

20.08.2020 Kit components

Product code	Description	
1536060 9703920	Affi-Gel® Immunoaffinity Hz Kit	
Components:		
1536047	Affi-Gel Hz Hydrazide	
1536054	Affi-Gel® Hz 10x Coupling Buffer	
9701030	EconoPak 10 P-6DG	
1536055	Affi-Gel® Hz Oxidizer	





Printing date 20.08.2020 Revision: 23.07.2020

Hazardous according to criteria of Safe Work Australia.

1 Identification

- · Product identifier
- · Trade name: Affi-Gel Hz Hydrazide
- · Article number: 1536047, 1536050, 9701043
- · Relevant identified uses of the substance or mixture and uses advised against

No further relevant information available.

- · Application of the substance / the mixture Laboratory chemicals
- · Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

Bio-Rad Laboratories Pty. Ltd Level 5, 446 Victoria Road Gladesville NSW 2111

Australia

Tel 61-2-9914-2800 (1 800 224 354) Fax 61-2-9914-2888

- · Information department: sales.australia@bio-rad.com
- · Emergency telephone number: 61-2-9037-2994

2 Hazard(s) Identification

· Classification of the substance or mixture

Flam. Liq. 2 H225 Highly flammable liquid and vapour.

Acute Tox. 5 H303 May be harmful if swallowed.

Acute Tox. 5 H333 May be harmful if inhaled.

Eye Irrit. 2A H319 Causes serious eye irritation.

STOT SE 3 H336 May cause drowsiness or dizziness.

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





GHS02 GHS07

- · Signal word Danger
- · Hazard statements

H225 Highly flammable liquid and vapour.

H303 May be harmful if swallowed.

H333 May be harmful if inhaled.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

Precautionary statements

P210

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

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Trade name: Affi-Gel Hz Hydrazide

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P241 Use explosion-proof electrical/ventilating/lighting equipment.

P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/

shower.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy

to do. Continue rinsing.

P405 Store locked up.

P501 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: Mixtures
- · Description: Mixture of the substances listed below with nonhazardous additions.
- · Dangerous components:

67-63-0 propan-2-ol Flam. Liq. 2, H225 50-100% Eye Irrit. 2A, H319; STOT SE 3, H336 Acute Tox. 5, H303; Acute Tox. 5, H333

· Additional information For the wording of the listed hazard phrases refer to section 16.

4 First Aid Measures

- · Description of first aid measures
- · General information Immediately remove any clothing soiled by the product.
- · After inhalation Supply fresh air; consult doctor in case of complaints.
- · After skin contact

Generally the product does not irritate the skin.

Immediately rinse with water.

- · After eye contact Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- · After swallowing Rinse mouth with water. Seek medical attention and appropriate follow-up.
- · 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, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

- · For safety reasons unsuitable extinguishing agents Water with full jet.
- · Special hazards arising from the substance or mixture No further relevant information available.

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Safety Data Sheet according to WHS Regulations

Printing date 20.08.2020 Revision: 23.07.2020

Trade name: Affi-Gel Hz Hydrazide

(Contd. of page 2)

- · Advice for firefighters
- · Protective equipment: Wear self-contained respiratory protective device.

6 Accidental Release Measures

· Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

Wear protective clothing.

· Environmental precautions:

Prevent seepage into sewage system, workpits and cellars.

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).

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

No special measures required.

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

· Information about protection against explosions and fires:

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

- · 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: Not required.
- · Further information about storage conditions:

Keep receptacle 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 systems: No further data; see item 7.

(Contd. on page 4)





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Trade name: Affi-Gel Hz Hydrazide

(Contd. of page 3)

- · Control parameters
- · Components with limit values that require monitoring at the workplace:

67-63-0 propan-2-ol

WES Short-term value: 1230 mg/m³, 500 ppm Long-term value: 983 mg/m³, 400 ppm

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

Fluid

- 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.

