

Material Safety Data Sheet

Printing date 07/28/2012

Reviewed on 07/25/2012

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

• Product identifier

• Trade name: **Development Accelerator Reagent**

• Catalog or product number: 1610448, 1610448EDU

• CAS Number:
497-19-8• EC number:
207-838-8• Index number:
011-005-00-2• Relevant identified uses of the substance or mixture and uses advised against
No further relevant information available.

• 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
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 Hazards identification

• Classification of the substance or mixture

• Classification according to Directive 67/548/EEC or Directive 1999/45/EC

Irritant to eyes.

Xi; Irritant

R36: Irritating to eyes.

• Information concerning particular hazards for human and environment: not applicable

• Classification system:

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:

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials

• Code letter and hazard designation of product:



Xi Irritant

• Risk phrases:

36 Irritating to eyes.

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• Safety phrases:

22 Do not breathe dust.

26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

35 This material and its container must be disposed of in a safe way.

• Other hazards

• Results of PBT and vPvB assessment

• PBT: Not applicable.

• vPvB: Not applicable.

3 Composition/information on ingredients

• Chemical characterization: Substances

• CAS No. Description:

497-19-8 sodium carbonate

• Identification number(s):

• EC number: 207-838-8

• Index number: 011-005-00-2

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

4 First aid measures

• Description of first aid measures

• 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. If symptoms persist, consult a doctor.

• 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.

• Indication of any immediate medical attention and special treatment needed No further relevant information available.

5 Firefighting measures

• Extinguishing media

• 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.

• Advice for firefighters

• Protective equipment: Wear self-contained respiratory protective device.

6 Accidental release measures

• Personal precautions, protective equipment and emergency procedures

Wear protective equipment (See section 8). Keep unprotected persons away.

• Environmental precautions: Do not allow to enter sewers/ surface or ground water.

• Methods and material for containment and cleaning up: Pick up mechanically.

• Reference to other sections

See Section 7 for information on safe handling

See Section 8 for information on personal protection equipment.

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See Section 13 for disposal information.

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7 Handling and storage

- **Handling**
- **Precautions for safe handling**
No special measures required.
Prevent formation of dust.
- **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:** 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:** Not required.
- **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.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Avoid contact with the eyes.
Avoid contact with the eyes and skin.
- **Breathing equipment:**
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.
- **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
Tightly sealed goggles.

9 Physical and chemical properties

- **Information on basic physical and chemical properties**
- **General Information**
- **Appearance:**
Form: Crystalline powder

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• Color:	White
• Odor:	Odorless
• Odour threshold:	Not determined.
• pH-value at 20°C:	11.5
• Change in condition	
• Melting point/Melting range:	854°C
• Boiling point/Boiling range:	undetermined
• Flash point:	Not applicable
• Flammability (solid, gaseous)	Product is not flammable.
• Ignition temperature:	
• Decomposition temperature:	Not determined.
• Auto igniting:	Not determined.
• Danger of explosion:	Product does not present an explosion hazard.
• Explosion limits:	
• Lower:	Not determined.
• Upper:	Not determined.
• Vapor pressure:	Not applicable.
• Density at 20°C:	2.533 g/cm ³
• Bulk density at 20°C:	500-600 kg/m ³
• Relative density	Not determined.
• Vapour density	Not applicable.
• Evaporation rate	Not applicable.
• Solubility in / Miscibility with	
• Water at 20°C:	212 g/l Fully miscible
• Partition coefficient (n-octanol/water):	Not determined.
• Viscosity:	
• dynamic:	Not applicable.
• kinematic:	Not applicable.
• Organic solvents:	0.0 %
• Solids content:	100.0 %
• Other information	No further relevant information available.

10 Stability and reactivity

- **Reactivity**
- **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.

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• **Hazardous decomposition products:** No dangerous decomposition products known

11 Toxicological information

• **Information on toxicological effects**• **Acute toxicity:**• **LD/LC50 values for hazardous components per OSHA criteria:**

497-19-8 sodium carbonate

Oral LD50 4000 mg/kg (rat)

• **Primary irritant effect:**• **on the skin:** Irritant to skin and mucous membranes.• **on the eye:** Irritant effect.• **Sensitization:** No sensitizing effects known.• **Additional toxicological information:**• **Carcinogenic categories**• **IARC (International Agency for Research on Cancer)**

Substance is not listed.

• **NTP (National Toxicology Program)**

Substance is not listed.

• **Target organs:** Eye.

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:**

Water hazard class 1 (German Regulation) (Assessment by list): slightly hazardous for water.

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Rinse off of bigger amounts into drains or the aquatic environment may lead to increased pH-values. A high pH-value harms aquatic organisms. In the dilution of the use-level the pH-value is considerably reduced, so that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous.

• **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**

Hand over to hazardous waste disposers.

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Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

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

14 Transport information

• **UN-Number**• **DOT, ADR, ADN, IMDG, IATA**

Void

• **UN proper shipping name**• **DOT, ADR, ADN, IMDG, IATA**

Void

• **Transport hazard class(es)**• **DOT, ADR, ADN, IMDG, IATA**• **Class**

Void

• **Packing group**• **DOT, ADR, IMDG, IATA**

Void

• **Environmental hazards:**• **Marine pollutant:**

No

• **Special precautions for user**

Not applicable.

• **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**

Not applicable.

15 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 (40CFR355.30 / 40CFR355.40):**

Substance not listed.

• **Section 313 (40CFR372.65):**

Substance is not listed.

• **TSCA (Toxic Substances Control Act):**

Substance is listed.

• **Carcinogenic categories**• **EPA (Environmental Protection Agency)**

Substance is not listed.

• **TLV (Threshold Limit Value established by ACGIH)**

Substance is not listed.

• **MAK (German Maximum Workplace Concentration)**

Substance is not listed.

• **NIOSH-Ca (National Institute for Occupational Safety and Health)**

Substance is not listed.

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• **OSHA-Ca (Occupational Safety & Health Administration)**

Substance is not listed.

• **National regulations**

• **Water hazard class:** Water hazard class 1 (Assessment by list): 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 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.**

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