

Material Safety Data Sheet (MSDS)

Alkaline Phosphatase (AP) Detection Kit (Ready-to-use) – Blue

SECTION 1: GENERAL INFORMATION

Product name	Alkaline Phosphatase (AP) Detection Kit (Ready-to-use) – Blue	
Catalog number	ST01001	
Size	50 tests	
Synonyms	Not Applicable	
Application of substance	Laboratory chemicals	
Intended use	For professional use and research purposes only.	
Manufacturer	Stemmera Inc., USA	
Address	1751, Fortune Drive, Unit G-2, San Jose, CA 95131 USA	
Emergency contact no.	+1-650-776-5670	Email: info@stemmera.com

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

Component(s)	CAS No.	Concentration
Paraformaldehyde solution	30525-89-4	~ 4 %
Nitrotetrazolium Blue Chloride	298-83-9	≤ 1.0%
5-Bromo-4-chloro-3-indolyl phosphate disodium salt	102185-33-1	≤ 1.0%

SECTION 3: HAZARDS IDENTIFICATION

All given concentrations of this product contains no substances that are considered to be hazardous to health.	
Potential Health Effects	
▪ Eyes	May cause irritation
▪ Skin	May cause irritation and/or allergic reaction
▪ Inhalation	May cause irritation and/or allergic reaction
▪ Ingestion	Harmful if swallowed
▪ Physical and chemical hazards	Not available

SECTION 4: FIRST-AIDS MEASURES

Eyes	Rinse immediately with copious amount of water for at least 15 minutes. If symptom persists, seek medical attention.
Skin	Rinse thoroughly with copious amounts of water and wash with soap. Remove contaminated clothing and wash before reuse. If symptoms arise, seek medical attention.
Ingestion	Wash mouth with copious amount of water provided person is conscious. Never give anything by mouth to an unconscious person. Get medical aid immediately. Do not induce vomiting without medical advice.
Inhalation	Move to fresh air. If not breathing, give artificial respiration. If

	breathing becomes difficult, contact a physician.
Note to Physician	Treat symptomatically.

SECTION 5: FIRE FIGHTING MEASURES

Suitable Extinguishing Media	Water, Carbon dioxide, Alcohol resistant foam, Dry chemical powder.
Fire Fighting Procedures	Wear a self-contained breathing apparatus and full protective gear.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions	Wear appropriate protective equipment.
Methods for cleaning up	Clean up spills immediately with disinfectant and water. Sweep up or soak up with absorbent material, then place into a suitable clean, dry, closed container for disposal. Dispose of materials according to local and national laws. Provide ventilation.

SECTION 7: HANDLING AND STORAGE

Handling	Wear appropriate personal protective equipment and clothing at all times. Good laboratory techniques should be employed when handling. Use reagents according to manual. Avoid extreme temperatures during transport. Avoid contact of material with skins or eyes. Avoid ingestion and inhalation.
Storage	Store medium undiluted at 2°C – 8°C. Keep containers tightly closed when not in use. Do not freeze. Protect from light. Incompatible with alkali, reactive organic substances, brass, steel, copper, copper alloys, bronze, strong oxidizing agents, strong reducing agents, combustible materials, caustics, isocyanates, anhydrides, oxides and inorganic acids.

SECTION 8: EXPOSURE CONTROL/PERSONAL PROTECTION

Exposure Limits				
Chemical Name	OSHA PEL	OSHA PEL (Ceiling)	ACGIH OEL (TWA)	ACGIH OEL (STEL)
Paraformaldehyde	None	None	None	None
Nitrotetrazolium Blue Chloride	None	None	None	None
5-Bromo-4-chloro-3-indolyl phosphate disodium salt	None	None	None	None

Personal Protective Equipment	
Respiratory protection	Handle the material in well-ventilated areas. In case of insufficient ventilation wear suitable respiratory equipment.
Eye protection	Laboratory safety glasses with side-shields or goggles required.
Hand protection	Laboratory chemical-resistant gloves required.
Skin and body protection	Laboratory protective clothing required.
Hygiene measures	Handle in accordance with good industrial hygiene and safety practice.

Environmental Exposure Controls	Prevent product from entering drains.
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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

General Information	
Physical State	Liquid
Color	Colorless
Odor	Odorless
Density	Undetermined
Boiling Point	Undetermined
Melting Point	Undetermined
Flash Point	Undetermined
Autoignition Temperature	Undetermined
Oxidizing properties	Undetermined
Solubility in Water	Soluble
Danger of Explosion	Not explosive

The physical properties of these products have not been determined but are believed to be very close to those of water.

SECTION 10: STABILITY AND REACTIVITY

Stability	Stable under normal handling and storage conditions.
Conditions to avoid	Avoid heat and acidic pH.
Materials to avoid	Strong oxidizers, reducing agents, acids, acid chlorides, acid anhydrides
Hazardous decomposition products	Formaldehyde, carbon dioxide, carbon monoxide and hydrogen.
Polymerization	Paraformaldehyde becomes formaldehyde in solution and depolymerizes to form formaldehyde gas when exposed to air.

SECTION 11: TOXICOLOGICAL INFORMATION

Acute Toxicity	
Acute Effects	Toxic by inhalation, ingestion or skin absorption. Causes eye irritation.
Chronic Effects	Paraformaldehyde becomes formaldehyde in solution and when exposed to air, it depolymerizes to form formaldehyde gas. Formaldehyde causes cancer in laboratory animals and has been listed as a carcinogen by NTP and IARC. Other medical conditions that may be aggravated by exposure to this material include dermatitis of the skin, conjunctivitis of the eye, asthma and respiratory diseases. Sensitization may occur from the inhalation or through skin contact with the product. Symptoms of exposure may include coughing, burning sensation, laryngitis, headache, wheezing, shortness of breath nausea and vomiting.

Irritation Data	Skin Rabbit: 500mg/24 hours = Severe Eye Rabbit: 100mg = Severe
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Toxicity Data	Oral Rat LD50 = 800mg/kg Inhalation Rat LC50 = 1070 mg/m ³ /4 hours Skin Rabbit LDLo = 1000 mg/kg
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SECTION 13: DISPOSAL CONSIDERATIONS

Product should be disposed of as potentially biohazardous material. Waste material must be disposed of in accordance with federal, state and local environmental regulations.

SECTION 14: TRANSPORT INFORMATION

Not regulated.

SECTION 15: REGULATORY INFORMATION

There are no known health hazards present in concentrations > 1% in these components. There are no known carcinogens present in concentrations > 0.1% in these components.

SECTION 16: OTHER 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. Stemmera Inc. shall not be held liable for any damage resulting from handling or the information contained in this Material Safety Data Sheet.

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