



# SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of:  
Canada WHMIS 2015 which includes the amended Hazardous Products Act (HPA) and the Hazardous Products Regulation (HPR)

Revision date 11-Jun-2024

Revision Number 1

## 1. Identification

### Product identifier

Product Name Celselect Direct Enum. Cartridge

### Other means of identification

Catalog Number(s) CEL84061

### Recommended use of the chemical and restrictions on use

Recommended use Laboratory chemicals

Restrictions on use No information available

### Details of the supplier of the safety data sheet

#### Corporate Headquarters

Bio-Rad Laboratories Inc.  
1000 Alfred Nobel Drive  
Hercules, CA 94547  
USA

#### Manufacturer Address

Bio-Rad Laboratories, Life Science Group  
2000 Alfred Nobel Drive  
Hercules, California 94547  
USA

#### Legal Entity / Contact Address

Bio-Rad Laboratories (Canada) Ltd.  
1329 Meyerside Drive  
Mississauga, ON L5T 1C9  
Canada

#### Technical Service

1-800-361-1808  
support@bio-rad.com

### Emergency telephone number

24 Hour Emergency Phone Number CHEMTREC Canada:1 (800) 424-9300

## 2. Hazard(s) identification

### Classification

|                           |            |
|---------------------------|------------|
| Respiratory sensitization | Category 1 |
| Skin sensitization        | Category 1 |
| Carcinogenicity           | Category 2 |

### Label elements

#### **Danger**

#### **Hazard statements**

May cause allergy or asthma symptoms or breathing difficulties if inhaled  
May cause an allergic skin reaction  
Suspected of causing cancer

**Precautionary Statements - Prevention**

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

Avoid breathing dust/fume/gas/mist/vapors/spray

In case of inadequate ventilation wear respiratory protection

Contaminated work clothing should not be allowed out of the workplace

**Precautionary Statements - Response**

IF exposed or concerned: Get medical advice/attention

**Skin**

IF ON SKIN: Wash with plenty of water and soap

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

Take off contaminated clothing and wash it before reuse

**Inhalation**

IF INHALED: Remove person to fresh air and keep comfortable for breathing

If experiencing respiratory symptoms: Call a POISON CENTER or doctor

**Precautionary Statements - Disposal**

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

**Other information**

Contains animal source material. (Goat).

**3. Composition/information on ingredients****Substance**

Not applicable.

**Mixture**

| Component | Description                                     |
|-----------|---|
| CEL50113  | Celselect Slide Direct Enumeration Reagents     |
| 12020942  | Celselect Slide Direct Enumeration Reagents 2.0 |

| Chemical name    | CAS No.    | Weight-%     | Hazardous Material<br>Information Review Act<br>registry number<br>(HMIRA registry #) | Date HMIRA filed and<br>date exemption granted<br>(if applicable) |
|------------------|------------|--------------|---|---|
| Paraformaldehyde | 30525-89-4 | 0.1 - 0.299  | -   |   |
| Sodium azide     | 26628-22-8 | 0.01 - 0.099 | -   |   |

## 4. First-aid measures

### Description of first aid measures

|   |  |
|---|--|
| <b>General advice</b>                     | Show this safety data sheet to the doctor in attendance. IF exposed or concerned: Get medical advice/attention.  |
| <b>Inhalation</b>                         | May cause allergic respiratory reaction. If breathing has stopped, give artificial respiration. Get medical attention immediately. Remove to fresh air. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation.  |
| <b>Eye contact</b>                        | Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.   |
| <b>Skin contact</b>                       | Wash with soap and water. May cause an allergic skin reaction. In the case of skin irritation or allergic reactions see a physician.   |
| <b>Ingestion</b>                          | May produce an allergic reaction. Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Get immediate medical advice/attention.  |
| <b>Self-protection of the first aider</b> | Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Avoid contact with skin, eyes or clothing. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Use personal protective equipment as required. See section 8 for more information. |

### Most important symptoms and effects, both acute and delayed

|                 |   |
|-----------------|---|
| <b>Symptoms</b> | May cause allergy or asthma symptoms or breathing difficulties if inhaled. Coughing and/ or wheezing. Itching. Rashes. Hives. |
|-----------------|---|

### Indication of any immediate medical attention and special treatment needed

|                           |  |
|---------------------------|--|
| <b>Note to physicians</b> | May cause sensitization in susceptible persons. Treat symptomatically. |
|---------------------------|--|

## 5. Fire-fighting measures

|   |   |
|---|---|
| <b>Suitable Extinguishing Media</b>                   | Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.                               |
| <b>Unsuitable extinguishing media</b>                 | No information available.   |
| <b>Specific hazards arising from the chemical</b>     | Product is or contains a sensitizer. May cause sensitization by inhalation and skin contact. May cause sensitization by skin contact. |
| <b>Explosion data</b>                                 |   |
| <b>Sensitivity to mechanical impact</b>               | None.   |
| <b>Sensitivity to static discharge</b>                | None.   |
| <b>Special protective equipment for fire-fighters</b> | Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.    |

## 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

|                             |  |
|-----------------------------|--|
| <b>Personal precautions</b> | Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal |
|-----------------------------|--|

protective equipment as required. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

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

#### **Methods and material for containment and cleaning up**

**Methods for containment** Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Pick up and transfer to properly labeled containers.