Avoid contact with the eyes and skin.

- · Breathing equipment: Not necessary if room is well-ventilated.
- · Protection of hands: Protective gloves.
- · Material of gloves Synthetic gloves
- Penetration time of glove material

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

· Eye protection: Safety glasses

Tightly sealed goggles.

9 Physical and Chemical Properties

· Information on	basıc physical	and chemica	l properties
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· General Information

· Appearance:

Form: Colourless Colour: Alcohol-like · Odour: · Odour threshold: Not determined.

· pH-value: Not determined.

· Change in condition

Melting point/freezing point: -89.5 °C Initial boiling point and boiling range: 82 °C

< 23 °C · Flash point:

· Flammability (solid, gaseous) Not applicable.

425 °C · Ignition temperature:

· Decomposition temperature: Not determined.

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Trade name: Affi-Gel Hz Hydrazide

	(Contd. of page
Self igniting:	Product is not selfigniting.
· Explosive properties:	Product is not explosive. However, formation of explosive air/vapour mixture are possible.
· Explosion limits:	
Lower:	2 Vol %
Upper:	12 Vol %
· Vapour pressure at 20 °C:	43 hPa
· Density:	Not determined
· Relative density	Not determined.
· Vapour density	Not determined.
Evaporation rate	Not determined.
· Solubility in / Miscibility with	
Water at 20 °C:	1 g/l
Partition coefficient: n-octanol/water:	Not determined.
· Viscosity:	
dynamic:	Not determined.
kinematic:	Not determined.
· Solvent content:	
Organic solvents:	97.0 %
Solids content:	3.0 %
· 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
- · 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 that are relevant for classification:

<i>67-63-0</i>	propan-2-ol
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	_	
Oral	LD50	4,570 mg/kg (rat)
Dermal	LD50	13,400 mg/kg (Rabbit)

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Trade name: Affi-Gel Hz Hydrazide

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Inhalative LC50/4 h 30 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.
- · Additional toxicological information:

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

Irritant

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) (Self-assessment): 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 of together with household garbage. Do not allow product to reach sewage system. Dispose of waste in accordance to applicable national, regional, or local regulations.

- · Uncleaned packagings:
- · Recommendation: Disposal must be made according to official regulations.

14 T	rans	port	int	ormat	ion

· UN-Number

· **ADG, IMDG, IATA** UN1219

· UN proper shipping name

· **ADG**1219 ISOPROPANOL (ISOPROPYL ALCOHOL) mixture

1219 ISOPROPANOL (ISOPROPYL ALCOHOL), mixture

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Trade name: Affi-Gel Hz Hydrazide

	(Contd. of page
· IMDG, IATA	ISOPROPANOL (ISOPROPYL ALCOHOL) mixture
· Transport hazard class(es)	
· ADG, IMDG, IATA · Class · Label	3 Flammable liquids. 3
· Packing group · ADG, IMDG, IATA	II .
· Environmental hazards: · Marine pollutant:	No
 Special precautions for user Hazard identification number (Kemler code): EMS Number: Stowage Category 	Warning: Flammable liquids. 33 F-E,S-D B
· Transport in bulk according to Annex II of Marpol a IBC Code	and the Not applicable.
· Transport/Additional information:	
· ADG · Limited quantities (LQ) · Excepted quantities (EQ)	1L Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· Transport category · Tunnel restriction code	2 <i>D/E</i>
· IMDG · Limited quantities (LQ) · Excepted quantities (EQ)	1L Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· UN "Model Regulation":	UN 1219 ISOPROPANOL (ISOPROPYL ALCOHO MIXTURE, 3, II

15 Regulatory information

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

All ingredients are listed.

· Standard for the Uniform Scheduling of Medicines and Poisons

None of the ingredients is listed.

· Australia: Priority Existing Chemicals

None of the ingredients is listed.

