water and provide fresh air. Call for a doctor immediately.

- Information for doctor:
- · Most important symptoms and effects, both acute and delayed No further relevant information available.
- · Indication of any immediate medical attention and special treatment needed No further relevant information available.

## 5 Fire Fighting Measures

- · Extinguishing media
- · Suitable extinguishing agents: CO2, sand, extinguishing powder. Do not use water.
- · For safety reasons unsuitable extinguishing agents: Water with full jet
- · Special hazards arising from the substance or mixture No further relevant information available.
- · Advice for firefighters
- · Protective equipment: Mouth respiratory protective device.

### **6 Accidental Release Measures**

· Personal precautions, protective equipment and emergency procedures

Mount respiratory protective device.

Wear protective equipment. Keep unprotected persons away.

Environmental precautions:

Do not allow product to reach sewage system or any water course.

Inform respective authorities in case of seepage into water course or sewage system.

Do not allow to enter sewers/ surface or ground water.

Methods and material for containment and cleaning up:

Use neutralising agent.

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

(Contd. on page 4)

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(Contd. of page 3)

Do not flush with water or aqueous cleansing agents

Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

### 7 Handling and Storage

· Handling:

#### · Precautions for safe handling

Thorough dedusting.

Ensure good ventilation/exhaustion at the workplace.

Open and handle receptacle with care.

#### Information about fire - and explosion protection:

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

Keep respiratory protective device available.

- Conditions for safe storage, including any incompatibilities
- · Storage:
- · Requirements to be met by storerooms and receptacles: Store in a cool location.
- Information about storage in one common storage facility: Do not store together with acids.
- · Further information about storage conditions:

Keep container tightly sealed.

Store in cool, dry conditions in well sealed receptacles.

· Specific end use(s) No further relevant information available.

#### 8 Exposure controls and personal protection

- · Additional information about design of technical facilities: No further data; see item 7.
- · Control parameters
- · Ingredients with limit values that require monitoring at the workplace: Not required.
- · Additional information: The lists valid during the making were used as basis.
- · Exposure controls
- · Personal protective equipment:
- General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Store protective clothing separately.

Avoid contact with the eyes.

Avoid contact with the eyes and skin.

#### · Respiratory protection:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

Protection of hands:



(Contd. on page 5)

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Trade name: Vial D (Reductant)

(Contd. of page 4)

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection:



Tightly sealed goggles

## 9 Physical and Chemical Properties

· Information on basic physical and chemical properties · General Information		
· Appearance: Form:	Powder	
Colour:	Whitish	
· Odour:	Odourless	
· Odour threshold:	Not determined.	
· pH-value:	Not applicable.	
· Change in condition		
Melting point/freezing point:	>242 °C	
Initial boiling point and boiling range:	Undetermined.	
· Flash point:	Not applicable.	
· Flammability (solid, gas):	Highly flammable. Contact with water liberates extremely flammable gases.	
· Decomposition temperature:	Not determined.	
· Auto-ignition temperature:	Not determined.	
· Explosive properties:	Not determined.	
· Explosion limits:		
Lower:	Not determined.	
Upper:	Not determined.	
· Vapour pressure:	Not applicable.	
Density at 20 °C:	1.12 g/cm <sup>3</sup>	
· Relative density	Not determined.	
Vapour density	Not applicable.	
· Evaporation rate	Not applicable.	
· Solubility in / Miscibility with		
water:	Insoluble.	
· Partition coefficient: n-octanol/water: Not determined.		

(Contd. on page 6)

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Trade name: Vial D (Reductant)

Viscosity:
Dynamic:
Not applicable.
Kinematic:
Not applicable.

Solids content: 100.0 %

• Other information No further relevant information available.

### 10 Stability and Reactivity

- · Reactivity No further relevant information available.
- · Chemical stability
- · Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions Contact with water releases flammable gases.
- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

### 11 Toxicological Information

- · Information on toxicological effects
- · Acute toxicity
- · Primary irritant effect:
- · Skin corrosion/irritation Strong caustic effect on skin and mucous membranes.
- · Serious eye damage/irritation

Strong caustic effect.

Strong irritant with the danger of severe eye injury.

- · Respiratory or skin sensitisation No sensitising effects known.
- Additional toxicological information:

Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

# 12 Ecological Information

- Toxicity
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Behaviour in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- · Ecotoxical effects:
- · Remark: Very toxic for fish
- Additional ecological information:
- · General notes:

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water

Do not allow product to reach ground water, water course or sewage system.

Must not reach sewage water or drainage ditch undiluted or unneutralised.

Danger to drinking water if even small quantities leak into the ground.

Also poisonous for fish and plankton in water bodies.

Very toxic for aquatic organisms

(Contd. on page 7)

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Trade name: Vial D (Reductant)

(Contd. of page 6)

- Results of PBT and vPvB assessment
- · **PBT:** Not applicable. · vPvB: Not applicable.
- · Other adverse effects No further relevant information available.

