
SECTION 1: Product and Company Identification

Identification of the substance or mixture

Catalog #: 10477
Product Name: Bicinchoninic Acid (BCA) Protein Assay with BSA Protein Standard

Company Identification

Cephram Life Sciences Inc.
11830 W Market Place, Suite K
Fulton, MD 20759
USA
Toll Free: 1-800-257-1565
Phone: 410-636-4954

24-hour Emergency Response for Hazardous Materials [or Dangerous Goods] Incident, Spill, Leak, Fire, Exposure, or Accident Call CHEMTREC Toll Free: 1-800-424-9300/ +1 703-527-3887 CCN 1010970

For Research Use Only. Not for use in diagnostic procedures.

SECTION 2: Hazards identification

GHS Classification

Acute inhalation toxicity	Category 3
Acute dermal toxicity	Category 3
Ozone	Not applicable

GHS label elements, including precautionary statements

Hazard Statements

H301 - Toxic if swallowed
H311 - Toxic in contact with skin

Precautionary Statements

P312 - Call a POISON CENTER or doctor/ physician if you feel unwell
P264 - Wash face, hands and any exposed skin thoroughly after handling
P270 - Do not eat, drink or smoke when using this product
P405 - Store locked up
P501 - Dispose of contents/ container to an approved waste disposal plant
P280 - Wear protective gloves/ eye protection/ face protection
P361 - Remove/Take off immediately all contaminated clothing
P363 - Wash contaminated clothing before reuse

Other information

No information available.

SECTION 3: Composition / Information on Ingredients

Chemical Name	CAS-No	Weight %	Classification (Reg. 1272/2008)
Sodium pyrophosphate	13472-36-1	1-5	Eye Irrit. 2 (H319) STOT SE 3 (H335) Skin Irrit. 2 (H315)
Sodium fluoride	7681-49-4	1-5	Acute Tox. 3 (H301) Eye Irrit. 2 (H319) Skin Irrit. 2 (H315) (EUH032)
Sodium orthovanadate	13721-39-6	0.1-1	Acute Tox. 4 (H302) Acute Tox. 4 (H312) Acute Tox. 4 (H332)

For the full text of the H-Statements mentioned in this Section, see Section 16

SECTION 4: First Aid Measures

General advice	When symptoms persist or in all cases of doubt seek medical advice.
Eye contact	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes.
Skin contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If symptoms persist, call a physician.
Inhalation	Move to fresh air.
Ingestion	Rinse mouth. Do not induce vomiting without medical advice. Consult a physician.
Notes to physician	Treat symptomatically.

SECTION 5: Firefighting Measures

Flammable properties	Not flammable
Flash point	Not determined
Suitable extinguishing media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Explosion Data	
Sensitivity to Mechanical Impact	none
Sensitivity to Static Discharge	none.
Protective Equipment and precautions for firefighters	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

SECTION 6: Accidental Release Measures

Personal precautions	Ensure adequate ventilation.
Environmental precautions	Try to prevent the material from entering drains or water courses.
Methods for containment	Prevent further leakage or spillage if safe to do so.
Methods for cleaning up	Pick up and transfer to properly labeled containers.

SECTION 7: Handling & Storage

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice.

Technical measures/Storage conditions Keep container tightly closed in a dry and well-ventilated place.

SECTION 8: Exposure Controls / Personal Protection

Exposure Guidelines This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Sodium fluoride 7681-49-4	TWA: 2.5 mg/m ³ F	TWA: 2.5 mg/m ³ F (vacated) TWA: 2.5 mg/m ³	IDLH: 250 mg/m ³ F TWA: 2.5 mg/m ³ F
Sodium orthovanadate 13721-39-6			Ceiling: 0.05 mg/m ³ V dust and fume 15 min

NIOSH IDLH: Immediately Dangerous to Life or Health

Other Exposure Guidelines Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

Engineering measures Showers
Eyewash stations
Ventilation systems

Personal Protective Equipment

Eye/face protection Tightly fitting safety goggles

Skin and body protection No special protective equipment required

Respiratory protection If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

Hygiene measures Handle in accordance with good industrial hygiene and safety practice.

SECTION 9: Physical and Chemical Properties

Information on basic physical and chemical properties

a) Appearance	No data available
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
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	Soluble
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

Other safety information
No data available

SECTION 10: Stability & Reactivity

Stability Stable under recommended storage conditions.

Incompatible products None known based on information supplied.

Conditions to avoid None known based on information supplied.

Hazardous decomposition products

None known based on information supplied.

Hazardous Polymerization:

Hazardous polymerization does not occur

SECTION 11: Toxicological Information

Acute toxicity

Product Information Product is toxic by ingestion. Toxic in contact with skin

Eye contact Avoid contact with eyes

Skin contact Toxic in contact with skin Wash thoroughly after handling

Ingestion Toxic if swallowed

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Sodium fluoride	52 mg/kg (Rat)	175 mg/kg (Rat)	

Chronic toxicity

Carcinogenicity This product contains one or more substances which are classified by IARC as carcinogenic to humans (Group I), probably carcinogenic to humans (Group 2A) or possibly carcinogenic to humans (Group 2B)

Chemical Name	ACGIH	IARC	NTP	OSHA
Sodium fluoride		Group 3		

IARC: (International Agency for Research on Cancer)

Group 3 – Not classifiable as to carcinogenicity in humans

Target Organ Effects: Central nervous system (CNS). Eyes. Kidney. Respiratory system. skeletal system. Skin.

SECTION 12: Ecological Information

Ecotoxicity

The environmental impact of this product has not been fully investigated.

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to microorganisms	Toxicity to daphnia and other aquatic invertebrates
Sodium fluoride	272: 96 h Pseudokirchneriella subcapitata mg/L EC50 850: 72 h Desmodesmus subspicatus mg/L EC50 static	530: 96 h Lepomis macrochirus mg/L LC50 830: 96 h Lepomis macrochirus mg/L LC50 semi-static 38-68: 96 h Oncorhynchus mykiss mg/L LC50 static 180: 96 h Pimephales promelas mg/L LC50 semi-static		338: 48 h Daphnia magna mg/L EC50 98: 48 h Daphnia magna mg/L EC50 Static

SECTION 13: Disposal Considerations

Waste disposal methods This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements.

Contaminated packaging Do not re-use empty containers

This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical Name	California Hazardous Waste Status
Sodium fluoride	Toxic

SECTION 14: Transport Information

DOT	Not dangerous goods
IATA	Not dangerous goods
ADR	Not dangerous goods

SECTION 15: Regulatory Information

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Acute Health Hazard	no
Chronic Health Hazard	no
Fire Hazard	no
Sudden Release of Pressure Hazard	no
Reactive Hazard	no

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

Chemical Name	CWA – Reportable Quantities	CWA – Toxic Pollutants	CWA – Priority Pollutants	CWA – Hazardous Substances
Sodium fluoride	1000 lb			X

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	RQ
Sodium fluoride	1000 lb		RQ 1000 lb final RQ RQ 454 kg final RQ

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

US State Right-to-Know Regulations

Chemical Name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Sodium fluoride	X	X	X	X	X

WHMIS Note: This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

SECTION 16: Other Information

Full text of H-Statements referred to under sections 2 and 3

H319 - Causes serious eye irritation H335 - May cause respiratory irritation H315 - Causes skin irritation H301 - Toxic if swallowed

Hazard statements

H301 - Toxic if swallowed
H311 - Toxic in contact with skin

Disclaimer:

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It does not represent any guarantee of the properties of the product. Cepham Life Sciences Incorporated and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product.