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Trade name: Affi-Gel Hz Hydrazide

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- · Directive 2012/18/EU
- · Named dangerous substances ANNEX I None of the ingredients is 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
- · National regulations
- · Technical instructions (air):

Class	Share in %		
NK	50-100		

- · Water hazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.
- · Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Relevant phrases

H225 Highly flammable liquid and vapour.

H303 May be harmful if swallowed.

H319 Causes serious eye irritation.

H333 May be harmful if inhaled.

H336 May cause drowsiness or dizziness.

- · Department issuing SDS: Environmental Health and Safety.
- · Contact:

Life Science Group, Environmental Health and Safety, 2000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 741-1000

Diagnostic Group, Environmental Health and Safety, 4000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 724-7000

· Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Flam. Liq. 2: Flammable liquids – Category 2

Acute Tox. 5: Acute toxicity - oral - Category 5

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

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

· * Data compared to the previous version altered.





Printing date 20.08.2020 Revision: 24.07.2020

Hazardous according to criteria of Safe Work Australia.

1 Identification

- · Product identifier
- · Trade name: Affi-Gel® Hz 10x Coupling Buffer
- · Article number: 1536054
- · Relevant identified uses of the substance or mixture and uses advised against

No further relevant information available.

- · Application of the substance / the mixture Laboratory chemicals
- · Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

Bio-Rad Laboratories Pty. Ltd Level 5, 446 Victoria Road Gladesville NSW 2111

Australia

Tel 61-2-9914-2800 (1 800 224 354) Fax 61-2-9914-2888

- · Information department: sales.australia @bio-rad.com
- · Emergency telephone number: 61-2-9037-2994

2 Hazard(s) Identification

· Classification of the substance or mixture

Skin Corr. 3 H316 Causes mild skin irritation.

- · Label elements
- · GHS label elements The product is classified and labelled according to the Globally Harmonised System (GHS).
- · Hazard pictograms Not Applicable
- · Signal word Warning
- · Hazard statements

H316 Causes mild skin irritation.

· Precautionary statements

P332+P313 If skin irritation occurs: 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: Mixtures
- · Description: Mixture of the substances listed below with nonhazardous additions.

· Dangero	· Dangerous components:				
127-09-3	sodium acetate	Acute Tox. 5, H303	5-10%		
64-19-7	acetic acid, glacial	Flam. Liq. 3, H226 Skin Corr. 1A, H314 Acute Tox. 5, H303	2.5-5%		

(Contd. on page 2)





Printing date 20.08.2020 Revision: 24.07.2020

Trade name: Affi-Gel® Hz 10x Coupling Buffer

(Contd. of page 1)

· Additional information For the wording of the listed hazard phrases refer to section 16.

4 First Aid Measures

- · Description of first aid measures
- · General information No special measures required.
- · After inhalation Supply fresh air; consult doctor in case of complaints.
- · After skin contact Generally the product does not irritate the skin.
- · After eye contact Rinse opened eye for several minutes under running water.
- · After swallowing Rinse mouth with water. Seek medical attention and appropriate follow-up.
- · 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 Use fire fighting measures that suit the environment.
- · 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 clothing.
- · Environmental precautions: 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.

See Section 13 for disposal information.

7 Handling and Storage

- · Handling
- · Precautions for safe handling No special measures required.
- · Information about protection against explosions and fires: No special measures required.
- · Conditions for safe storage, including any incompatibilities
- · Storage
- · Requirements to be met by storerooms and receptacles: According to product specification
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: None.

(Contd. on page 3)





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Trade name: Affi-Gel® Hz 10x Coupling Buffer

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

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8 Exposure controls and personal protection

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

64-19-7 acetic acid, glacial

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

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

4

- · Exposure controls
- · Personal protective equipment
- · General protective and hygienic measures Wash hands before breaks and at the end of work.
- · Breathing equipment: Not necessary if room is well-ventilated.
- · Protection of hands: Protective gloves.
- · Material of gloves Synthetic gloves
- · Penetration time of glove material

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

· Eye protection: Safety glasses

9 Physical and Chemical Properties

· Information on	basic phvs	ical and c	hemical	properties

· General Information

· Appearance:

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

· pH-value at 20 °C:

· Change in condition

Melting point/freezing point: undetermined **Initial boiling point and boiling range:** undetermined

• Flash point: Not applicable Not determined.

