



# ReNu 1 Step™ Daily Protein Remover Liquid

## MATERIAL SAFETY DATA SHEET

Effective Date: 2/21/07    Supersedes: 2/4/99

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### Section 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** ReNu 1 Step™ Daily Protein Remover Liquid  
**Product Code:** 624049  
**Chemical Family:** NA  
**Manufacturer:** Bausch & Lomb, Incorporated  
**Address:** 1400 N. Goodman Street  
Rochester, New York 14609

**For Information:** 1-800-553-5340  
**For Emergency:** 1-800-535-5053

### Section 2: COMPOSITION / INFORMATION ON INGREDIENTS

CAS #	COMPONENT NAME	% W/W	OCCUPATIONAL EXPOSURE LIMITS / GUIDELINES										UNITS
			OSHA PEL		ACGIH TLV		NIOSH REL		IRELAND		HSE		
			TWA /STEL	TWA /STEL	TWA /STEL	TWA /STEL	TWA /STEL	TWA /STEL	TWA /STEL	TWA /STEL	TWA /STEL		
56-81-5	Glycerin	55-70	15*5**	NE	10	NE	NE	NE	10	NE	10	NE	MG/M <sup>3</sup>
9014-01-1	Protease Enzyme (subtilisin)	< 0.1	NE	NE	NE	.00006C	NE	.00006***	NE	NE	NE	NE	MG/M <sup>3</sup>
10043-35-3	Boric Acid	< 1	NE	NE	2	6	NE	NE	NE	NE	NE	NE	MG/M <sup>3</sup>
1303-96-4	Sodium Borate	< 1	NE	NE	2	6	5	NE	5	NE	5	NE	MG/M <sup>3</sup>
1310-73-2	Sodium Hydroxide	< 1	2	NE	NE	C2	NE	C2	NE	NE	NE	NE	MG/M <sup>3</sup>
7732-18-5	Purified Water	> 30	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NA
Total		100											

N/E: Not Established    OSHA: Occupational Safety & Health Administration  
N/A: Not Applicable    PPM: Parts Per Million  
ACGIH: American Conference of Governmental Industrial Hygienists  
NIOSH: National Institute for Occupational Safety & Health  
MG/M<sup>3</sup>: Milligrams Per Cubic Meter

\* Total Mist

\*\* Respirable Mist

\*\*\* As a 60 min. Ceiling Limit (Proteolytic enzymes as 100% pure crystalline enzyme)

TWA: 8-Hour Time-Weighted Average  
STEL: Short-Term Exposure Limit  
C: Ceiling Limit  
REL: Recommended Exposure Limit

### Section 3: HAZARDS IDENTIFICATION

#### EMERGENCY OVERVIEW

*Clear, odorless viscous liquid. **Caution!** May cause eye and skin irritation. May cause respiratory and digestive tract irritation. This product is intended to be used on soft (hydrophilic) contact lenses as a cleaning / care regimen per labeled instructions only. This product is not intended for direct in-eye use. **Keep out of reach of children.***

**Section 3: HAZARDS IDENTIFICATION (cont.)**

**PRECAUTIONS:**

This is a contact lens care product intended to be used with daily wear and extended wear soft (hydrophilic) contact lenses as a cleaning regimen per labeled instructions only. This product is not intended for direct in-eye use. Use only in accordance with product literature. If you are allergic to any ingredient in this product, do not use.

*Keep out of reach of children.*

**POTENTIAL HEALTH EFFECTS**

**EYE:**

Can cause severe eye irritation.

**SKIN:**

Frequent or prolonged contact may irritate the skin and cause a skin rash (dermatitis).

**INGESTION:**

Not expected to be an exposure route. However, may be irritating to mouth, throat, stomach and intestinal tract.

**INHALATION:**

Not expected to be an exposure route. However, the breathing of mists may cause respiratory tract irritation.

**CHRONIC HEALTH EFFECTS**

**INHALATION:**

**Protease Enzyme:**

Repeated inhalation of enzyme mist by susceptible individuals may result in allergenic sensitization. Subsequent exposure to mists may result in respiratory irritation, inflammation of the mucous membranes of the nose and eyes, coughing, chest tightness, and difficulty breathing.

**CARCINOGENICITY:**

**NTP:** NA

**IARC:** NA

**OSHA:** NA

**Section 4: FIRST AID MEASURES**

**EYES:**

Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.

**SKIN:**

Wash thoroughly with soap and water. Get medical attention if irritation or other symptoms develop or persist.

**Section 4: FIRST AID MEASURES (cont.)**

**INGESTION:**

If swallowed, contact the Poison Control Center and obtain appropriate medical attention immediately.

**INHALATION:**

If exposed to excessive levels of mists, remove to fresh air. Get medical attention if cough or other symptoms develop.

**Section 5: FIRE FIGHTING MEASURES**

**FLAMMABLE PROPERTIES:**

**Flash Point:** This product is non-flammable.

**Method:** NA

**EXTINGUISHING MEDIA:**

Carbon dioxide, dry chemical powder, appropriate foam or water fog.

