

# BC Assay

## MATERIAL SAFETY AND DATA SHEET

Section 1		Chemical Product and Company Identification	
<b>Name</b>	BC Assay kit	Reagent A Reagent B	Cat.#UP40840    Cat #UP95424 Cat #UP95425
<b>Synonyms</b> (CAS, chemical names, tradename, abbreviates...)	Protein determination kit based on bicinchoninic acid		
<b>Company identification</b>	UPTIMA-INTERCHIM		213 J.F.Kennedy, 03100 Montluçon (FRANCE) Tel. :+33 (0)3 70 03 88 55 Fax: +33 (0) 3 70 03 82 60 e-mail: <a href="mailto:uptima@interchim.com">uptima@interchim.com</a>
<b>In case of Emergency</b>	In Europe: Call UPTIMA-INTERCHIM out of office: Centre anti Poisons de Lyon In US: call CHEMTREC		Tel.: +33 (0)3 70 03 88 55 Tel.: 04 72 11 69 11 Tel.: 800;424;9300

Section 2		Composition, Information on Ingredients	
Component	Hazardous ingredients (Identification, CAS, Name...)	Information (% weight, state...)	
Reagent A (#UP95424)	Bicinchoninic acid (C <sub>20</sub> H <sub>10</sub> N <sub>2</sub> Na <sub>2</sub> O <sub>4</sub> )	1% aqueous solution	
Reagent B (#UP95425)	Copper (II) Sulfate (CAS7758-99-8)	4% aqueous solution	
Albumin Standard (#UP36859)	Serum Bovin Albumin	2mg / ml solution	

Section 3		Hazards Identification	
<b>Label precautionary statement</b>	Reagent A: IRRITANT Reagent B: TOXIC (USA), HARMFULL (EU)		
<b>Emergency overview</b>	-Reagent A: irritant if shallowed or if eye or skin contact. -Reagent B: Possible risk of damage if shallowed, and irritations if eye or skin contact See too section 8		
<b>Potential health effects</b> (Eye, Skin, Ingestion, Inhalation, Chronic)	-Reagent A: May cause eye irritation May cause irritation to other organs, but toxic properties have not been fully investigated; No known effect on skin contact No known effect from repeated or prolonged exposure -Reagent B: target organs : liver and kidneys, may impair fertility, possible risk of harm to the unborn child, harmful if shallowed, risk of damages to eyes, irritating to respiratory system, may cause irritation and sensitization by skin contact		
<b>Other information</b> (over-exposure, toxicity...)			
<b>Precautionary guidelines</b>	-Reagent A: avoid contact with eyes, skin, and clothing; avoid breathing vapor -Reagent B: avoid contact with eyes, skin and clothing by wearing gloves when handling		

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Section 4 First aid Measures	
<b>General measures</b>	Remove contaminated clothing promptly. Allow the victim to rest in a well ventilated area, Seek medical attention
<b>Emergency first measures (Eyes, Skin, Ingestion, Inhalation...)</b>	-Reagent A: avoid contact with eyes, skin, and clothing; avoid breathing vapor In case of skin contact, wash thoroughly (>15min) after handling-contact In case of eye contact, rinse immediately by separating eyelids, and seek for medical advice If swallowed, do NOT induce vomiting, If conscious and alert, rinse mouth and drink water. -Reagent B: In cas of skin contact, wash skin with soap and plenty of water In case of eye contact, rinse immediately with plenty of cold water while separating eyelids, and seek for medical advice If swallowed, do NOT induce vomiting, If conscious and alert, rinse mouth and drink water.
<b>Notes to physicians</b>	Treat symptomatically

Section 5 Fire Fighting Measures	
<b>Physical Information (Flammability, auto-ignition, flash point...)</b>	Reagent A: Combustible Reagent B: Non Combustible see section 10
<b>General information</b>	As in any fire, wear a self-contained breathing apparatus in pressure-demand, and full protected gear (see section 8)
<b>Extinguishing media</b>	In case of fire, use water or extinguishing media (dry chemicals, CO <sub>2</sub> , foam) appropriate to surrounding fire conditions.
<b>Spills and Leaks</b>	Sweep up or vacuum material and place into a suitable disposal container

Section 6 Accidental Release Measures	
<b>General information</b>	Wear a proper personal protective equipment to avoid skin and eye exposure (see section 8): wear respirator, rubber boots, chemical resistant gloves
<b>Spills and Leaks</b>	Sweep up or vacuum material and place into a suitable disposal container. Clean contaminated surfaces by spreading water Dispose off according to local and regional authority requirements For large spill and leak, keep away from heat, from any source of ignition
<b>Other</b>	

Section 7 Handling and Storage	
<b>Handling</b>	Wear a a proper personal protective equipment to avoid skin and eye exposure (see section 8)
<b>Storage</b>	Store all components well tighed at room temperature, or for long terme storage in a cool place (a precipitate may occur, and should be dissolve again before using).