· Flammability (solid, gaseous) Not applicable.

· Decomposition temperature: Not determined.

· **Self igniting:** Product is not selfigniting.

• Explosive properties: Not determined.

(Contd. on page 4)





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Trade name: Affi-Gel® Hz 10x Coupling Buffer

	(Contd. of page
· Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
· Vapour pressure at 20 °C:	23 hPa
Density at 20 °C:	1.039 g/cm³
Relative density	Not determined.
Vapour density	Not determined.
Evaporation rate	Not determined.
Solubility in / Miscibility with	
Water:	Fully miscible
Partition coefficient: n-octanol/water:	Not determined.
Viscosity:	
dynamic:	Not determined.
kinematic:	Not determined.
Solvent content:	
Organic solvents:	3.1 %
Water:	79.9 %
Solids content:	17.0 %
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
- · 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 that are relevant for classification:

127-09-3 sodium acetate

Oral LD50 3,530 mg/kg (rat)

64-19-7 acetic acid, glacial

Oral LD50 3,310 mg/kg (rat)

- Primary irritant effect:
- · Skin corrosion/irritation No irritant effect.

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Trade name: Affi-Gel® Hz 10x Coupling Buffer

(Contd. of page 4)

- · Serious eye damage/irritation No irritating effect.
- · Respiratory or skin sensitisation No sensitising effects known.

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) (Self-assessment): 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 of together with household garbage. Do not allow product to reach sewage system. Dispose of waste in accordance to applicable national, regional, or local regulations.

- Uncleaned packagings:
- · Recommendation: Disposal must be made according to official regulations.

14 Transport information		
· UN-Number	Met Deminted	
· ADG, ADN, IMDG, IATA	Not Reguated	
· UN proper shipping name		
· ADG	Not Reguated	
	Not Reguated	
· ADN, IMDG, IATA	Not Reguated	
· Transport hazard class(es)		
· ADG, ADN, IMDG, IATA		
· Class	Not Reguated	
· Packing group		
· ADG, IMĎG, IATA	Not Reguated	
		(Contd. on page 6





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Trade name: Affi-Gel® Hz 10x Coupling Buffer

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· · · · · · · · · · · · · · · · · · ·
No
Not applicable.
he Not applicable.
Not dangerous according to the above specifications.
Not Reguated

15 Regulatory information

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

All ingredients are listed.

· Standard for the Uniform Scheduling of Medicines and Poisons

64-19-7 acetic acid, glacial

S2, S5, S6

· Australia: Priority Existing Chemicals

None of the ingredients is listed.

- · Directive 2012/18/EU
- · Named dangerous substances ANNEX I None of the ingredients is listed.
- · National regulations
- · Technical instructions (air):

Class	Share in %
II.	2.5-5

- · Water hazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.
- Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Relevant phrases

H226 Flammable liquid and vapour.

H303 May be harmful if swallowed.

H314 Causes severe skin burns and eye damage.

- · Department issuing SDS: Environmental Health and Safety.
- Contact:

Life Science Group, Environmental Health and Safety, 2000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 741-1000

Diagnostic Group, Environmental Health and Safety, 4000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 724-7000 (Contd. on page 7)



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Safety Data Sheet according to WHS Regulations

Printing date 20.08.2020 Revision: 24.07.2020

Trade name: Affi-Gel® Hz 10x Coupling Buffer

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· Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative Flam. Liq. 3: Flammable liquids – Category 3 Acute Tox. 5: Acute toxicity - oral – Category 5
Skin Corr. 1A: Skin corrosion/irritation – Category 1A
Skin Corr. 3: Skin corrosion/irritation – Category 3

* Data compared to the previous version altered.





