

Safety Data Sheet

according to HPR, Schedule 1

Printing date 01/29/2021

Reviewed on 08/20/2020

1 Identification

- **Product identifier**
- **Trade name:** ReadyPrep Sequential Extraction Kit Reagent 3
- **Catalog or product number:** 1632104, 9703562
- **Application of the substance / the mixture** Laboratory chemicals
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Bio-Rad Laboratories (Canada) Ltd.
1329 Meyerside Drive
Mississauga, Ontario
L5T 1C9
Canada
- **Information department:** sales_canada@bio-rad.com
- **Emergency telephone number:** 1-800-424-6723 option 2

phone: 1-800-268-0213 Fax: 1-888-913-9779

2 Hazard identification

- **Classification of the substance or mixture**
Carcinogenicity – Category 2 H351 Suspected of causing cancer.
Reproductive Toxicity - Category 2 H361 Suspected of damaging fertility or the unborn child.
- **Label elements**
- **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms**



GHS08

- **Signal word** Warning
- **Hazard-determining components of labeling:**
thiourea
- **Hazard statements**
H351 Suspected of causing cancer.
H361 Suspected of damaging fertility or the unborn child.
- **Precautionary statements**
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
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.

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3 Composition/Information on ingredients

- **Chemical characterization: Mixtures**
- **Description:** Mixture of the substances listed below with non-hazardous additions.

- **Listing of dangerous and non-hazardous components:**

62-56-6	thiourea Carcinogenicity – Category 2, H351; Reproductive Toxicity - Category 2, H361 Acute Toxicity (Oral) - Category 4, H302	25-30% w/w *
55179-31-2	1-(4-biphenyloxy)-3,3-dimethyl-1-(1H-1,2,4-triazol-1-yl)-2-butanol Acute Toxicity (Inhalation) - Category 3, H331 Acute Toxicity (Oral) - Category 4, H302; Acute Toxicity (Dermal) – Category 4, H312	1-5% w/w *

* Actual concentration ranges are withheld as a trade secret.

- **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 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.

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· 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/ 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. Adequate ventilation required.**· 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:** Liquid

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Color:	Light yellow
· Odor:	Odorless
· Odor threshold:	Not determined.
· pH-value:	Not determined.
· Change in condition	
Melting point/Melting range:	undetermined
Boiling point/Boiling range:	undetermined
· Flash point:	Not applicable Not determined.
· Flammability (solid, gaseous)	Not applicable.
· Ignition temperature:	440 °C
· Decomposition temperature:	Not determined.
· Auto igniting:	Product is not selfigniting.
· Danger of explosion:	Not determined.
· Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
· Vapor pressure:	Not determined.
· Density:	Not determined
· Relative density	Not determined.
· Vapor 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:	
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

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- **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 for hazardous components per OSHA criteria:

57-13-6 urea

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

- **on the skin:** No irritant effect.

- **on the eye:** No irritant effect.

- **Sensitization:** No sensitizing 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:

· Carcinogenic categories

· IARC (International Agency for Research on Cancer)

62-56-6	thiourea	3
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· NTP (National Toxicology Program)

62-56-6	thiourea	R
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12 Ecological information

· Toxicity

- **Aquatic toxicity:** No further relevant information available.

- **Persistence and degradability** No further relevant information available.

· Behavior 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 2 (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.

· Results of PBT and vPvB assessment

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

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· **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**

· **DOT/TDG, ADR, IMDG, IATA**

UN2810

· **UN proper shipping name**

· **DOT/TDG**

Toxic, liquids, organic, n.o.s. (thiourea, 1-(4-biphenyloxy)-3,3-dimethyl-1-(1H-1,2,4-triazol-1-yl)-2-butanol)

· **ADR**

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

· **IMDG, IATA**

2810 TOXIC LIQUID, ORGANIC, N.O.S. (thiourea, β-([1,1'-biphenyl]-4-yloxy)-α-tert-butyl-1H-1,2,4-triazol-1-ethanol) TOXIC LIQUID, ORGANIC, N.O.S. (thiourea, 1-(4-biphenyloxy)-3,3-dimethyl-1-(1H-1,2,4-triazol-1-yl)-2-butanol)

· **Transport hazard class(es)**

· **DOT, ADR, IMDG, IATA**

· **Class**

6.1 Toxic substances

· **Label**

6.1

· **Packing group**

· **DOT/TDG, ADR, IMDG, IATA**

III

· **Environmental hazards:**

· **Marine pollutant:**

No

· **Special marking (ADR):**

Symbol (fish and tree)

· **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 MARPOL73/78 and the IBC Code**

Not applicable.

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· **Transport/Additional information:**

· **DOT/TDG**

· **Quantity limitations**

Void

Void

· **ADR**

· **Excepted quantities (EQ)**

Code: E1

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 1000 ml

· **IMDG**

· **Limited quantities (LQ)**

· **Excepted quantities (EQ)**

5L

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**

· **SARA (Superfund Amendments and Reauthorization Act of 1986 - USA)**

· **Section 302/304 (40CFR355.30 / 40CFR355.40):**

None of the ingredients is listed.

· **Section 313 (40CFR372.65):**

62-56-6 thiourea

· **TSCA (Toxic Substances Control Act):**

57-13-6 urea

ACTIVE

62-56-6 thiourea

ACTIVE

77-86-1 Tris(hydroxymethyl)aminomethane

ACTIVE

7732-18-5 water

ACTIVE

· **MAK (German Maximum Workplace Concentration)**

62-56-6 thiourea

3B

· **National regulations**

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations

· **Technical instructions (air):**

Class	Share in %
I	20-30

· **Water hazard class:** Water hazard class 2 (Self-assessment): hazardous for water.

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- **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

- **Date of the latest revision of the safety data sheet** 01/29/2021 / -

- **Abbreviations and acronyms:**

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

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

- *** Data compared to the previous version altered.**