

## SECTION 1 - Product and Company Information

**Product Name :** BUB1 monoclonal antibody (M01), clone 4C3-4C9 (Cat # : H00000699-M01)  
**Company :** Abnova (Taiwan) Corporation  
**Address :** 9th Fl., No.108, Jhouzih St., Neihu District, Taipei City, 114 Taiwan.  
**Telephone :** +886-2-87511888  
**Fax :** +886-2-87511166

## SECTION 2 - Composition/Information on Ingredient

Monoclonal Antibody in 1x Phosphate Buffered Saline (PBS) solution.

### 1x PBS Composition:

CAS#	Chemical Name	Percent (w/v)	EINECS/ELINCS
7647-14-5	Sodium Chloride (NaCl)	8.0%	231-598-3
7558-79-4	Sodium phosphate, dibasic (Na <sub>2</sub> HPO <sub>4</sub> )	0.6%	231-448-7
7778-77-0	Potassium phosphate, Monobasic (KH <sub>2</sub> PO <sub>4</sub> )	0.2%	231-913-4
7447-40-7	Potassium chloride (KCl)	0.2%	231-211-8
7732-18-5	Water (H <sub>2</sub> O)	~ 91%	231-791-2

## SECTION 3 - Hazards Identification

### Potential Health Effects

**Eye:** May cause eye irritation.

**Skin:** May cause skin irritation.

**Ingestion:** Ingestion of large amounts may cause gastrointestinal irritation. May cause gastric disturbances and electrolytic imbalance. Ingestion of large amounts of sodium chloride may cause nausea, and vomiting, rigidity or convulsions. Continued exposure can produce coma, dehydration and internal organ congestion.

**Inhalation:** May cause respiratory tract irritation.

**Chronic:** No information found. None

## SECTION 4 - First Aid Measures

**Eyes:** Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

**Skin:** Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists. Wash clothing before reuse.

**Ingestion:** Do not induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid.

**Inhalation:** Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

**Notes to Physician:** Treat symptomatically and supportively.

## SECTION 5 - Fire Fighting Measures

**Fire Extinguisher Type:** Use water spray, dry chemical, carbon dioxide, or chemical foam.

**Fire Fighting Procedure:** As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Substance is noncombustible.

**NFPA Rating:** (estimated) Health: 2; Flammability: 0; Instability: 0

## SECTION 6 - Accidental Release Measures

**General Information:** Use proper personal protective equipment as indicated in Section 8.

**Spills/Leaks:** Vacuum or sweep up material and place into a suitable disposal container. Clean up spills immediately, observing precautions in the Protective Equipment section. Avoid generating dusty conditions. Provide ventilation.

## SECTION 7 - Handling and Storage

**Handling:** Wash thoroughly after handling. Use with adequate ventilation. Avoid contact with eyes, skin, and clothing. Avoid ingestion and inhalation.

**Storage:** Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances.

## SECTION 8 - Exposure Controls

**Eyes:** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

**Skin:** Wear appropriate protective gloves to prevent skin exposure.

**Clothing:** Wear appropriate protective clothing to prevent skin exposure.

**Respirators:** Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

## SECTION 9 - Physical and Chemical Properties

**Appearance:** liquid

**pH:** 7.0

**Boiling point:** Not available

**Vapor density:** Not available

**Vapor pressure:** Not available

**Density (g cm<sup>-3</sup>):** Not available

**Flash point:** Not available

**Explosion limits:** Not available

**Auto ignition temperature:** Not available

## SECTION 10 - Stability and Reactivity

**Chemical Stability:** Stable.

**Incompatibilities with Other Materials:** Potassium chloride is incompatible with potassium permanganate. Sodium chloride is incompatible with dichloromaleic anhydride + urea, lithium, and nitrogen compounds. Potassium phosphate dibasic and monobasic may react violently with strong acids.

**Hazardous Polymerization:** Will not occur.

## SECTION 11 - Toxicological Information

**Epidemiology:** No information found

**Teratogenicity:** No information found

**Reproductive Effects:** No information found

**Mutagenicity:** No information found

**Neurotoxicity:** No information found

## SECTION 12 - Ecological Information

Not available.

## SECTION 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

RCRA P-Series: None listed.

RCRA U-Series: None listed.

## SECTION 14 - Transport Information

	US DOT	Canada TDG
Shipping Name:	Not regulated as a hazardous material	No information available.
Hazard Class:		
UN Number:		
Packing Group:		

## SECTION 15 - Regulatory Information

### US FEDERAL

#### TSCA

CAS# 7647-14-5 is listed on the TSCA inventory.

CAS# 7558-79-4 is listed on the TSCA inventory.

CAS# 7778-77-0 is listed on the TSCA inventory.

CAS# 7447-40-7 is listed on the TSCA inventory.

#### Health & Safety Reporting List

None of the chemicals are on the Health & Safety Reporting List.

#### Chemical Test Rules

None of the chemicals in this product are under a Chemical Test Rule.

#### Section 12b

None of the chemicals are listed under TSCA Section 12b.

#### TSCA Significant New Use Rule

None of the chemicals in this material have a SNUR under TSCA.

#### CERCLA Hazardous Substances and corresponding RQs

CAS# 7558-79-4: 5000 lb final RQ; 2270 kg final RQ

#### SARA Section 302 Extremely Hazardous Substances

None of the chemicals in this product have a TPQ.

#### SARA Codes

CAS # 7647-14-5: immediate.

CAS # 7778-77-0: immediate.

CAS # 7447-40-7: immediate.

#### Section 313

This material contains Potassium chloride (listed as Water Dissociable Nitrate Compounds), ~2.0%, (CAS# 7447-40-7) which is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 373.

#### Clean Air Act:

This material does not contain any hazardous air pollutants.

This material does not contain any Class 1 Ozone depleters.

This material does not contain any Class 2 Ozone depleters.

#### Clean Water Act:

CAS# 7558-79-4 is listed as a Hazardous Substance under the CWA.

None of the chemicals in this product are listed as Priority Pollutants under the CWA.

None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

#### OSHA:

None of the chemicals in this product are considered highly hazardous by OSHA.

#### STATE

CAS# 7647-14-5 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

CAS# 7558-79-4 can be found on the following state right to know lists: California, New Jersey, Pennsylvania, Massachusetts.

CAS# 7778-77-0 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

CAS# 7447-40-7 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

**California Prop 65**

California No Significant Risk Level: None of the chemicals in this product are listed.

**European/International Regulations**

**European Labeling in Accordance with EC Directives**

**Hazard Symbols:** Not available.

**Risk Phrases:**

**Safety Phrases:**

**WGK (Water Danger/Protection)**

CAS# 7647-14-5: 0

CAS# 7558-79-4: 1

CAS# 7778-77-0: 1

CAS# 7447-40-7: 1

**Canada - DSL/NDL**

CAS# 7647-14-5 is listed on Canada's DSL List.

CAS# 7558-79-4 is listed on Canada's DSL List.

CAS# 7778-77-0 is listed on Canada's DSL List.

CAS# 7447-40-7 is listed on Canada's DSL List.

**Canada - WHMIS**

Not available

**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. Abnova shall not be held liable for any damage resulting from handling or from contact with the above product.