Printing date 20.08.2020 Revision: 25.07.2020

Not classified as hazardous according to criteria of Safe Work Australia.

1 Identification

· Product identifier

· Trade name: EconoPak 10 P-6DG

· Article number: 9701030

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

No further relevant information available.

· Application of the substance / the mixture Laboratory chemicals

· Details of the supplier of the safety data sheet

Manufacturer/Supplier:
 Bio-Rad Laboratories Pty. Ltd
 Level 5, 446 Victoria Road
 Gladesville NSW 2111

Australia

Tel 61-2-9914-2800 (1 800 224 354) Fax 61-2-9914-2888

- · Information department: sales.australia @bio-rad.com
- · Emergency telephone number: 61-2-9037-2994

2 Hazard(s) Identification

· Classification of the substance or mixture

The product is not classified, according to the Globally Harmonised System (GHS).

- · Label elements
- · GHS label elements Not Applicable
- · Hazard pictograms Not Applicable
- · Signal word Not Applicable
- · Hazard statements Not Applicable
- · Other hazards
- · Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.

3 Composition and Information on Ingredients

- · Chemical characterisation: Mixtures
- · Description: Mixture of the substances listed below with nonhazardous additions.
- · Dangerous components: Not applicable.
- · Additional information For the wording of the listed hazard phrases refer to section 16.

4 First Aid Measures

- · Description of first aid measures
- · General information No special measures required.

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Safety Data Sheet according to WHS Regulations

Printing date 20.08.2020 Revision: 25.07.2020

Trade name: EconoPak 10 P-6DG

(Contd. of page 1)

- · After inhalation Supply fresh air; consult doctor in case of complaints.
- · After skin contact Generally the product does not irritate the skin.
- · After eye contact Rinse opened eye for several minutes under running water.
- · After swallowing Rinse mouth with water. Seek medical attention and appropriate follow-up.
- · 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 Use fire fighting measures that suit the environment.
- · 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 clothing.
- · Environmental precautions: No special measures required.
- · Methods and material for containment and cleaning up: Pick up mechanically.
- · Reference to other sections

No dangerous substances are released.

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 No special measures required.
- · Information about protection against explosions and fires: No special measures required.
- · Conditions for safe storage, including any incompatibilities
- · Storage
- · Requirements to be met by storerooms and receptacles: According to product specification
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: None.
- · Specific end use(s) No further relevant information available.

8 Exposure controls and personal protection

· Additional information about design of technical systems: No further data; see item 7.

(Contd. on page 3)





Printing date 20.08.2020 Revision: 25.07.2020

Trade name: EconoPak 10 P-6DG

(Contd. of page 2)

- · Control parameters
- Components with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

- · Additional information: The lists that were valid during the creation were used as basis.
- · Exposure controls
- · Personal protective equipment
- · General protective and hygienic measures

The usual precautionary measures should be adhered to when handling chemicals.

- · Protection of hands: Protective gloves.
- · Material of gloves Synthetic gloves
- · Penetration time of glove material

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

· Eye protection: Safety glasses

9 Ph	vsica	al and	C	hemi	cal	P	ro	pert	ies
						-			

Triyoroar aria Orionnoar Frope			
	Information on basic physical and chemical properties		
General Information			
· Appearance:			
Form:	Fluid		
Colour:	White		
Odour:	Odourless		
Odour threshold:	Not determined.		
· pH-value:	Not applicable.		
Change in condition			
Melting point/freezing point:	undetermined		
Initial boiling point and boiling ra	n nge: undetermined		
Flash point:	Not applicable		
•	Not determined.		
Flammability (solid, gaseous)	Not determined.		
Decomposition temperature:	Not determined.		
Self igniting:	Product is not selfigniting.		
Explosive properties:	Not determined.		
Explosion limits:			
Lower:	Not determined.		
Upper:	Not determined.		
Vapour pressure at 20 °C:	23 hPa		
Density:	Not determined		
Relative density	Not determined.		
Vapour density	Not applicable.		

