

SAFETY DATA SHEET

Legal Entity / Contact Address

239/2, Rajdamri Road, Lumpini,

Pathumwan, Bangkok 10330

Thailand

1st and 2nd Floor, Lumpini 1 Building

Bio-Rad Laboratories Ltd.

This safety data sheet was created pursuant to the requirements of: GB/T 16483-2008, GB/T 17519-2013

Product Name UriSelect 4, 20 x 90 mm Plates

Revision date 31-Mar-2023

Revision Number 1

SECTION 1: Identification of the substance/mixture and of the company/undertaking

Product identifier

Product Name UriSelect 4, 20 x 90 mm Plates

Catalogue Number(s) 63726

Other means of identification

Pure substance/mixture Mixture

Details of the supplier of the safety data sheet

Corporate HeadquartersManufacturerBio-Rad Laboratories Inc.Bio-Rad

1000 Alfred Nobel Drive 3 boulevard Raymond Poincaré Hercules, CA 94547 92430 Marnes-la-Coquette

USA Frai

e-mail: fds-msds.fr@bio-rad.com

Technical Service +66 2 652 8313

ctsthailand@bio-rad.com

Emergency telephone number

24 Hour Emergency Phone Number CHEMTREC Hong Kong: 800-968-793

Recommended use of the chemical and restrictions on use

Recommended use Restricted to professional users

In vitro diagnostic

SECTION 2: Hazards identification

Emergency Overview

Contains a known or suspected carcinogen

Appearance gel Physical state Solid Odour Varies

Classification of the substance or mixture

Carcinogenicity Category 1A

Label elements

Review Date 31-Mar-2023



Signal word Danger

Hazard statements May cause cancer

Precautionary statements

Prevention

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

Response

IF exposed or concerned: Get medical advice/attention

Disposal

Dispose of contents/container in accordance with local, regional, national, and international regulations as applicable

Physical and chemical hazards

Not applicable.

Health hazards

Immediate Health Effects: Not applicable.

Chronic effects: Contains a known or suspected carcinogen.

Environmental hazards

Not applicable

Other hazards which do not result in classification

Contains animal source material

SECTION 3: Composition/information on ingredients

Substance

Not applicable.

Mixture

Chemical name	Weight-%	CAS No
Quartz	1 - 2.5	14808-60-7
N,N-Dimethylformamide	0.1 - 0.299	68-12-2

SECTION 4: First aid measures

Description of necessary first aid measures

General advice IF exposed or concerned: Get medical advice/attention.

Inhalation Remove to fresh air.

Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Eye contact

Consult a doctor.

Skin contact Wash skin with soap and water.

Ingestion Rinse mouth thoroughly with water.

Most important symptoms and effects, both acute and delayed No information available.

No information available. For emergency responders

Note to doctors Treat symptomatically.

SECTION 5: Firefighting measures

Extinguishing media

Suitable Extinguishing Media Use extinguishing measures that are appropriate to local circumstances and the

surrounding environment.

Unsuitable extinguishing media No information available.

Specific hazards arising from the

chemical

No information available.

Special protective actions for

fire-fighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.

Use personal protection equipment.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions See section 8 for more information.

Other information Refer to protective measures listed in Sections 7 and 8.

For emergency responders Use personal protection recommended in Section 8.

See Section 12 for additional Ecological Information. **Environmental precautions**

Methods and material for containment and cleaning up Prevent further leakage or spillage if safe to do so. Pick up and transfer to properly labelled

containers.

Precautions to prevent secondary

<u>hazards</u>

Clean contaminated objects and areas thoroughly observing environmental regulations.

SECTION 7: Handling and storage

Precautions for safe handling Handle in accordance with good industrial hygiene and safety practice. Avoid contact with

skin, eyes or clothing. Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product. See Section 8 for information on

appropriate personal protective equipment.

Conditions for safe storage, including any incompatibilities

Store according to product and label instructions.

Incompatible materials None known based on information supplied.

