

### 09/03/2020 Kit Components

Product code	Description	
1661033EDU	Advance COurse Kit	
Components:		
1610752	Gel Drying Solution	
1650963	Cellophane Support	





Printing date 09/03/2020 Reviewed on 08/06/2020

#### 1 Identification

- · Product identifier
- · Trade name: Gel Drying Solution
- · Catalog or product number: 1610752, 1610752EDU, 1661047EDU, 1661004EDU
- · 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 phone: 1-800-268-0213 Fax: 1-888-913-9779

- · Information department: sales\_canada@bio-rad.com
- · Emergency telephone number: 1-800-424-6723 option 2

#### 2 Hazard identification

· Classification of the substance or mixture

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

- · Label elements
- · GHS label elements Not Applicable
- · Hazard pictograms Not Applicable
- · Signal word Not Applicable
- · Hazard statements Not Applicable

#### 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:

64-17-5 ethanol

5-10% w/w \*

- Flammable Liquids Category 2, H225
- \* 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.

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Trade name: Gel Drying Solution

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· 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: Dilute with plenty of 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

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/ 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:

#### 64-17-5 ethanol

EL STEL: 1000 ppm

EV TWA: 1,900 mg/m<sup>3</sup>, 1,000 ppm

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

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Trade name: Gel Drying Solution

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- · Exposure controls
- Personal protective equipment
- General protective and hygienic measures The usual precautionary measures for handling chemicals should be followed.
- · Breathing equipment: Not 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 prop	erties erties
<ul> <li>Information on basic physical and</li> <li>General Information</li> <li>Appearance:</li> </ul>	l chemical properties
Form:	Liquid
Color:	Colorless
· Odor:	Odorless
· Odor threshold:	Not determined.
· pH-value:	Not determined.
· Change in condition Melting point/Melting range: Boiling point/Boiling range:	undetermined undetermined
· Flash point:	Not applicable Not determined.
· Flammability (solid, gaseous)	Not applicable.
· Ignition temperature:	425 ℃
· 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 at 20 °C:	23 hPa
· Density at 20 °C:	0.979 g/cm³
· Relative density	Not determined.
· Vapor density	Not determined.
· Evaporation rate	Not determined.
· Solubility in / Miscibility with Water:	Fully miscible
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Trade name: Gel Drying Solution

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· Partition coefficient (n-octanol/water): Not determined.

· Viscosity:

dynamic:Not determined.kinematic:Not determined.

· Solvent content:

Organic solvents: 8.1 % Water: 91.9 %

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 t	for hazardo	us components	s per OSHA d	riteria:
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#### 64-17-5 ethanol

 Oral
 LD50
 7,060 mg/kg (rat)

 Inhalative
 LC50/4 h
 20,000 mg/l (rat)

- Primary irritant effect:
- · on the skin: No irritant effect.
- · on the eye: No irritant effect.
- · Sensitization: No sensitizing 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.

· Carcinogenic categories

IARC (International Agency for Research on Cancer)

64-17-5 ethanol

1

· NTP (National Toxicology Program)

None of the ingredients is listed.

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Trade name: Gel Drying Solution

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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: 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.

UN-Number		
DOT/TDG, ADR, ADN, IMDG, IATA	Not Regulated	
UN proper shipping name		
DOT/TDG, ADN, IMDG, IATA	Not Regulated	
ADR	Not Regulated	
	Not Regulated	
Transport hazard class(es)		
DOT, ADR, ADN, IMDG, IATA		
Class	Not Regulated	
Packing group		
DOT/TDG, ADR, IMDG, IATA	Not Regulated	
Environmental hazards:		
Marine pollutant:	No	
Special precautions for user	Not applicable.	

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Trade name: Gel Drying Solution

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· Transport in bulk according to Annex II of MARPOL73/78  and the IBC Code  Not applicable.		
· Transport/Additional information:	Not dangerous according to the above specifications.	
· UN "Model Regulation":	Not Regulated	
·		

#### 15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture
- · SARA (Superfund Amendents and Reauthorization Act of 1986 USA)
- Section 302/304 (40CFR355.30 / 40CFR355.40):

None of the ingredients is listed.

Section 313 (40CFR372.65):

None of the ingredients is listed.

· TSCA (Toxic Substances Control Act):

All components have the value ACTIVE.