(Contd. on page 4)





Printing date 20.08.2020 Revision: 25.07.2020

Trade name: EconoPak 10 P-6DG

	(Contd. of page 3
· Evaporation rate	Not applicable.
· Solubility in / Miscibility with Water:	Fully miscible
· Partition coefficient: n-octanol/water:	Not determined.
· Viscosity: dynamic: kinematic:	Not applicable. Not applicable.
· Solvent content: Water:	75.0 %
Solids content: · Other information	25.0 % 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
- · 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 No irritant effect.
- · Serious eye damage/irritation No irritating effect.
- · Respiratory or skin sensitisation No sensitising effects known.
- · Additional toxicological information:

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

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.

(Contd. on page 5)





Printing date 20.08.2020 Revision: 25.07.2020

Trade name: EconoPak 10 P-6DG

(Contd. of page 4)

- · Additional ecological information:
- · General notes: Generally not hazardous for water.
- · 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 of together with household garbage. Do not allow product to reach sewage system. Dispose of waste in accordance to applicable national, regional, or local regulations.

- · Uncleaned packagings:
- · **Recommendation:** Disposal must be made according to official regulations.
- · Recommended cleansing agent: Water, if necessary with cleansing agents.

Transport information	
UN-Number ADG, ADN, IMDG, IATA	Not Reguated
UN proper shipping name ADG	Not Reguated Not Reguated
ADN, IMDG, IATA	Not Reguated
Transport hazard class(es)	
ADG, ADN, IMDG, IATA Class	Not Reguated
Packing group ADG, IMDG, IATA	Not Reguated
Environmental hazards: Marine pollutant:	No
Special precautions for user	Not applicable.
Transport in bulk according to Annex II of N IBC Code	flarpol and the Not applicable.
Transport/Additional information:	Not dangerous according to the above specifications.
UN "Model Regulation":	Not Reguated

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(Contd. on page 6)





Printing date 20.08.2020 Revision: 25.07.2020

Trade name: EconoPak 10 P-6DG

(Contd. of page 5)

15 Regulatory information

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

7732-18-5 water

· Standard for the Uniform Scheduling of Medicines and Poisons

None of the ingredients is listed.

· Australia: Priority Existing Chemicals

None of the ingredients is listed.

- · Directive 2012/18/EU
- · Named dangerous substances ANNEX I None of the ingredients is listed.
- · National regulations
- · Water hazard class: Generally not hazardous for water.
- · Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- · Department issuing SDS: Environmental Health and Safety.
- · Contact:

Life Science Group, Environmental Health and Safety, 2000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 741-1000

Diagnostic Group, Environmental Health and Safety, 4000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 724-7000

· Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

* Data compared to the previous version altered.

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Printing date 20.08.2020 Revision: 24.07.2020

Hazardous according to criteria of Safe Work Australia.

1 Identification

· Product identifier

· Trade name: Affi-Gel® Hz Oxidizer · Article number: 1536055, 9701044

· CAS Number: 7790-28-5 · EC number: 232-197-6

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

No further relevant information available.

- · Application of the substance / the mixture Laboratory chemicals
- · Details of the supplier of the safety data sheet
- · Manufacturer/Supplier: Bio-Rad Laboratories Ptv. Ltd Level 5. 446 Victoria Road Gladesville NSW 2111

Australia

Tel 61-2-9914-2800 (1 800 224 354) Fax 61-2-9914-2888

- · Information department: sales.australia@bio-rad.com
- · Emergency telephone number: 61-2-9037-2994

2 Hazard(s) Identification

· Classification of the substance or mixture

Ox. Sol. 2 H272 May intensify fire; oxidiser. Acute Tox. 2 H310 Fatal in contact with skin. H315 Causes skin irritation. Skin Irrit. 2

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





GHS03 GHS06

- · Signal word Danger
- · Hazard-determining components of labelling: sodium periodate
- · Hazard statements

H272 May intensify fire; oxidiser. H310 Fatal in contact with skin.

