

Safety Data Sheet

according to WHS Regulations

Printing date 29.01.2021

Revision: 20.08.2020

Hazardous according to criteria of Safe Work Australia.

1 Identification

- **Product identifier**
- **Trade name:** ReadyPrep Sequential Extraction Kit Reagent 3
- **Article number:** 1632104, 9703562
- **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**
Acute Tox. 5 H303 May be harmful if swallowed.
Acute Tox. 5 H333 May be harmful if inhaled.
Carc. 2 H351 Suspected of causing cancer.
Repr. 2 H361d Suspected of damaging the unborn child.
Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.

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



GHS08 GHS09

- **Signal word** Warning
- **Hazard-determining components of labelling:**
thiourea
1-(4-biphenyloxy)-3,3-dimethyl-1-(1H-1,2,4-triazol-1-yl)-2-butanol
- **Hazard statements**
H303 May be harmful if swallowed.
H333 May be harmful if inhaled.
H351 Suspected of causing cancer.
H361d Suspected of damaging the unborn child.

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H411 Toxic to aquatic life with long lasting effects.

· **Precautionary statements**

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P304+P312 IF INHALED: Call a POISON CENTER/doctor if you feel unwell.

P308+P313 IF exposed or concerned: Get medical advice/attention.

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:**

62-56-6	thiourea	25-35%
	Carc. 2, H351; Repr. 2, H361 Aquatic Chronic 2, H411 Acute Tox. 4, H302 Acute Tox. 5, H313	
55179-31-2	1-(4-biphenyloxy)-3,3-dimethyl-1-(1H-1,2,4-triazol-1-yl)-2-butanol	2.5-5%
	Acute Tox. 3, H331 Acute Tox. 4, H302; Acute Tox. 4, H312	

· **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.

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- **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 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:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to item 13.
- **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** Open and handle receptacle with care.
- **Information about protection against explosions and fires:** Keep respiratory protective device available.
- **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.
- **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:**
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**
Keep away from foodstuffs, beverages and feed.
Wash hands before breaks and at the end of work.
Store protective clothing separately.
- **Breathing equipment:** Not necessary if room is well-ventilated.

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- **Protection of hands:** Protective gloves.
- **Material of gloves:** Synthetic gloves
- **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:** Safety glasses

9 Physical and Chemical Properties

· Information on basic physical and chemical properties

· General Information

· Appearance:

Form:	Fluid
Colour:	Light yellow
Odour:	Odourless
Odour threshold:	Not determined.

· **pH-value:** Not determined.

· 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.

· **Ignition temperature:** 440 °C

· **Decomposition temperature:** Not determined.

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

· **Explosive properties:** Not determined.

· Explosion limits:

Lower:	Not determined.
Upper:	Not determined.

· **Vapour pressure:** Not determined.

· **Density:** Not determined

· **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.

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· Solvent content:	
Water:	0.2 %
· Solids content:	99.7 %
· 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:**

57-13-6 urea

Oral	LD50	14,500 mg/kg (rat)
------	------	--------------------

62-56-6 thiourea

Oral	LD50	1,750 mg/kg (rat)
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Dermal	LD50	2,800 mg/kg (rbt)
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- **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:**
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:
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
Carc. 2, Repr. 2

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.

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- **Ecotoxical effects:**
- **Remark:** 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.
 Danger to drinking water if even small quantities leak into the ground.
 Also poisonous for fish and plankton in water bodies.
 Toxic for aquatic organisms
- **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

- | | |
|---|--|
| <ul style="list-style-type: none"> · UN-Number · ADG, IMDG, IATA | UN2810 |
| <ul style="list-style-type: none"> · UN proper shipping name · ADG | 2810 TOXIC LIQUID, ORGANIC, N.O.S. (thiourea, 1-(4-biphenyloxy)-3,3-dimethyl-1-(1H-1,2,4-triazol-1-yl)-2-butanol), ENVIRONMENTALLY HAZARDOUS
2810 TOXIC LIQUID, ORGANIC, N.O.S. (thiourea, β-([1,1'-biphenyl]-4-yloxy)-α-tert-butyl-1H-1,2,4-triazol-1-ethanol) |
| <ul style="list-style-type: none"> · IMDG, IATA | TOXIC LIQUID, ORGANIC, N.O.S. (thiourea, 1-(4-biphenyloxy)-3,3-dimethyl-1-(1H-1,2,4-triazol-1-yl)-2-butanol) |
| <ul style="list-style-type: none"> · Transport hazard class(es) · ADG, IMDG, IATA · Class · Label | 6.1 Toxic substances.
6.1 |
| <ul style="list-style-type: none"> · Packing group · ADG, IMDG, IATA | III |

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· Environmental hazards:	No
· Marine pollutant:	Symbol (fish and tree)
· Special marking (ADG):	
· Special precautions for user	Warning: Toxic substances.
· Hazard identification number (Kemler code):	60
· EMS Number:	F-A,S-A
· Stowage Category	A
· Stowage Code	SW2 Clear of living quarters.
· Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable.
· Transport/Additional information:	
· ADG	
· Limited quantities (LQ)	5L
· Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· Transport category	2
· Tunnel restriction code	E
· IMDG	
· Limited quantities (LQ)	5L
· Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· UN "Model Regulation":	UN 2810 TOXIC LIQUID, ORGANIC, N.O.S. (THIOUREA, 1-(4-BIPHENYLYLOXY)-3,3-DIMETHYL-1-(1H-1,2,4-TRIAZOL-1-YL)-2-BUTANOL), 6.1, III, ENVIRONMENTALLY HAZARDOUS

15 Regulatory information

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

57-13-6	urea
62-56-6	thiourea
55179-31-2	1-(4-biphenylyloxy)-3,3-dimethyl-1-(1H-1,2,4-triazol-1-yl)-2-butanol
77-86-1	Tris(hydroxymethyl)aminomethane
7732-18-5	water

· **Standard for the Uniform Scheduling of Medicines and Poisons**

62-56-6	thiourea	S4, S6
77-86-1	Tris(hydroxymethyl)aminomethane	S4

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· 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.

· Seveso category E2 Hazardous to the Aquatic Environment

· Qualifying quantity (tonnes) for the application of lower-tier requirements 200 t

· Qualifying quantity (tonnes) for the application of upper-tier requirements 500 t

· National regulations
· Technical instructions (air):

Class	Share in %
I	20-35

· Water hazard class: Water hazard class 2 (Self-assessment): 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

H302 Harmful if swallowed.

H312 Harmful in contact with skin.

H313 May be harmful in contact with skin.

H331 Toxic if inhaled.

H351 Suspected of causing cancer.

H361 Suspected of damaging fertility or the unborn child.

H411 Toxic to aquatic life with long lasting effects.

· 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

Acute Tox. 4: Acute toxicity - oral - Category 4

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

Acute Tox. 3: Acute toxicity - inhalation - Category 3

Carc. 2: Carcinogenicity - Category 2

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Repr. 2: Reproductive toxicity – Category 2
Repr. 2: Reproductive toxicity – Category 2
Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2
* **Data compared to the previous version altered.**

AU