## **7. Handling and storage**

#### **Precautions for safe handling**

**Advice on safe handling** Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Provide extract ventilation to points where emissions occur. In case of insufficient ventilation, wear suitable respiratory equipment. Do not eat, drink or smoke when using this product. Remove contaminated clothing and shoes. Take off contaminated clothing and wash before reuse.

#### **Conditions for safe storage, including any incompatibilities**

**Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place. Store locked up. Keep out of the reach of children. Store according to product and label instructions.

## **8. Exposure controls/personal protection**

#### **Control parameters**

##### **Exposure Limits**

| Chemical name              | Alberta   | British Columbia                                     | Ontario                                      | Quebec   |
|----------------------------|---|--|--|--|
| Sodium azide<br>26628-22-8 | Ceiling: 0.29 mg/m <sup>3</sup><br>Ceiling: 0.11 ppm<br>STEL: 0.3 mg/m <sup>3</sup> | Ceiling: 0.29 mg/m <sup>3</sup><br>Ceiling: 0.11 ppm | CEV: 0.29 mg/m <sup>3</sup><br>CEV: 0.11 ppm | Ceiling: 0.29 mg/m <sup>3</sup><br>Ceiling: 0.11 ppm |

#### **Appropriate engineering controls**

**Engineering controls** Showers  
Eyewash stations  
Ventilation systems.

#### **Individual protection measures, such as personal protective equipment**

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

**Hand protection** Wear suitable gloves.

**Skin and body protection** Wear suitable protective clothing.

**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.

**General hygiene considerations** Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do

not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Wash hands before breaks and immediately after handling the product.

## 9. Physical and chemical properties

### Information on basic physical and chemical properties

|                |                          |
|----------------|--------------------------|
| Physical state | Liquid                   |
| Appearance     | No information available |
| Color          | blue and colorless       |
| Odor           | None                     |
| Odor threshold | No information available |

| Property                                | Values            | Remarks • Method |
|---|-------------------|------------------|
| pH                                      | No data available | None known       |
| Melting point / freezing point          | No data available | None known       |
| Initial boiling point and boiling range | No data available | None known       |
| Flash point                             | No data available | None known       |
| Evaporation rate                        | No data available | None known       |
| Flammability                            | No data available | None known       |
| Flammability Limit in Air               |                   | None known       |
| Upper flammability or explosive limits  | No data available |                  |
| Lower flammability or explosive limits  | No data available |                  |
| Vapor pressure                          | No data available | None known       |
| Relative vapor density                  | No data available | None known       |
| Relative density                        | No data available | None known       |
| Water solubility                        | Miscible in water |                  |
| Solubility in other solvents            | No data available | None known       |
| Partition coefficient                   | No data available | None known       |
| Autoignition temperature                | 300 °C / 572 °F   |                  |
| Decomposition temperature               |                   | None known       |
| Kinematic viscosity                     | No data available | None known       |
| Dynamic viscosity                       | No data available | None known       |
| <b>Other information</b>                |                   |                  |
| Explosive properties                    | Not applicable.   |                  |
| Oxidizing properties                    | Not applicable.   |                  |
| Softening point                         | Not applicable    |                  |
| Molecular weight                        | Not applicable    |                  |
| VOC content                             | Not applicable    |                  |

## 10. Stability and reactivity

|                                    |   |
|------------------------------------|---|
| Reactivity                         | No information available.   |
| Chemical stability                 | Stable under normal conditions.   |
| Possibility of hazardous reactions | Avoid contact with metals. This product contains sodium azide. Sodium azide can react with copper, brass, lead, and solder in piping systems to form explosive compounds and toxic gases. |
| Conditions to avoid                | None known based on information supplied.   |
| Incompatible materials             | Metals.   |

**Hazardous decomposition products** None known based on information supplied.

## 11. Toxicological information

### Information on likely routes of exposure

#### Product Information

|                     |   |
|---------------------|---|
| <b>Inhalation</b>   | Specific test data for the substance or mixture is not available May cause sensitization in susceptible persons (based on components).  |
| <b>Eye contact</b>  | Specific test data for the substance or mixture is not available.   |
| <b>Skin contact</b> | Specific test data for the substance or mixture is not available Repeated or prolonged skin contact may cause allergic reactions with susceptible persons (based on components). May cause sensitization by skin contact. |
| <b>Ingestion</b>    | Specific test data for the substance or mixture is not available. May cause additional affects as listed under "Inhalation".  |