SECTION 8: Exposure controls/personal protection

Occupational exposure limits

Chemical name	China	ACGIH TLV
Quartz - 14808-60-7	TWA: 0.7 mg/m³ total dust TWA: 0.3 mg/m³ respirable dust TWA: 1 mg/m³ total dust TWA: 0.7 mg/m³ respirable dust TWA: 0.5 mg/m³ total dust TWA: 0.2 mg/m³ respirable dust	TWA: 0.025 mg/m³ respirable particulate matter
	G1(C**)	
N,N-Dimethylformamide - 68-12-2	TWA: 20 mg/m ³ Skin* G2A(C**)	TWA: 5 ppm S*

Note

See section 16 for terms and abbreviations

Biological occupational exposure limits

	Chemical name	Biological standards	Monitoring and observation	ACGIH
			processes	
	N,N-Dimethylformamide -	135 nmol/g Hb - blood		30 mg/L - urine (Total
	68-12-2	(N-Methylcarbamoylated haemo		N-methylformamide) - end of
-		globin adduct) - anytime after 4		shift
-		months of exposure		30 mg/L - urine
-		·		(N-Acetyl-S-(N-methylcarbamoy
				l)cysteine) - end of shift at end of
-				workweek

Monitoring and observation processes

No applicable information was found.

Showers **Engineering controls**

Eyewash stations Ventilation systems.

Individual protection measures, such as personal protective equipment

Wear safety glasses with side shields (or goggles). Eye/face protection

Skin and body protection Wear suitable protective clothing.

Hand protection Wear suitable gloves.

Respiratory protection No protective equipment is needed under normal use conditions. If exposure limits are

exceeded or irritation is experienced, ventilation and evacuation may be required.

Do not eat, drink or smoke when using this product. Wash hands before breaks and **General hygiene considerations**

immediately after handling the product.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance Colour Opaque

Solid Physical state Varies Odour

Odour threshold No information available

Property Values Remarks • Method

None known Ha Melting point / freezing point No data available None known Boiling point / boiling range No data available None known Flash point No data available None known **Evaporation rate** No data available None known Flammability (solid, gas) No data available None known

None known

Flammability Limit in Air Upper flammability or explosive No data available

limits

Lower flammability or explosive No data available

limits

Vapour pressure No data available None known Vapour density No data available None known Relative density No data available None known Water solubility No data available None known Solubility(ies) No data available None known **Partition coefficient** No data available None known

215 °C **Autoignition temperature**

No data available **Decomposition temperature** None known Kinematic viscosity No data available None known Dynamic viscosity No data available None known

Additional information

Explosive properties Not applicable **Oxidising properties** Not applicable

SECTION 10: Stability and reactivity

Stable under normal conditions. **Stability**

Possibility of hazardous reactions None under normal processing.

Sensitivity to mechanical impact None. Sensitivity to static discharge None.

Conditions to avoid None known based on information supplied.

Incompatible materials None known based on information supplied.

Hazardous decomposition products None known based on information supplied.

SECTION 11: Toxicological information

Acute toxicity

Numerical measures of toxicity

Component Information

	Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Γ	N,N-Dimethylformamide	= 2800 mg/kg (Rat)	= 1100 mg/kg (Rat)	> 5.85 mg/L (Rat) 4 h

Skin corrosion/irritationBased on available data, the classification criteria are not met.

Serious eye damage/eye irritation Based on available data, the classification criteria are not met.

Respiratory or skin sensitisation Based on available data, the classification criteria are not met.

Germ cell mutagenicity Based on available data, the classification criteria are not met.

Carcinogenicity Contains a known or suspected carcinogen. Classification based on data available for

ingredients. May cause cancer.

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	China	IARC
Quartz	Carcinogenic to humans	Group 1
N,N-Dimethylformamide	Probably carcinogenic to humans	Group 2A

Legend

IARC (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans

Group 2A - Probably Carcinogenic to Humans

Reproductive toxicity Based on available data, the classification criteria are not met.

Specific target organ toxicity —

single exposure

Based on available data, the classification criteria are not met.

Specific target organ toxicity —

repeated exposure

Based on available data, the classification criteria are not met.

Target organ effects Respiratory system. Eyes. Lungs.

