

BIO-RAD

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

- Product identifier
- Trade name: PV92 Homozygous (+/-) Control
- Catalog or product number: 9704808
- Application of the substance / the preparation Laboratory chemicals
- Details of the supplier of the safety data sheet
- Manufacturer/Supplier: Bio-Rad Laboratories, Life Science Group 2000 Alfred Nobel Drive Hercules, California 94547 (510)741-1000
- Information department: Technical services, customer support sq. techserv_us@bio-rad.com
- Emergency telephone number: 1(800)424-9300 Use only in the event of a CHEMICAL EMERGENCY involving a SPILL, LEAK, FIRE, EXPLOSION or ACCIDENT. 510-741-1000

2 Composition/information on ingredients

- Chemical characterization: Substances
- CAS No. Description: 7732-18-5 water
- Identification number(s): EC number: 231-791-2
- Description: Mixture of the substances listed below with non-hazardous additions.
- Listing of dangerous and non-hazardous components: 7732-18-5 water 50-100%
- Additional information: Contains added constituents of animal origin. For the wording of the listed risk phrases refer to section 15.

3 Hazards identification

- Classification of the substance or mixture
- Classification according to Directive 67/541/EEC or Directive 1999/45/EC not applicable
- Information concerning particular hazards for human and environment: The product does not have to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.
- Classification system: The classification was made according to the latest editions of the EU-lists, and expanded upon from company and literature data. The classification was made according to OSHA 29CFR 1910.1200 and 1910.1030, and is expanded upon from company and/or literature information.
- Label elements
- Labelling according to EU guidelines: Observe the general safety regulations when handling chemicals

(Contd. on page 2) USA

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Trade name: PV92 Homozygous (+/-) Control

- The product is not subject to identification regulations under EU Directives and the Ordinance on Hazardous Materials (GeStoffV).
- Safety phrases: 60 This material and its container must be disposed of as hazardous waste.

4 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 Induce vomiting and call for medical help.

5 Firefighting measures

- Suitable extinguishing agents: CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- Special hazards arising from the substance or mixture No further relevant information available.
- Protective equipment: No special measures required.

6 Accidental release measures

- Personal precautions, protective equipment and emergency procedures: Wear protective equipment (See section 8). Keep unprotected persons away.
- Environmental precautions: No special measures required.
- 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.
- 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) USA

Trade name: PV92 Homozygous (+/-) Control

- (Contd. of page 2)
- **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.
 - **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

General Information	
• Appearance:	Liquid
• Form:	Colorless
• Odor:	Odorless
• Odour threshold:	Not determined.
• pH-value:	Not determined.
• Change in condition	0°C
• Melting point/Melting range:	undetermined
• Boiling point/Boiling range:	Not applicable
• Flash point:	Not applicable.
• Flammability (solid, gaseous)	Not determined.
• Ignition temperature:	Product is not selfigniting.
• Decomposition temperature:	Product does not present an explosion hazard.
• Auto igniting:	Not determined.
• Danger of explosion:	Not determined.
• Explosion limits:	23 hPa
• Lower:	1 g/cm³
• Upper:	Not determined.
• Vapor pressure at 20°C:	Not determined.
• Density at 20°C:	Not determined.
• Relative density	Not determined.
• Vapour density	Not determined.
• Evaporation rate	Not determined.
• Solubility in / Miscibility with	Fully miscible
• Water:	
• Segregation coefficient (n-octanol/water):	Not determined.

(Contd. on page 4)

USA

Trade name: PV92 Homozygous (+/-) Control

(Contd. of page 3)

• Viscosity: dynamic: kinematic:	Not determined. Not determined.
• Solvent content: Organic solvents: Water:	0.0 % 99.9 %
• Solids content: Other information	0.1 % No further relevant information available.

10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known

11 Toxicological information

- **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:**
The product is not subject to classification according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:
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.
- **Target organs:** Not applicable.

12 Ecological information

- **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.
- **Additional ecological information:**
- **General notes:** Generally not hazardous for water.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation**
Hand over to hazardous waste disposers.
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

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USA

BIO-RAD
Material Safety Data Sheet

Trade name: PV92 Homozygous (+/-) Control

- Uncleaned packagings:
- Recommendation: Disposal must be made according to official regulations.

(Contd. of page 4)

14 Transport information

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

15 Regulatory information

· 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):
None of the ingredients is listed.
· TSCA (Toxic Substances Control Act):
All ingredients are listed.
· Carcinogenic categories
· EPA (Environmental Protection Agency)
None of the ingredients is listed.
· IARC (International Agency for Research on Cancer)
None of the ingredients is listed.
· NTP (National Toxicology Program)
None of the ingredients is listed.
· TLV (Threshold Limit Value established by ACGIH)
None of the ingredients is listed.

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USA

BIO-RAD
Material Safety Data Sheet

Trade name: PV92 Homozygous (+/-) Control

· MAK (German Maximum Workplace Concentration)	(Contd. of page 5)
None of the ingredients is listed.	
· NIOSH-Ca (National Institute for Occupational Safety and Health)	
None of the ingredients is listed.	
· OSHA-Ca (Occupational Safety & Health Administration)	
None of the ingredients is listed.	
· National regulations	
· Water hazard class: Generally not hazardous for water.	

