

## 1. Identification

<b>Product identifier</b>	<b>Single chain Human tPA</b>	
<b>Other means of identification</b>		
<b>Product code</b>	101201	
<b>Recommended use</b>	Not available.	
<b>Recommended restrictions</b>	Use in accordance with supplier's recommendations.	
<b>Manufacturer/Importer/Supplier/Distributor information</b>		
<b>Corporate Headquarters</b>	BioMedica Diagnostics Inc. 94 Wentworth Road, PO Box 1030 Windsor, Nova Scotia CANADA B0N 2T0	
<b>7 cbHfUWidYfgcb</b>	Corporate Phone: 1-902-798-5105 Corporate Fax: 1-902-798-1025 Email: info@biomedicadiagnostics.com      Website: www.biomedicadiagnostics.com	
<b>9a Yf[ YbWriHY'Yd\ cbY Bi a VYfg</b>	US, Canada, Puerto Rico & Virgin Islands 1-800-255-3924 International +1-813-248-0585      Australia 1-300-954-583 Brazil 0-800-591-6042      China 400-120-0751 India 000-800-100-4086      Mexico 01-800-099-0731	
<b>7 cbHfUWibi a VYf</b>	MIS9591327	

## 2. Hazard(s) identification

<b>Physical hazards</b>	Not classified.	
<b>Health hazards</b>	Acute toxicity, oral	Category 4
<b>OSHA defined hazards</b>	Not classified.	
<b>Label elements</b>		



<b>Signal word</b>	Warning	
<b>Hazard statement</b>	Harmful if swallowed.	
<b>Precautionary statement</b>		
<b>Prevention</b>	Wash thoroughly after handling. Do not eat, drink or smoke when using this product.	
<b>Response</b>	If swallowed: Call a poison center/doctor if you feel unwell. Rinse mouth.	
<b>Storage</b>	Store away from incompatible materials.	
<b>Disposal</b>	Dispose of waste and residues in accordance with local authority requirements.	
<b>Hazard(s) not otherwise classified (HNOC)</b>	None known.	

## 3. Composition/information on ingredients

### Mixtures

Chemical name	CAS number	%
Ammonium bicarbonate	1066-33-7	70 - 90

**Composition comments** All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

## 4. First-aid measures

<b>Inhalation</b>	Move to fresh air. If breathing is difficult, give oxygen. Get medical attention if any discomfort continues.
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<b>Skin contact</b>	For skin contact flush with large amounts of water while removing contaminated clothing. Get medical attention if irritation develops and persists.
<b>Eye contact</b>	Flush eyes thoroughly with water for at least 15 minutes. If eye irritation persists, get medical advice/attention.
<b>Ingestion</b>	Rinse mouth thoroughly if dust is ingested. Get medical advice/attention if you feel unwell.
<b>Most important symptoms/effects, acute and delayed</b>	Dust may irritate skin and the respiratory system.
<b>Indication of immediate medical attention and special treatment needed</b>	Provide general supportive measures and treat symptomatically.
<b>General information</b>	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

## 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Extinguish with water spray, carbon dioxide, dry chemical or material appropriate for the surrounding fire.
<b>Unsuitable extinguishing media</b>	None known.
<b>Specific hazards arising from the chemical</b>	Fire will generate toxic and irritating gases.
<b>Special protective equipment and precautions for firefighters</b>	Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>Fire fighting equipment/instructions</b>	Use standard firefighting procedures and consider the hazards of other involved materials.
<b>General fire hazards</b>	Will burn if involved in a fire.

## 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	Keep unnecessary personnel away. See Section 8 of the SDS for Personal Protective Equipment.
<b>Methods and materials for containment and cleaning up</b>	Avoid dust formation. Sweep or scoop up and remove.
<b>Environmental precautions</b>	Avoid discharge into drains, water courses or onto the ground.

## 7. Handling and storage

<b>Precautions for safe handling</b>	Avoid prolonged exposure. Wash thoroughly after handling. Avoid inhalation of dust and contact with skin and eyes. Observe good laboratory hygiene practices.
<b>Conditions for safe storage, including any incompatibilities</b>	Store at 2 - 8°C. Store in a closed container away from incompatible materials.

## 8. Exposure controls/personal protection

<b>Occupational exposure limits</b>	No exposure limits noted for ingredient(s).
<b>Biological limit values</b>	No biological exposure limits noted for the ingredient(s).
<b>Exposure guidelines</b>	Follow standard monitoring procedures.
<b>Appropriate engineering controls</b>	No special ventilation requirements.
<b>Individual protection measures, such as personal protective equipment</b>	
<b>Eye/face protection</b>	Wear dust-resistant safety goggles.
<b>Skin protection</b>	
<b>Hand protection</b>	It is a good industrial hygiene practice to minimize skin contact. Chemical resistant gloves are recommended.
<b>Other</b>	It is a good industrial hygiene practice to minimize skin contact.
<b>Respiratory protection</b>	In case of inadequate ventilation or risk of inhalation of dust, use suitable respiratory equipment with particle filter.
<b>Thermal hazards</b>	Wear appropriate thermal protective clothing, when necessary.
<b>General hygiene considerations</b>	Handle in accordance with good industrial hygiene and safety practice.