Aspiration hazard Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

Ecotoxicity

Unknown aquatic toxicity 0 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

Chemical name	Algae/aquatic plants	Fish	Crustacea
N,N-Dimethylformamide	EC50: >500mg/L (96h,	LC50: =6300mg/L (96h, Lepomis	EC50: =7500mg/L (48h,
	Desmodesmus subspicatus)	macrochirus)	Daphnia magna)
		LC50: =9800mg/L (96h,	EC50: =8485mg/L (48h,
		Oncorhynchus mykiss)	Daphnia magna)
		LC50: =10410mg/L (96h,	EC50: 6800 - 13900mg/L (48h,
		Pimephales promelas)	Daphnia magna)

<u>Persistence and degradability</u> No information available.

Bioaccumulative potential There is no data for this product.

Component Information

Chemical name	Partition coefficient
N,N-Dimethylformamide	-1.028

Mobility in soil No information available.

SECTION 13: Disposal considerations

Waste chemicals Dispose of in accordance with local regulations. Dispose of waste in accordance with

environmental legislation.

<u>Contaminated packaging</u> Do not reuse empty containers.

SECTION 14: Transport information

IMDG Not regulated

Transport in bulk according to No information available

Annex II of MARPOL and the IBC

Code

<u>IATA</u> Not regulated

<u>China</u> Not regulated

Special precautions for user

Please refer to the applicable dangerous goods regulations for additional information

SECTION 15: Regulatory information

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

National regulations

Law of the People's Republic of China on Prevention and Control of Occupational Diseases

Catalogue of occupational hazard factors: Listed. Inhalation of dust/particles.

Chemical hazards.

Catalogue of occupational diseases:

Listed. pneumoconiosis. Occupational

poisoning.

Chemical name	Category
Quartz	Inhalation of dust/particles
N,N-Dimethylformamide	Chemical hazards

Regulations on the Control over Safety of Hazardous Chemicals

<u>Inventory of hazardous chemicals</u>

The table below indicates ingredients

above the cut-off threshold considered as relevant which are listed. Weight-%

0

Chemical name	Inventory of hazardous chemicals
N,N-Dimethylformamide	Listed

GB 18218-2009 Identification of major hazard installations for dangerous chemicals Not applicable

List of hazardous chemicals under priority management Not applicable

Regulations on Labour Protection in Workplaces Where Toxic Substances Are Used

Inventory of highly toxic goods

Not applicable

Regulations for Environmental Management on the First Import of Chemicals and the Import and Export of Toxic Chemicals

List of toxic chemicals severely restricted for import and export in China Not applicable

Measures for the Environmental Management of New Chemical Substances

Review Date 31-Mar-2023

IECSC - China Inventory of Existing Chemical Substances
Contact supplier for inventory compliance status.

International Regulations

The Montreal Protocol on Substances that Deplete the Ozone Layer Not applicable

The Stockholm Convention on Persistent Organic Pollutants Not applicable

The Rotterdam Convention Not applicable

SECTION 16: Other information

Prepared By Bio-Rad Laboratories, Environmental Health and Safety

Revision date 31-Mar-2023

Revision Note Significant changes throughout SDS. Review all sections.

Abbreviations and acronyms

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA TWA (time-weighted average) STEL STEL (Short Term Exposure Limit)

Ceiling Maximum limit value * Skin designation

C Carcinogen

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)
U.S. Environmental Protection Agency ChemView Database

European Food Safety Authority (EFSA) EPA (Environmental Protection Agency) Acute Exposure Guideline Level(s) (AEGL(s))

U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act

U.S. Environmental Protection Agency High Production Volume Chemicals

Food Research Journal

Hazardous Substance Database

International Uniform Chemical Information Database (IUCLID)

Japan GHS Classification

Australian National Industrial Chemicals Notification and Assessment Scheme (NICNAS)

NIOSH (National Institute for Occupational Safety and Health)

National Library of Medicine's ChemID Plus (NLM CIP)

National Library of Medicine's PubMed database (NLM PUBMED)

National Toxicology Program (NTP)

New Zealand's Chemical Classification and Information Database (CCID)

Organisation for Economic Co-operation and Development Environment, Health, and Safety Publications Organisation for Economic Co-operation and Development High Production Volume Chemicals Programme

Organisation for Economic Co-operation and Development Screening Information Data Set

RTECS (Registry of Toxic Effects of Chemical Substances)

World Health Organization

Disclaimer

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End of Safety Data Sheet