(Contd. on page 2)



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Safety Data Sheet according to WHS Regulations

Printing date 20.08.2020 Revision: 24.07.2020

Trade name: Affi-Gel® Hz Oxidizer

(Contd. of page 1)

H315 Causes skin irritation.

H335 May cause respiratory irritation.

· Precautionary statements

P210 Keep away from heat. - No smoking.

P220 Keep/Store away from clothing/combustible materials.

P221 Take any precaution to avoid mixing with combustibles.

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P405 Store locked up.

P501 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:

7790-28-5 sodium periodate

- · Identification number(s):
- · EC number: 232-197-6
- · Additonal information: For the wording of the listed risk phrases refer to section 16.

4 First Aid Measures

- · Description of first aid measures
- · General information Immediately remove any clothing soiled by the product.
- · After inhalation Supply fresh air; consult doctor in case of complaints.
- · After skin contact

Immediately wash with water and soap and rinse thoroughly.

Immediately rinse with water.

- · After eye contact Rinse opened eye for several minutes under running water.
- · After swallowing Rinse mouth with water. Seek medical attention and appropriate follow-up.
- · 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 Use fire fighting measures that suit the environment.
- · Special hazards arising from the substance or mixture No further relevant information available.
- · Advice for firefighters
- · Protective equipment: Wear self-contained respiratory protective device.

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Safety Data Sheet according to WHS Regulations

Printing date 20.08.2020 Revision: 24.07.2020

Trade name: Affi-Gel® Hz Oxidizer

(Contd. of page 2)

6 Accidental Release Measures

- · Personal precautions, protective equipment and emergency procedures Wear protective clothing.
- · 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

No special measures required.

Thorough dedusting.

Ensure good ventilation/exhaustion at the workplace.

- · Information about protection against explosions and fires: Protect from heat.
- · Conditions for safe storage, including any incompatibilities
- · Storage
- · Requirements to be met by storerooms and receptacles: According to product specification
- · Information about storage in one common storage facility: Not required.
- Further information about storage conditions:

Keep receptacle tightly sealed.

Protect from heat and direct sunlight.

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

8 Exposure controls and personal protection

- · Additional information about design of technical systems: No further data; see item 7.
- · Control parameters
- · Components with limit values that require monitoring at the workplace: Not required.
- · Additional information: The lists that were valid during the creation 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 skin.

Breathing equipment:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

(Contd. on page 4)





Printing date 20.08.2020 Revision: 24.07.2020

Trade name: Affi-Gel® Hz Oxidizer

(Contd. of page 3)

- Protection of hands: Protective gloves. Material of gloves Synthetic gloves
- · Penetration time of glove material

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

· Eye protection: Safety glasses

Information on basic physical and ch	nomical proporties		
General Information	emical properties		
Appearance:			
Form:	Solid.		
Colour:	White		
Odour:	Odourless		
Odour threshold:	Not determined.		
pH-value:	Not applicable.		
Change in condition			
Melting point/freezing point:	300 °C		
Initial boiling point and boiling rang	ge: undetermined		
Flash point:	Not applicable		
-	Not determined.		
Flammability (solid, gaseous)	Product is not flammable.		
Decomposition temperature:	Not determined.	Not determined.	
Self igniting:	Not determined.		
Explosive properties:	Not determined.		
Explosion limits:			
Lower:	Not determined.		
Upper:	Not determined.		
Vapour pressure:	Not applicable.		
Density at 20 °C:	3.865 g/cm³		
Relative density	Not determined.		
Vapour density	Not applicable.		
Evaporation rate	Not applicable.		
Solubility in / Miscibility with			
Water:	Fully miscible		
Partition coefficient: n-octanol/water:	Not determined.		
Viscosity:			
dynamic:	Not applicable.		
kinematic:	Not applicable.		
Solids content:	100.0 %		



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Safety Data Sheet according to WHS Regulations

Printing date 20.08.2020 Revision: 24.07.2020

Trade name: Affi-Gel® Hz Oxidizer

(Contd. of page 4)

· 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
- · 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 that are relevant for classification:

7790-28-5 sodium periodate

Dermal LD50 58 mg/kg (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: 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) (Self-assessment): 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.