## 9. Physical and chemical properties

<b>Appearance</b>	Straw colored powder.
<b>Physical state</b>	Solid.
<b>Form</b>	Powder.
<b>Color</b>	Straw colored.
<b>Odor</b>	None.
<b>Odor threshold</b>	Not applicable.
<b>pH</b>	Not available.
<b>Melting point/freezing point</b>	Not available.
<b>Initial boiling point and boiling range</b>	Not relevant.
<b>Flash point</b>	Not relevant.
<b>Evaporation rate</b>	Not available.
<b>Flammability (solid, gas)</b>	Non flammable.
<b>Upper/lower flammability or explosive limits</b>	
<b>Flammability limit - lower (%)</b>	Not available.
<b>Flammability limit - upper (%)</b>	Not available.
<b>Vapor pressure</b>	Not relevant.
<b>Vapor density</b>	Not relevant.
<b>Relative density</b>	Not available.
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	Soluble in water.
<b>Partition coefficient (n-octanol/water)</b>	Not available.
<b>Auto-ignition temperature</b>	Not available.
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	Not relevant.
<b>Other information</b>	
<b>Explosive properties</b>	Not relevant.
<b>Oxidizing properties</b>	Not oxidizing.

## 10. Stability and reactivity

<b>Reactivity</b>	The product is stable and non reactive under normal conditions of storage and transport.
<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	Polymerization will not occur.
<b>Conditions to avoid</b>	Keep away from heat.
<b>Incompatible materials</b>	Strong oxidizing agents. Strong reducing agents. Strong acids.
<b>Hazardous decomposition products</b>	Carbon oxides.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Inhalation</b>	Dust may irritate respiratory system.
<b>Skin contact</b>	Dust may irritate skin.
<b>Eye contact</b>	Dust may irritate the eyes.
<b>Ingestion</b>	Harmful if swallowed.
<b>Symptoms related to the physical, chemical and toxicological characteristics</b>	Dust may irritate skin and the respiratory system.

## Information on toxicological effects

**Acute toxicity** Harmful if swallowed.

Components	Species	Test Results
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Ammonium bicarbonate (CAS 1066-33-7)

### Acute

*Oral*

LD50	Rat	1470 mg/kg
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**Skin corrosion/irritation** Dust may irritate skin.

**Serious eye damage/eye irritation** Dust may irritate the eyes.

### Respiratory or skin sensitization

**Respiratory sensitization** Not classified.

**Skin sensitization** Not classified.

**Germ cell mutagenicity** Not classified.

**Carcinogenicity** Not classified.

### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

**Reproductive toxicity** Not classified.

**Specific target organ toxicity - single exposure** Not classified.

**Specific target organ toxicity - repeated exposure** Not classified.

**Aspiration hazard** Not classified.

## 12. Ecological information

### Ecotoxicity

Components	Species	Test Results
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Ammonium bicarbonate (CAS 1066-33-7)

### Aquatic

Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	16.1 - 18.7 mg/l, 96 hours
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**Persistence and degradability** No data available.

**Bioaccumulative potential** No data available.

**Mobility in soil** Not available.

**Mobility in general** The product is soluble in water.

**Other adverse effects** The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

## 13. Disposal considerations

**Disposal instructions** Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Contaminated instruments and surfaces should be disinfected in accordance with your employer's chemical-specific and universal/standard precautions.

**Hazardous waste code** The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

**Waste from residues / unused products** Dispose in accordance with all applicable regulations.

**Contaminated packaging** Empty containers should be taken to an approved waste handling site for recycling or disposal.

## 14. Transport information

### DOT

Not regulated as dangerous goods.

### IATA

Not regulated as dangerous goods.

**IMDG**

Not regulated as dangerous goods.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not applicable.

**15. Regulatory information**

**US federal regulations** This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

Not regulated.

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

Not listed.

**CERCLA Hazardous Substance List (40 CFR 302.4)**

Ammonium bicarbonate (CAS 1066-33-7) LISTED

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**Hazard categories** Immediate Hazard - Yes  
Delayed Hazard - No  
Fire Hazard - No  
Pressure Hazard - No  
Reactivity Hazard - No

**SARA 302 Extremely hazardous substance**

Not listed.

**SARA 311/312 Hazardous chemical** Yes

**SARA 313 (TRI reporting)**

Chemical name	CAS number	% by wt.
Ammonium bicarbonate	1066-33-7	70 - 90

**Other federal regulations****Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Not regulated.

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Not regulated.

**Safe Drinking Water Act (SDWA)** Not regulated.

**US state regulations** This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

**US. Massachusetts RTK - Substance List**

Ammonium bicarbonate (CAS 1066-33-7)

**US. New Jersey Worker and Community Right-to-Know Act**

Ammonium bicarbonate (CAS 1066-33-7)

**US. Pennsylvania Worker and Community Right-to-Know Law**

Ammonium bicarbonate (CAS 1066-33-7)

**US. Rhode Island RTK**

Ammonium bicarbonate (CAS 1066-33-7)

**US. California Proposition 65**

Not Listed.

**International Inventories**

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes

Country(s) or region	Inventory name	On inventory (yes/no)*
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

## 16. Other information, including date of preparation or last revision

**Issue date** 01-December-2017

**Revision date** 26-July-2017

**Version #** 02

**NFPA ratings**



**References** ECHA CHEM

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