

GTC MATERIAL SAFETY DATA SHEET

I - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME rhAT (Recombinant Human Antithrombin)
PRODUCT NUMBER N/A
PRODUCT CLASS N/A

MANUFACTURERS NAME & ADDRESS **EMERGENCY – CALL CHEMTREC**
 GTC Biotherapeutics, Inc. DOMESTIC NORTH AMERICA 800-424-9300
 175 Crossing Boulevard, Suite 410 INTERNATIONAL 703-527-3887 (Call
 Framingham, MA 01702 Collect)

INFORMATION TELEPHONE NUMBER
 Thomas E. Smith 508-370-5402
 Monday – Friday 8a.m. - 5p.m.

Revision: 2 July 17, 2008

II - COMPOSITION / HAZARDOUS INGREDIENTS

The lyophilized vial product is supplied as a white to off-white powder with the following composition.

PRODUCT COMPOSITION	Approx. Percent	Occupational Exposure Limit		Vapor Pressure
		TLV	PEL	
Recombinant Human AT ¹	55	N/A	N/A	N/A
Sodium Citrate	6	N/A	N/A	N/A
Glycine	22	N/A	N/A	N/A
Sodium Chloride	17	N/A	N/A	N/A

¹Antithrombin (AT) is a serine protease inhibitor which is the principal inhibitor of the blood coagulation serine proteases, thrombin and Factor Xa, and to a lesser extent, factors IXa, XIa, XIIa, trypsin, plasmin, and kallikrein[1-5]. AT neutralizes the activity of thrombin as well as other serine proteases by forming a 1:1 stoichiometric complex between enzyme and inhibitor.

III - HEALTH HAZARDS IDENTIFICATION

This product contains no hazardous components as defined in OSHA 29CFR 1910.1200

Health hazards are largely unknown.

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PRIMARY ROUTE (S) OF ENTRY

Dermal: *Eye Contact.* Possible allergic reaction with exposure.
Skin Contact. Possible allergic reaction with exposure.
Inhalation: Possible allergic reaction with exposure.
Ingestion: Possible allergic reaction with exposure.

This product presents no unusual hazard if involved in a fire.

EFFECTS OF OVEREXPOSURE N/A

MEDICAL CONDITIONS PRONE TO AGGRAVATION BY EXPOSURE:

None known.

IV - FIRST AID

MUCOUS MEMBRANES: Flush eyes with water for 15 minutes Rinse mouth with water.
SKIN: Promptly wash with soap and water. Remove contaminated clothing and shoes.
INHALATION: Remove from exposure into fresh air and call a physician.
INGESTION: Flush mouth with water if person is conscious, insuring rinse is not swallowed. Give water (1/2 pint) to drink to dilute in the stomach and get medical attention.

V - FIRE-FIGHTING MEASURES

FLAMMABILITY CLASSIFICATION: OSHA N/A FLASH POINT: N/A
DOT N/A LEL: N/A

EXTINGUISHING MEDIA: Extinguish with water, carbon dioxide, dry chemical powder or appropriate foam

SPECIAL FIRE FIGHTING PROCEDURES: Where self contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

VI - ACCIDENTAL RELEASE MEASURES

Wear respirator, chemical safety goggles, rubber boots and gloves. Sweep up, place in a bag and hold for disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.

VII - HANDLING AND STORAGE

Store at controlled temperatures (2-8°C). Protect from light. Keep out of reach of children.

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VIII - EXPOSURE CONTROLS / PERSONAL PROTECTION

SKIN PROTECTION: Low, but unmeasured, risk of allergic response with normal exposure. If concerns exist wear impervious protective gloves. Gloves required for spill clean up.

EYE PROTECTION: Low, but unmeasured risk of allergic response with normal exposure. If concerns exist wear safety glasses/goggles. Safety goggles required for spill clean up.

RESPIRATORY PROTECTION: Low, but unmeasured, risk of allergic response with normal exposure. If concerns exist wear N95 particulate respirator. Respiratory protection required for spill clean up.

IX - PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point:	N/A
Melting Point:	N/A
Vapor Pressure:	N/A
Vapor Density:	N/A
Solubility in Water:	Soluble
Specific Gravity:	N/A
pH:	N/A
Odor:	None
Appearance:	White to off-white powder

X - STABILITY AND REACTIVITY

STABILITY:	<input type="checkbox"/> Unstable	<input checked="" type="checkbox"/> Stable
HAZARDOUS POLYMERIZATION:	<input type="checkbox"/> May Occur	<input checked="" type="checkbox"/> Will Not Occur
HAZARDOUS DECOMPOSITION PRODUCTS:		

None known

INCOMPATIBILITY (MATERIALS & CONDITIONS TO AVOID):

Avoid extreme temperatures. Maintain storage temperature between 2 and 8°C

XI - TOXICOLOGICAL INFORMATION

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None known. This product is derived from a non-human source.
No immunological response has been noted following intravenous injection.

XII - ECOLOGICAL INFORMATION

No known ecological hazards have been identified from this product when released into the environment. The biological activity of ATIII is believed to be rapidly deactivated with exposure to the environment.

XIII - DISPOSAL CONSIDERATIONS

Dispose product in accordance with federal, state, and local regulations.

XIV - TRANSPORT INFORMATION

Avoid extreme temperatures

XV - REGULATORY INFORMATION

N/A

XVI - OTHER NOTIFICATION INFORMATION

The information provided in this document by GTC Biotherapeutics is based on the most accurate information available and all reasonable attempts have been made to insure accuracy. Data presented are not to be taken as a warranty or representation for which GTC Biotherapeutics assumes legal responsibility. Consequently, this information is intended to assist in the safe use and handling of this material by any/all recipients.

**For Chemical Emergency
Spill Leak Fire Exposure or Accident
Call CHEMTREC Day or Night**

**DOMESTIC NORTH AMERICA 800-424-9300
INTERNATIONAL, CALL 703-527-3887 (collect calls accepted)**