

08/31/2020 Kit Components

Product code	Description
1610497 10017673	Oriole Fluorescent Gel Stain Kit
Components:	
10017571	Oriole Fluorescent Gel Stain Concentrate 100X
10017599	Oriole Fluorescent Gel Stain Diluent





Printing date 08/31/2020 Reviewed on 08/14/2020

1 Identification

- · Product identifier
- Trade name: Oriole Fluorescent Gel Stain Concentrate 100X
- · Catalog or product number: 10017571, 10017653, 10017675
- · 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

Reproductive Toxicity - Category 1B H360 May damage 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 Danger
- · Hazard-determining components of labeling:

N-methyl-2-pyrrolidone

· Hazard statements

H360 May damage 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.

3 Composition/Information on ingredients

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

(Contd. on page 2)





Printing date 08/31/2020 Reviewed on 08/14/2020

Trade name: Oriole Fluorescent Gel Stain Concentrate 100X

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:

Dilute with plenty of water.

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

No dangerous substances are released.

See Section 7 for information on safe handling

See Section 8 for information on personal protection equipment.

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^{*} Actual concentration ranges are withheld as a trade secret.

[·] Additional information For the wording of the listed hazard phrases refer to section 16.



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See Section 13 for disposal information.

7 Handling and storage

- · Handling
- · Precautions for safe handling

No special measures required.

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:

64-17-5 ethanol

EL STEL: 1000 ppm

EV TWA: 1,900 mg/m³, 1,000 ppm

872-50-4 N-methyl-2-pyrrolidone

EV TWA: 400 mg/m³

- · 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

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Trade name: Oriole Fluorescent Gel Stain Concentrate 100X

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9 Physical and chemical prope	rties	
 Information on basic physical and General Information Appearance: 	chemical properties	
Form: Color: Odor: Odor threshold:	Liquid Colorless Alcohol-like Not determined.	
· pH-value at 20 °C:	7	
· 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 °C	
· Decomposition temperature:	Not determined.	
· Auto igniting:	Product is not selfigniting.	
· Danger of explosion:	Not determined.	
· Explosion limits: Lower: Upper:	3.5 Vol % 15 Vol %	
· Vapor pressure at 20 °C:	59 hPa	
Density:Relative densityVapor densityEvaporation rate	Not determined Not determined. Not determined. Not determined. Not determined.	
· Solubility in / Miscibility with Water:	Not miscible or difficult to mix	
· Partition coefficient (n-octanol/wat	er): Not determined.	
· Viscosity: dynamic: kinematic:	Not determined. Not determined.	
· Solvent content: Organic solvents: Water:	18.2 % 71.6 %	
Solids content:	10.2 %	





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Trade name: Oriole Fluorescent Gel Stain Concentrate 100X

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· 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:

Addic to	aroney.	
· LD/LC50	values for	hazardous components per OSHA criteria:
64-17-5 e	thanol	
Oral	LD50	7,060 mg/kg (rat)
Inhalative	LC50/4 h	20,000 mg/l (rat)
872-50-4	N-methyl-2	2-pyrrolidone
Oral	LD50	3,600 mg/kg (rat)
Dermal	LD50	8,000 mg/kg (rbt)

- · 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)

64-17-5 ethanol

1

· NTP (National Toxicology Program)

None of the ingredients is listed.

12 Ecological information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.

(Contd. on page 6)





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Trade name: Oriole Fluorescent Gel Stain Concentrate 100X

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- · 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 1 (German Regulation) (Self-assessment): slightly hazardous for water. Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

- · 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 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.
Transport in bulk according to Annex II of MA	ARPOL73/78
and the IBC Code	Not applicable.
Transport/Additional information:	Not dangerous according to the above specifications.





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Trade name: Oriole Fluorescent Gel Stain Concentrate 100X

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· 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):

872-50-4 N-methyl-2-pyrrolidone

· TSCA (Toxic Substances Control Act):

•	,	
7732-18-5	water	ACTIVE
64-17-5	ethanol	ACTIVE
9003-11-6	Polypropylene oxide-propylene glycol	ACTIVE
872-50-4	N-methyl-2-pyrrolidone	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	10-30

- · Water hazard class: Water hazard class 1 (Self-assessment): slightly 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 08/31/2020 / -
- 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: Oriole Fluorescent Gel Stain Concentrate 100X

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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





Printing date 08/31/2020 Reviewed on 08/11/2020

1 Identification

- · Product identifier
- · Trade name: Oriole Fluorescent Gel Stain Diluent
- · Catalog or product number: 10017599, 10017654, 10017676
- · 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: Substances
- · CAS No. Description:

7732-18-5 water

- · Identification number(s):
- · EC number: 231-791-2
- · Chemical characterization: Mixtures
- · Description: Mixture of the substances listed below with non-hazardous additions.
- · Listing of dangerous and non-hazardous components: Not applicable.
- · 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 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.

(Contd. on page 2)





Printing date 08/31/2020 Reviewed on 08/11/2020

Trade name: Oriole Fluorescent Gel Stain Diluent

(Contd. of page 1)

· 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:

7664-38-2 phosphoric acid

EL STEL: 3 mg/m³ TWA: 1 mg/m³

(Contd. on page 3)





Printing date 08/31/2020 Reviewed on 08/11/2020

Trade name: Oriole Fluorescent Gel Stain Diluent

(Contd. of page 2)

EV STEL: 3 mg/m³ TWA: 1 mg/m³

- · Additional information: The lists that were valid during the creation were used as basis.
- · 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 properties
. Information on basic physical and cham

· Information on basic physical and c	hemical properties
· General Information	
· Appearance:	
Form:	Liquid
Color:	Colorless
· Odor:	Odorless
· Odor threshold:	Not determined.
· pH-value at 20 °C:	<2.1
· Change in condition	
Melting point/Melting range:	0 ℃
Boiling point/Boiling range:	undetermined
· Flash point:	Not applicable
P • • • • • • • • • • • • • • • • • • •	Not determined.
· Flammability (solid, gaseous)	Not applicable.
· 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:	1.01333 g/cm³
· Relative density	Not determined.
· Vapor density	Not determined.
· Evaporation rate	Not determined.
-	

(Contd. on page 4)





Printing date 08/31/2020 Reviewed on 08/11/2020

Trade name: Oriole Fluorescent Gel Stain Diluent

(Contd. of page 3)

· Solubility in / Miscibility with

Water: Not miscible or difficult to mix

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

· Viscosity:

dynamic: Not determined. kinematic: Not determined.

· Solvent content:

Water: 97.6 %

· 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.

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

None of the ingredients is listed.

NTP (National Toxicology Program)

None of the ingredients is listed.

12 Ecological information

- Toxicity
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.

(Contd. on page 5)





Printing date 08/31/2020 Reviewed on 08/11/2020

Trade name: Oriole Fluorescent Gel Stain Diluent

(Contd. of page 4)

- · 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.

Transport information		
· UN-Number · DOT/TDG, ADR, ADN, IMDG, IATA	Not Regulated	
UN proper shipping name DOT/TDG, ADN, IMDG, IATA ADR	Not Regulated 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.	
· Transport in bulk according to Annex II of MA and the IBC Code	NRPOL73/78 Not applicable.	
· UN "Model Regulation":	Not Regulated	

(Contd. on page 6)





Printing date 08/31/2020 Reviewed on 08/11/2020

Trade name: Oriole Fluorescent Gel Stain Diluent

(Contd. of page 5)

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)

None of the ingredients is 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:

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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)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

· * Data compared to the previous version altered.

CA