Bigelow Laboratory for Ocean Sciences
P.O. Box 380, 60 Bigelow Drive
East Boothbay, ME 04544 USA
(p) 01-207-315-2567 x311
ncma@bigelow.org

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

1.1 Product identifiers

Product name: L1 Medium Kit
Product Number: MKL1-50L
Brand: Bigelow
REACH No. : A registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified use: Laboratory chemicals, Manufacture of substances

1.3 Details of the supplier of the safety data sheet

Company: Bigelow Laboratory for Ocean Sciences
60 Bigelow Drive PO Box 380 East Boothbay, Me 04544
Telephone: (207) 315 2567
Fax: (207) 315 2329
E-mail address: ncma@bigelow.org

1.4 Emergency telephone number

Emergency Phone #: I.N.R.S.:+33 (0)1 45 42 59 59

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Not a hazardous substance or mixture

2.2 Label elements

Not a hazardous substance or mixture

2.3 Other hazards – none

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Sodium nitrate	CAS # 7631-99-4	Stock Solution Concentration: 8.82×10^{-1} M
Sodium phosphate monobasic monohydrate	CAS # 10049-21-5	Stock Solution Concentration: 3.62×10^{-2} M
Sodium metasilicate nonahydrate	CAS # 13517-24-3	Stock Solution Concentration: 1.06×10^{-1} M
Trace metal solution		
Sodium EDTA dihydrate	CAS # 6381-92-6	Stock Solution Concentration: 1.17×10^{-2} M
Iron(III) chloride hexahydrate	CAS # 10025-77-1	Stock Solution Concentration: 1.17×10^{-2} M
Copper(II) sulfate pentahydrate	CAS # 7758-99-8	Stock Solution Concentration: 3.92×10^{-5} M
Sodium molybdate dihydrate	CAS # 10102-40-6	Stock Solution Concentration: 2.60×10^{-5} M
Zinc sulfate heptahydrate	CAS # 7446-20-0	Stock Solution Concentration: 7.65×10^{-5} M
Cobalt chloride hexahydrate	CAS # 7791-13-1	Stock Solution Concentration: 4.20×10^{-5} M
Manganese(II) chloride tetrahydrate	CAS # 13446-34-9	Stock Solution Concentration: 9.00×10^{-4} M
Selenous acid	CAS # 7783-00-8	Stock Solution Concentration: 1.00×10^{-5} M
Nickel(II) sulfate hexahydrate	CAS # 10101-97-0	Stock Solution Concentration: 1.00×10^{-5} M
Sodium orthovanadate	CAS # 13721-39-6	Stock Solution Concentration: 1.00×10^{-5} M
Potassium chromate	CAS # 7789-00-6	Stock Solution Concentration: 1.00×10^{-5} M

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Vitamin Solution

Thiamine HCl (Vitamin B1)	CAS # 67-03-8	Stock Solution Concentration: 2.96 x 10^{-4} M
Cyanocobalamin (Vitamin B12)	CAS # 68-19-9	Stock Solution Concentration: 7.38 x 10^{-7} M
Biotin (Vitamin H)	CAS # 58-85-5	Stock Solution Concentration: 4.09 x 10^{-6} M

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed

No data available

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture

Nature of decomposition products not known

5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further information

No data available

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid breathing vapors, mist or gas. For personal protection see section 8.

6.2 Environmental precautions

No special environmental precautions required.

6.3 Methods and materials for containment and cleaning up

Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For disposal see section 13.

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SECTION 7: Handling and storage
7.1 Precautions for safe handling
For precautions see section 2.2.
7.2 Conditions for safe storage, including any incompatibilities
Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Recommended storage temperature: 20 °C
7.3 Specific end use(s)
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

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SECTION 8: Exposure controls/personal protection
8.1 Control parameters
Components with workplace control parameters
Contains no substances with occupational exposure limit values.
8.2 Exposure controls
Appropriate engineering controls
General industry hygiene practice.
Personal protective equipment
Eye/face protection
Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).
Skin protection
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.
Body Protection
The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
Respiratory protection.
Respiratory protection not required. For nuisance exposures use type OV/AG (US) or type ABEK (EU EN 14387) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
Control of environmental exposure
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

SECTION 9: Physical and chemical properties
9.1 Information on basic physical and chemical properties
a) Appearance Form: liquid
b) Odor: no data available
c) Odor Threshold: no data available
d) pH: no data available
e) Melting point/freezing point: no data available
f) Initial boiling point and boiling range: no data available
g) Flash point: no data available
h) Evaporation rate: no data available
i) Flammability (solid, gas): no data available

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j) Upper/lower flammability or explosive limits: no data available
k) Vapor pressure: no data available
l) Vapor density: no data available
m) Relative density: no data available
n) Water solubility: no data available
o) Partition coefficient: n-octanol/water: no data available
p) Auto-ignition temperature: no data available
q) Decomposition temperature: no data available
r) Viscosity no data: available
s) Explosive properties: no data available
t) Oxidizing properties: no data available

9.2 Other safety information

No data available

SECTION 10: Stability and reactivity

10.1 Reactivity

No data available

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

No data available

10.4 Conditions to avoid

No data available

10.5 Incompatible materials

No data available

10.6 Hazardous decomposition products

Other decomposition products - no data available
In the event of fire: see section 5

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

No data available

Skin corrosion/irritation

No data available

Serious eye damage/eye irritation

No data available

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH. NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known

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or anticipated carcinogen by NTP. OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity
No data available
Specific target organ toxicity - single exposure
No data available
Specific target organ toxicity - repeated exposure
No data available
Aspiration hazard
No data available
Additional Information
RTECS: Not available
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

SECTION 12: Ecological information
12.1 Toxicity
No data available
12.2 Persistence and degradability
No data available
12.3 Bioaccumulative potential
No data available
12.4 Mobility in soil
No data available
12.5 Results of PBT and vPvB assessment
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted
12.6 Other adverse effects
No data available

SECTION 13: Disposal considerations
13.1 Waste treatment methods
Product
Offer surplus and non-recyclable solutions to a licensed disposal company
Contaminated packaging
Dispose of as unused product.

SECTION 14: Transport information
DOT (US) Not dangerous goods
IMDG Not dangerous goods
IATA Not dangerous goods

SECTION 15: Regulatory information
SARA 302 Components No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.
SARA 313 Components This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.
SARA 311/312 Hazards No SARA Hazards
Massachusetts Right To Know Components No components are subject to the Massachusetts Right to Know Act.

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California Prop. 65 Components This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

SECTION 16: Other information

HMIS Rating

Health hazard:	0
Chronic Health Hazard:	
Flammability:	0
Physical Hazard	0

NFPA Rating

Health hazard:	0
Fire Hazard:	0
Reactivity Hazard:	0

Further information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product.

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END OF SDS