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 MSDS: 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

* Data compared to the previous version altered.

USA

Printing date 06/29/2012

Reviewed on 04/12/2012

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

- Product identifier
- Trade name: **PV92 Heterozygous (+/-) Control**
- Catalog or product number: 9704809
- Application of the substance / the preparation Laboratory chemicals
- Details of the supplier of the safety data sheet
- Manufacturer/Supplier:
Bio-Rad Laboratories, Life Science Group
2000 Allred Nobel Drive
Hercules, California 94547
- Information department:
Technical services, customer support
sg_techserv_us@bio-rad.com
- Emergency telephone number:
1(800)424-9300 Use only in the event of a CHEMICAL EMERGENCY involving a SPILL, LEAK, FIRE, EXPLOSION or ACCIDENT.

(510)741-1000

2 Composition/information on ingredients

- Chemical characterization: Substances
- CAS No. Description:
7732-18-5 water
- Identification number(s):
- EC number: 231-791-2
- Description: Mixture of the substances listed below with non-hazardous additions.
- Listing of dangerous and non-hazardous components:

7732-18-5 water	50-100%
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Additional information

Contains added constituents of animal origin.

For the wording of the listed risk phrases refer to section 15.

3 Hazards identification

- Classification of the substance or mixture
- Classification according to Directive 67/548/EEC or Directive 1999/45/EC not applicable
- Information concerning particular hazards for human and environment:
The product does not have to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.
- Classification system:
The classification was made according to the latest editions of the EU-lists, and expanded upon from company and literature data.
- The classification was made according to OSHA 29CFR 1910.1200 and 1910.1030, and is expanded upon from company and/or literature information.

Label elements

- Labelling according to EU guidelines:

Observe the general safety regulations when handling chemicals

(Contd. on page 2)

USA

Printing date 06/29/2012

Reviewed on 04/12/2012

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The product is not subject to identification regulations under EU Directives and the Ordinance on Hazardous Materials (GefStoffV).

- Safety phrases:
60 This material and its container must be disposed of as hazardous waste.

4 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 Induce vomiting and call for medical help.

5 Firefighting measures

- Suitable extinguishing agents
CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- Special hazards arising from the substance or mixture No further relevant information available.
- Protective equipment: No special measures required.

6 Accidental release measures

- Personal precautions, protective equipment and emergency procedures
Wear protective equipment (See section 8). Keep unprotected persons away.
- Environmental precautions: No special measures required.
- 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

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Precautions for safe handling No special measures required.
- Information about protection against explosions and fires: No special measures required.
- 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)

USA

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- **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

· General information	
· Appearance:	Liquid
· Form:	Colorless
· Color:	Odorless
· Odor:	Odorless
· Odour threshold:	Not determined.
· pH-value:	Not determined.
· Change in condition	0°C
· Melting point/Melting range:	undetermined
· Boiling point/Boiling range:	Not applicable
· Flash point:	Not applicable.
· Flammability (solid, gaseous)	Not applicable.
· Ignition temperature:	Not determined.
· Decomposition temperature:	Not determined.
· Auto igniting:	Product is not selfigniting.
· Danger of explosion:	Product does not present an explosion hazard.
· Explosion limits:	
· Lower:	Not determined.
· Upper:	Not determined.
· Vapor pressure at 20°C:	23 hPa
· Density at 20°C:	1 g/cm³
· Relative density	Not determined.
· Vapour density	Not determined.
· Evaporation rate	Not determined.
· Solubility in / Miscibility with	Fully miscible
· Water:	
· Segregation coefficient (n-octanol/water):	Not determined.

(Contd. on page 4)
USA

Trade name: PV92 Heterozygous (+/-) Control

(Contd. of page 3)

· Viscosity:	Not determined.
· dynamic:	Not determined.
· kinematic:	Not determined.
· Solvent content:	0.0 %
· Organic solvents:	99.9 %
· Water:	0.1 %
· Solids content:	0.1 %
· Other information	No further relevant information available.

10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known

11 Toxicological information

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- **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.
- **Target organs:** Not applicable.

12 Ecological information

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- **Behavior in environmental systems:**
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- **General notes:** Generally not hazardous for water.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation**
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(Contd. on page 5)
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Material Safety Data Sheet

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Printing date 06/29/2012

Reviewed on 04/12/2012

Trade name: PV92 Heterozygous (+/-) Control

- Uncleaned packagings:
- Recommendation: Disposal must be made according to official regulations.

(Contd. of page 4)

14 Transport information

· UN-Number	Void
· DOT, ADR, ADN, IMDG, IATA	Void
· UN proper shipping name	Void
· DOT, ADR, ADN, IMDG, IATA	Void
· Transport hazard class(es)	Void
· DOT, ADR, ADN, IMDG, IATA	Void
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· DOT, ADR, IMDG, IATA	Void
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· Marine pollutant:	Not applicable.
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Material Safety Data Sheet

Page 6/6

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Trade name: PV92 Heterozygous (+/-) Control

(Contd. of page 5)

· MAK (German Maximum Workplace Concentration)
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