### Symptoms related to the physical, chemical and toxicological characteristics

|                 |  |
|-----------------|--|
| <b>Symptoms</b> | Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain, or flushing. Coughing and/ or wheezing. Itching. Rashes. Hives. |
|-----------------|--|

### Acute toxicity

#### Numerical measures of toxicity

No information available

#### Component Information

| Chemical name                  | Oral LD50           | Dermal LD50           | Inhalation LC50                      |
|--------------------------------|---------------------|-----------------------|--------------------------------------|
| Paraformaldehyde<br>30525-89-4 | = 800 mg/kg ( Rat ) | -                     | = 1070 mg/m <sup>3</sup> ( Rat ) 4 h |
| Sodium azide<br>26628-22-8     | = 27 mg/kg ( Rat )  | = 20 mg/kg ( Rabbit ) | 0.054 - 0.52 mg/L ( Rat ) 4 h        |

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

|  |  |
|--|--|
| <b>Skin corrosion/irritation</b>         | Based on available data, the classification criteria are not met.  |
| <b>Serious eye damage/eye irritation</b> | Based on available data, the classification criteria are not met.  |
| <b>Respiratory or skin sensitization</b> | May cause sensitization by inhalation. May cause sensitization by skin contact.  |
| <b>Germ cell mutagenicity</b>            | Based on available data, the classification criteria are not met.  |
| <b>Carcinogenicity</b>                   | Contains a known or suspected carcinogen. Classification based on data available for ingredients. Suspected of causing cancer. |
| <b>Reproductive toxicity</b>             | Based on available data, the classification criteria are not met.  |
| <b>STOT - single exposure</b>            | Based on available data, the classification criteria are not met.  |
| <b>STOT - repeated exposure</b>          | Based on available data, the classification criteria are not met.  |

## Aspiration hazard

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

**12. Ecological information**

## Ecotoxicity

| Chemical name              | Algae/aquatic plants | Fish   | Toxicity to microorganisms | Crustacea |
|----------------------------|----------------------|--|----------------------------|-----------|
| Sodium azide<br>26628-22-8 | -                    | LC50: =0.8mg/L (96h, Oncorhynchus mykiss)<br>LC50: =0.7mg/L (96h, Lepomis macrochirus)<br>LC50: =5.46mg/L (96h, Pimephales promelas) | -                          | -         |

## Persistence and degradability

No information available.

## Bioaccumulation

No information available.

## Other adverse effects

No information available.

**13. Disposal considerations**

## Disposal methods

## Waste from residues/unused products

Flush pipes with water frequently if discarding solutions containing sodium azide into metal piping systems. Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

## Contaminated packaging

Do not reuse empty containers.

**14. Transport information**

## TDG

Not regulated

## DOT

Not regulated

## MEX

Not regulated

## IATA

Not regulated

## IMDG

Not regulated

**15. Regulatory information**

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

## 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

#### International Inventories

Contact supplier for inventory compliance status

## 16. Other information

|  |                    |                |                    |                                    |
|--|--------------------|----------------|--------------------|------------------------------------|
| <b>NFPA</b>  | Health hazards 2   | Flammability 1 | Instability 0      | Physical and chemical properties - |
| <b>HMIS</b>  | Health hazards 2 * | Flammability 1 | Physical hazards 0 | Personal protection X              |
| Chronic Hazard Star Legend * = Chronic Health Hazard |                    |                |                    |                                    |

#### Key or legend to abbreviations and acronyms used in the safety data sheet

##### Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

|         |                             |      |                                  |
|---------|-----------------------------|------|----------------------------------|
| TWA     | TWA (time-weighted average) | STEL | STEL (Short Term Exposure Limit) |
| Ceiling | Maximum limit value         | Sk*  | Skin designation                 |

#### 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)  
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  
Australia 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)  
U.S. National Toxicology Program (NTP)  
New Zealand's Chemical Classification and Information Database (CCID)  
Organization for Economic Co-operation and Development Environment, Health, and Safety Publications  
Organization for Economic Co-operation and Development High Production Volume Chemicals Program  
Organization for Economic Co-operation and Development Screening Information Data Set  
RTECS (Registry of Toxic Effects of Chemical Substances)  
World Health Organization

**Prepared By** Bio-Rad Laboratories, Environmental Health and Safety.

**Revision date** 11-Jun-2024

**Revision Note** Significant changes throughout SDS. Review all sections.

#### Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**