Section 8 Exposure Controls, Personal Protection	
<b>Engineering controls</b>	Ensure there is eyewash stations and safety showers close to the work-stations. Avoid breathing vapors, and provide an exhaust ventilation if prolonged work periods.
<b>Personal protection (eyes, hands, body, respiratory...)</b>	For normal use, rubber gloves usually sufficient when handled properly. Wear protective clothing (laboratory suit) to prevent skin contact In case of large spill, additionnal protective wears may be needed (boots, splash goggles and safety glasses...) Wear a NIOSH/MSHA or European Standard EN 149 approved full-facepiece airline respirator in the positive pressure mode with emergency escape provisions
<b>Exposure limits</b>	consult local authorities

Section 9 Physical and Chemical Properties	
<b>Physical state / Appearance</b>	Reagent A: clear solution    Reagent B: blue solution    Standard: off white solution
<b>Odor</b>	No remarkable odor

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<b>Other</b> (pH, Melting/Freezing Point, Vapor Pressure, Vapor Density, Volatility, Boiling Point, Viscosity, Flash point, Auto-ignition temperature, Explosion limits (low.Upp.), Specific Gravity / Density, Molecular Formula /MW, CAS...)	Not available. All reagents are aqueous solutions
<b>Comments</b>	

<b>Section 10 Stability and Reactivity</b>	
<b>Chemical Stability</b> <b>Chemical Reactivity</b> (conditions, by -products...)	This product is stable under normal storage and handling conditions (normal temperature and pressure)
<b>Incompatibilities</b> (conditions, materials...)	Reagent A: No records Reagent B: Metals; corrodes steel
<b>Decomposition</b> <b>polymerisation</b> (conditions, materials...)	Hazardous combustion or decomposition not known products of combustion are carbon oxides (CO, CO <sub>2</sub> ), nitrogen oxides (NO, NO <sub>2</sub> ), metallic oxides (sulfur oxides) No Hazardous polymerisation
<b>Comments</b>	

<b>Section 11 Toxicological Information</b>	
<b>Toxicity</b> <b>in animals</b> <b>in human</b>	LD50/LC50 not available Reagent A is toxic to eyes, reagent B is harmful to eyes if shallowed or absorded through skin; both may cause skin irritation to skin and respiratory mucous and digestive tract (possible damage to eye, formation of methemoglobin) No other toxic information available
<b>Carcinogenicity</b>	Not available
<b>Remarks</b> (RTECS...)	Possible risk of congenital malformation in the fetus May cause reproductive disorders Chronic copper poisoning pattern is hepatic cirrhosis, brain damage and demyelinisation, kidney defects. RTECS#GL8900000)

<b>Section 12 Ecological Information</b>	
<b>Ecotoxicity (BOD5, COD...)</b> <b>Biodegradation</b> <b>Mobility</b>	Not available
<b>Remarks</b>	

<b>Section 13 Disposal Considerations</b>	
<b>Waste</b>	Not available
<b>Remarks</b>	Consult your local or regional authority or a licensed profesional waste service

<b>Section 14 Transport Information</b>	
<b>Classifications</b> (Other classifications)	Not controlled under IATA, ADR (Europe) Not controlled under TDG(Canada), IMDG, DOT (USA)
<b>Shipping</b>	Room temperature
<b>Hazards Class</b>	
<b>UN Class</b>	
<b>Packing Group</b>	
<b>Comments</b> ( marine pollutants...)	

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Section 15		Regulatory Information
<b>Classification</b>	Europe	* European labeling in accordance with EC directives CAUTION: product not fully tested Hazard symbols: not available Risk phrases: Reagent A: R36 Reagent B: R37-38 Safety phrases: Reagent A: S26-36 Reagent B:
<b>Other classifications</b>		* WGK (Water Danger/Protection) : CAS# 69-78-3: 1 * Canada: CAS# 69-78-3 is listed on Canada's DSL/NDSL List, but not listed on Canada's Ingredient Disclosure List. * US FEDERAL: CAS# 69-78-3 is listed on the TSCA inventory.

Section 16		Additional Information
<b>MSDS validation</b>		UPTIMA-INTERCHIM, A07E
<b>Comment</b>		<i>The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no way shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if the company has been advised of the possibility of such damages</i>