### 13 Disposal considerations

- · Waste treatment methods
- · Recommendation Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- · Uncleaned packaging:
- · Recommendation: Disposal must be made according to official regulations.

#### 14 Transport information Not Regulated, De minimis Quantities · UN-Number · ADG, IMDG, IATA UN3134 · UN proper shipping name 3134 WATER-REACTIVE SOLID, TOXIC, N.O.S. (sodium cyanborohydride), ENVIRONMENTALLY HAZARDOUS · IMDG, IATA WATER-REACTIVE SOLID, TOXIC, N.O.S. (sodium cyanborohydride)

- · Transport hazard class(es)
- · ADG







· Class

4.3 Substances which, in contact with water, emit flammable gases. · Label 4.3 (6.1)

·IMDG





· Class · Label 4.3 Substances which, in contact with water, emit flammable gases.

4.3/6.1

(Contd. on page 8)

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Trade name: Vial D (Reductant)

(Contd. of page 7)

·IATA



6.1 Toxic substances.

· Label 4.3 (6.1)

· Packing group

ADG, IMDG, IATA Ш

· Environmental hazards:

Special marking (ADG): Symbol (fish and tree)

· Special precautions for user Warning: Substances which, in contact with water, emit

flammable gases.

· EMS Number: F-G,S-N

Transport in bulk according to Annex II of Marpol and

the IBC Code Not applicable.

· Transport/Additional information:

· Limited quantities (LQ) 500 g

Excepted quantities (EQ) Code: E2

Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 500 g

 Transport category C/E

Tunnel restriction code

· Limited quantities (LQ) 1 kg · Excepted quantities (EQ) Code: 30 g

· UN "Model Regulation": UN 3134 WATER-REACTIVE SOLID, TOXIC, N.O.S. (SODIUM

CYANBOROHYDRIDE), 4.3 (6.1), II, ENVIRONMENTALLY **HAZARDOUS** 

## 15 Regulatory information

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

· Australian Inventory of Chemical Substances

Substance is listed.

Standard for the Uniform Scheduling of Medicines and Poisons

Substance is not listed.

· GHS label elements The substance is classified and labelled according to the Globally Harmonised System (GHS).

(Contd. on page 9)

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# Safety Data Sheet according to WHS Regulations

Revision Date: 07.05.2019 Issue Date: 24.04.2019

Trade name: Vial D (Reductant)

#### · Hazard pictograms







GHS02

GHS05

GHS06

#### · Signal word Danger

#### · Hazard-determining components of labelling:

sodium cyanborohydride

#### · Hazard statements

Flammable solid.

In contact with water releases flammable gases.

Toxic if swallowed.

Toxic in contact with skin.

Toxic if inhaled.

Causes severe skin burns and eye damage.

#### · Precautionary statements

Keep away from heat/sparks/open flames/hot surfaces. No smoking.

Keep away from any possible contact with water, because of violent reaction and possible flash fire.

Handle and store contents under inert gas. Protect from moisture.

Ground/bond container and receiving equipment.

Use explosion-proof electrical/ventilating/lighting equipment.

Do not breathe dusts or mists.

Wash thoroughly after handling.

Do not eat, drink or smoke when using this product.

Use only outdoors or in a well-ventilated area.

Wear protective gloves/protective clothing/eye protection/face protection.

IF SWALLOWED: Immediately call a POISON CENTER/ doctor.

Specific treatment (see on this label).

IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

Call a POISON CENTER/doctor.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a POISON CENTER/doctor if you feel unwell.

Take off immediately all contaminated clothing and wash it before reuse.

Brush off loose particles from skin. Immerse in cool water/wrap in wet bandages.

In case of fire: Use for extinction: CO2, sand, extinguishing powder.

Store in a dry place. Store in a closed container.

Store in a well-ventilated place. Keep container tightly closed.

Dispose of contents/container in accordance with local/regional/national/international regulations.

#### · Directive 2012/18/EU

· Named dangerous substances - ANNEX I Substance is not listed.

### · Seveso category

H2 ACUTE TOXIC

E1 Hazardous to the Aquatic Environment

- · Qualifying quantity (tonnes) for the application of lower-tier requirements 50 t
- · Qualifying quantity (tonnes) for the application of upper-tier requirements 200 t
- · Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

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Trade name: Vial D (Reductant)

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## 16 Other information

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.

#### · Abbreviations and acronyms:

Flam. Sol. 1: Flammable solids – Category 1
Water-react. 2: Substances and mixtures which in contact with water emit flammable gases – Category 2
Acute Tox. 3: Acute toxicity – Category 3
Skin Corr. 1B: Skin corrosion/irritation – Category 1B
Eye Dam. 1: Serious eye damage/eye irritation – Category 1