- AU





Printing date 20.08.2020 Revision: 24.07.2020

Trade name: Affi-Gel® Hz Oxidizer

(Contd. of page 5)

13 Disposal considerations

- · Waste treatment methods
- · Recommendation

Must not be disposed of together with household garbage. Do not allow product to reach sewage system. Dispose of waste in accordance to applicable national, regional, or local regulations.

- · Uncleaned packagings:
- · Recommendation: Disposal must be made according to official regulations.
- · Recommended cleansing agent: Water, if necessary with cleansing agents.

UN-Number	
ADG, IMDG, IATA	UN1479
UN proper shipping name ADG	1479 OXIDIZING SOLID, N.O.S. 1479 OXIDIZING SOLID, N.O.S.
IMDG IATA	OXIDIZING SOLID, N.O.S. OXIDIZING SOLID, N.O.S. (sodium periodate)
Transport hazard class(es)	
ADG, IMDG, IATA Class Label	5.1 Oxidising substances. 5.1
Packing group ADG, IMDG, IATA	II
Environmental hazards: Marine pollutant:	No
Special precautions for user Hazard identification number (Kemler code): Stowage Category Segregation Code	Warning: Oxidising substances. 50 B SG38 Stow "separated from" SGG2-ammonium compound SG49 Stow "separated from" SGG6-cyanides SG60 Stow "separated from" SGG16-peroxides SG61 Stow "separated from" SGG15-powdered metals
Transport in bulk according to Annex II of Marpol a IBC Code	and the Not applicable.
Transport/Additional information:	• •
ADG Limited quantities (LQ) Excepted quantities (EQ)	1 kg Code: E2 Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 500 g

(Contd. on page 7)





Printing date 20.08.2020 Revision: 24.07.2020

Trade name: Affi-Gel® Hz Oxidizer

	(Contd. of page 6)
· Transport category · Tunnel restriction code	2 F
· IMDG	
· Limited quantities (LQ)	1 kg
Excepted quantities (EQ)	Code: E2
	Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 500 g
· UN "Model Regulation":	UN 1479 OXIDIZING SOLID, N.O.S., 5.1, 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

Substance is not listed.

· Australia: Priority Existing Chemicals

Substance is not listed.

- · Directive 2012/18/EU
- · Named dangerous substances ANNEX I Substance is not listed.
- · Seveso category

H2 ACUTE TOXIC

P8 OXIDISING LIQUIDS AND SOLIDS

- \cdot Qualifying quantity (tonnes) for the application of lower-tier requirements $50\ t$
- · Qualifying quantity (tonnes) for the application of upper-tier requirements 200 t
- · National regulations
- · Water hazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.
- · Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- · Department issuing SDS: Environmental Health and Safety.
- Contact:

Life Science Group, Environmental Health and Safety, 2000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 741-1000

Diagnostic Group, Environmental Health and Safety, 4000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 724-7000

· Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

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Safety Data Sheet according to WHS Regulations

Printing date 20.08.2020 Revision: 24.07.2020

Trade name: Affi-Gel® Hz Oxidizer

(Contd. of page 7)

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative Ox. Sol. 2: Oxidizing solids – Category 2

Acute Tox. 2: Acute toxicity - dermal – Category 2 Skin Irrit. 2: Skin corrosion/irritation – Category 2

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

· * Data compared to the previous version altered.