· MAK (German Maximum Workplace Concentration)

64-17-5 ethanol

5

· 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 %
NK	5-10

- · 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

· Date of the latest revision of the safety data sheet 09/03/2020 / -

· Abbreviations and acronyms:

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

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## Safety Data Sheet according to HPR, Schedule 1

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Trade name: Gel Drying Solution

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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 door E0 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative





Printing date 09/03/2020 Reviewed on 09/03/2020

#### 1 Identification

- · Product identifier
- · Trade name: Cellophane Support
- · Catalog or product number:

1650963, 1651779, 1650922, 1651275, 1651276, 1668001, 1668005, 1668006, 1668007, 1668221, 1668222, 1668001EDU, 1668005EDU, 1668008EDU, 1668010EDU, 1668011EDU, 1668020EDU, 1668021EDU, 1668022EDU, 1668222EDU

CAS Number:

9004-34-6

· EC number:

232-674-9

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

- · Information department: sales\_canada@bio-rad.com
- · Emergency telephone number: 1-800-424-6723 option 2

#### 2 Hazard identification

· Classification of the substance or mixture

The substance is not classified, according to the Globally Harmonized System (GHS).

- · Label elements
- · GHS label elements Not Applicable
- · Hazard pictograms Not Applicable
- · Signal word Not Applicable
- · Hazard statements Not Applicable

#### 3 Composition/Information on ingredients

- · Chemical characterization: Substances
- · CAS No. Description:
- 9004-34-6 Cellulose
- Identification number(s):
- · EC number: 232-674-9
- · Additional information: For the wording of the listed risk phrases referto 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.

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### Safety Data Sheet according to HPR, Schedule 1

Printing date 09/03/2020 Reviewed on 09/03/2020

Trade name: Cellophane Support

(Contd. of page 1)

- · 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/ Personal protection

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

(Contd. on page 3)





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Trade name: Cellophane Support

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

#### 9004-34-6 Cellulose

EL TWA: 10\* 3\*\* mg/m3

\*total dust, \*\*respirable fraction

EV TWA: 10 mg/m<sup>3</sup> paper fibre, total dust

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

340 °C

- · Exposure controls
- · Personal protective equipment
- · General protective and hygienic measures The usual precautionary measures for handling chemicals should be followed.
- · 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.

- · Not suitable are gloves made of the following materials: Synthetic gloves
- · Eye protection: Safety glasses

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- J I III	Jour	allu	CITCI	HIGH		

Information on basic physical and chemical properties
. General Information

General Information

· Appearance:

Form: **Fibers** Color: White · Odor: Odorless Not determined. · Odor threshold:

· pH-value: 5-7.5

· Change in condition

· Ignition temperature:

Melting point/Melting range: undetermined Boiling point/Boiling range: undetermined

· Flash point: Not applicable Not determined.

· Flammability (solid, gaseous) Product is not flammable.

Not determined. · Decomposition temperature:

· Auto igniting: Not determined.

· Danger of explosion: Not determined.

· Explosion limits:

Lower: Not determined.

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Trade name: Cellophane Support

		(Contd. of page 3
Upper:	Not determined.	
· Vapor pressure at 20 °C:	0 hPa	
· Density at 20 °C:	0.38 g/cm³	
· Relative density	Not determined.	
· Vapor 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 %	
· 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:
- Primary irritant effect:
- · on the skin: No irritant effect.
- · on the eye: No irritant effect.
- · Sensitization: No sensitizing 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.

The substance is not subject to classification according to the latest version of the EU lists.

- · Carcinogenic categories
- · IARC (International Agency for Research on Cancer)

Substance is not listed.

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Trade name: Cellophane Support

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· NTP (National Toxicology Program)

Substance is not listed.

#### 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: 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.

UN-Number		
DOT/TDG, ADR, ADN, IMDG, IATA	Not Regulated	
UN proper shipping name		
DOT/TDG, ADN, IMDG, IATA	Not Regulated	
ADR	Not Regulated	
	Not Regulated	
Transport hazard class(es)		
DOT, ADR, ADN, IMDG, IATA		
Class	Not Regulated	
Packing group		
DOT/TDG, ADR, IMDG, IATA	Not Regulated	





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Not Regulated

Trade name: Cellophane Support

	(Contd. of page 5)
· Environmental hazards:	
· Marine pollutant:	No
· Special precautions for user	Not applicable.
· Transport in bulk according to Annex II of MARPOL73/7	8
and the IBC Code	Not applicable.
· Transport/Additional information:	Not dangerous according to the above specifications.

#### 15 Regulatory information

· UN "Model Regulation":

- · Safety, health and environmental regulations/legislation specific for the substance or mixture
- · SARA (Superfund Amendents and Reauthorization Act of 1986 USA)
- Section 302/304 (40CFR355.30 / 40CFR355.40):

Substance not listed.

Section 313 (40CFR372.65):

Substance is not listed.

· TSCA (Toxic Substances Control Act):

**ACTIVE** 

· MAK (German Maximum Workplace Concentration)

Substance is not listed.

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

- · 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

- · Date of the latest revision of the safety data sheet 09/03/2020 / -
- · 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

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# Safety Data Sheet according to HPR, Schedule 1

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Trade name: Cellophane Support

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CAS: Chemical Abstracts Service (division of the American Chemical Society) PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative