

1 Identification

- Product identifier
- Trade name: 10x CO₂ Indicator
- Catalog or product number: 10049296, 10049297
- Application of the substance / the mixture 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 telephone number: (510)741-1000
- Emergency telephone number: 1(800)424-9300 Use only in the event of a CHEMICAL EMERGENCY involving a SPILL, LEAK, FIRE, EXPLOSION or ACCIDENT.

2 Hazard(s) identification

- Classification of the substance or mixture
 The product is not classified according to the Globally Harmonized System (GHS).
- Label elements
- GHS label elements Void
- Hazard pictograms Void
- Signal word Void
- Hazard statements Void
- Additional information: Contact with acids may cause release of toxic gases
- Other hazards
- Results of PBT and vPvB assessment
- PBT: Not applicable
- vPvB: 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: Void
- Additional information For the wording of the listed risk phrases refer to section 15.

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 Induce vomiting and call for medical help.
- Information for doctor
- Most important symptoms and effects, both acute and delayed No further relevant information available.

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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:
- Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- Reference to other sections
- See Section 7 for information on safe handling
- See Section 8 for information on personal protection equipment.
- See Section 13 for disposal information.
- Protective Action Criteria for Chemicals

PAC-1:	64-17-5: ethanol	1,800 ppm
	144-55-8: sodium hydrogencarbonate	13 mg/m ³
	76-61-9: thymol blue	50 mg/m ³
PAC-2:	64-17-5: ethanol	3600* ppm
	144-55-8: sodium hydrogencarbonate	140 mg/m ³
	76-61-9: thymol blue	360 mg/m ³
PAC-3:	64-17-5: ethanol	15000* ppm
	144-55-8: sodium hydrogencarbonate	840 mg/m ³
	76-61-9: thymol blue	2,000 mg/m ³

7 Handling and storage

- Handling
- Precautions for safe handling No special precautions are necessary if used correctly.
- 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.

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Specific end use(s): No further relevant information available.

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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

PEL Long-term value: 1900 mg/m³, 1000 ppm

REL Long-term value: 1900 mg/m³, 1000 ppm

TLV Short-term value: 1800 mg/m³, 1000 ppm

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 or 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 chemical properties

General information

Appearance:

Form: Liquid

Color: Various colors

Odor: Odorless

Odor threshold: Not determined.

pH-value at 20 °C: 8

Change in condition

Melting point/Melting range: undetermined

Boiling point/Boiling range: undetermined

Flash point: Not applicable

Flammability (solid, gaseous): Not applicable.

Ignition temperature:

Decomposition temperature: Not determined.

Auto-ignition: Product is not self-igniting.

Danger of explosion: Product does not present an explosion hazard.

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Explosion limits:	Not determined.
Lower:	Not determined.
Upper:	Not determined.
Vapor pressure at 20 °C:	23 hPa
Density:	Not determined
Relative density:	Not determined.
Vapor density:	Not determined.
Evaporation rate:	Not determined
Solubility in / Miscibility with Water:	Fully miscible
Partition coefficient (n-octanol/water):	Not determined.
Viscosity:	
dynamic:	Not determined.
kinematic:	Not determined.
Solvent content:	
Organic solvents:	1.6 %
Water:	98.3 %
Solids content:	0.1 %
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:

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.

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Carcinogenic categories	
IARC (International Agency for Research on Cancer)	
64-17-5: ethanol	
MTP (National Toxicology Program)	
None of the ingredients is listed.	
OSHA-Ca (Occupational Safety & Health Administration)	
None of the ingredients is listed.	
Target organs: Not applicable	

2 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.

3 D Disposal Considerations

- Waste treatment methods**
- Recommendation: Dispose of waste in accordance to applicable national, regional, or local regulations.
- Unlabeled packagings:
- Recommendation: Disposal must be made according to official regulations.

4 Transport Information

UN-Number	Void
DOT, ADR, ADN, IMDG, IATA	
UN proper shipping name	Void
DOT, ADR, ADN, IMDG, IATA	
Transport hazard classes)	
DOT, ADR, ADN, IMDG, IATA	Void
Class	Void
Packaging group	Void
DOT, ADR, IMDG, IATA	

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Environmental hazards:	No
Marine pollutant:	Not applicable.
Special precautions for user	Not applicable.
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not applicable.
UN "Model Regulation":	Void

5 Regulatory Information

- Safety, health and environmental regulations/legislation specific for the substance or mixture**
- SARA (Superfund Amendments and Reauthorization Act of 1986 - USA)
 - Section 302/304 (40CFR355.50 / 40CFR355.50):
 - 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.
- California Proposition 65:
- Developmental Toxicity: 64-17-5: ethanol

Carcinogenic categories

- EPA (Environmental Protection Agency)
- None of the ingredients is listed.
- TLV (Threshold Limit Value established by ACGIH): 64-17-5: ethanol
- MAK (German Maximum Workplace Concentration): 64-17-5: ethanol
- MOSH-Ca (National Institute for Occupational Safety and Health)
- None of the ingredients is listed.

National regulations

- Technical instructions (air):

Class	Shore in %
NK	1-2.5

- Water hazard class: Generally not hazardous for water.
- Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

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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 preparation / last revision 09/20/2017 / -**

• **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
 IATA: International Air Transport Association
 ILO: International Labour Organization
 ACPH: American Conference of Governmental Industrial Hygienists
 EINECS: European Inventory of Existing Commercial Chemical Substances
 ELINCS: European Inventory of Existing Chemical Substances
 CAS: Chemical Abstracts Service (division of the American Chemical Society)
 PBT: Persistent, Bioaccumulative and Toxic
 vPvB: very Persistent and Very Bioaccumulative
 NIOSH: National Institute for Occupational Safety and Health
 OSHA: Occupational Safety & Health
 TLV: Threshold Limit Value
 PEL: Permissible Exposure Limit
 REL: Recommended Exposure Limit

• *** Data compared to the previous version altered.**

Printing date 09/20/2017

Reviewed on 09/20/2017

1. Identification

• **Product identifier**

• **Trade name:** Algae Beads

• **Catalog or product number:** 10049292, 10049266, 10049291

• **Application of the substance / the mixture:** 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

• **Information department:** lsg_techserv_us@bio-rad.com

• **Emergency telephone number:**

1(800)741-1000

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. Hazard(s) identification

• **Classification of the substance or mixture**

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

• **Label elements**

• **GHS label elements:** Void

• **Hazard pictograms:** Void

• **Signal word:** Void

• **Hazard statements:** Void

• **Additional information:** Contact with acids may cause release of toxic gases

• **Other hazards**

• **Results of PBT and vPvB assessment**

• **PBT:** Not applicable.

• **vPvB:** 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:** Void

• **Additional information:** For the wording of the listed risk phrases refer to section 15.

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:** Flush opened eye for several minutes under running water.

• **After swallowing:** Induce vomiting and call for medical help.

• **Most important symptoms and effects, both acute and delayed:** No further relevant information available.

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