**HAZARDOUS COMBUSTION PRODUCTS:**

During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

**SPECIAL FIRE FIGHTING INSTRUCTIONS:**

As in any fire, wear self-contained breathing apparatus and full protective gear to prevent contact with skin and eyes.

**Section 6: ACCIDENTAL RELEASE MEASURES**

**General Information:**

Contain spill and absorb with a suitable inert material, then place in a chemical waste container. Dispose of in accordance with Section 13.

**Section 7: HANDLING AND STORAGE**

**HANDLING:**

Wash hands thoroughly after handling. Avoid contact with eyes or repeated contact with skin.

**STORAGE:**

This product is stable and non reactive. To maintain product stability, store at room temperature (15°C - 30°C, 59°F - 86°F). Use this product before the expiration date marked on the carton or bottle. Keep container tightly closed when not in use.

**Section 8: EXPOSURE CONTROLS / PERSONAL PROTECTION**

**RESPIRATORY PROTECTION:**

No special controls or personal protection required under conditions of intended use.

In the event of an industrial spill, provide adequate ventilation to keep airborne concentrations low. A NIOSH/MSHA approved air-purifying respirator equipped with the appropriate cartridges may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits and when adequate oxygen is present. Use a positive pressure air-supplied respirator if there is any potential for an uncontrolled release or any other circumstances where air-purifying respirators may not provide adequate protection.

**SKIN PROTECTION:**

No special controls or personal protection required under conditions of intended use.

In the event of an industrial spill, wear appropriate protective gloves to prevent skin contact.

**EYE PROTECTION:**

Avoid contact with the eye. No special controls or personal protection required under conditions of intended use.

In the event of an industrial spill, wear safety glasses or chemical safety goggles.

**ADDITIONAL PROTECTIVE CLOTHING & EQUIPMENT:**

In the event of an industrial spill, wear rubber boots and appropriate protective clothing to minimize contact with the skin.

**Section 9: PHYSICAL AND CHEMICAL PROPERTIES**

**PHYSICAL PROPERTIES:**

**Appearance / Physical State:** Clear, viscous liquid  
**Odor:** Odorless

**CHEMICAL PROPERTIES:**

<b>Boiling Point:</b>	Unknown	<b>Melting Point:</b>	Not Applicable
<b>Vapor Pressure:</b>	Unknown	<b>Vapor Density:</b>	Unknown
<b>Solubility In Water:</b>	Soluble	<b>Specific Gravity (H2O = 1):</b>	1.155
<b>pH:</b>	5.3 - 5.8	<b>Freezing Point:</b>	Unknown
<b>Molecular Weight:</b>	Not Applicable, Mixture		

**Section 10: STABILITY AND REACTIVITY**

**GENERAL:**

Stable under normal conditions.

**INCOMPATIBLE MATERIALS AND CONDITIONS TO AVOID:**

None known.

**Section 10: STABILITY AND REACTIVITY (cont.)**

**HAZARDOUS POLYMERIZATION:**

Will not occur.

**HAZARDOUS DECOMPOSITION:**

Carbon monoxide, irritating and toxic fumes and gases, carbon dioxide

**Section 11: TOXICOLOGICAL INFORMATION**

**RTECS No.: MA8050000**

**Glycerine**

**Toxicity Data:** ORL-RAT LD50: 12600 MG/KG

**RTECS No.: CO9550000**

**Protease Enzyme (Subtilisin)**

**Toxicity Data:** ORL-RAT LD50: 3700 MG/KG

**Irritation Data:** EYE-RBT 3 MG (MOD)

**RTECS No.: ED4550000**

**Boric Acid**

**Toxicity Data:** ORL-RAT LD50: 2660 MG/KG  
ORL-HUMAN LDLO: 429 MG/KG

**Irritation Data:** SKN-HUMAN 15 MG/3D (MILD)

**RTECS No.: SC7310000**

**Sodium Borate**

**Toxicity Data:** ORL-RAT LD50: 2660 MG/KG

**RTECS No.: WB4900000**

**Sodium Hydroxide**

**Toxicity Data:** IPR-MOUSE LD50: 40 MG/KG

**Irritation Data:** EYE-MKY 1%/24H (SEV)

# ReNu 1 Step™ Daily Protein Remover Liquid

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### Section 11: TOXICOLOGICAL INFORMATION (cont.)

**NOTE:** Only selected Registry of Toxic Effects of Chemical Substances (RTECS) data is presented here. See actual entry in RTECS for complete information.

### Section 12: ECOLOGICAL INFORMATION

No specific ecological data is available for this product.

### Section 13: DISPOSAL CONSIDERATIONS

All disposal methods must be in compliance with all Federal, State/Provincial and local laws and regulations. Regulations may vary in different locations. Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator.

### Section 14: TRANSPORT INFORMATION

	US DOT	IATA	IMO	RID/ADR	Canadian
<b>Shipping Name:</b>	Not Regulated	Not Regulated	No Information Available	No Information Available	No Information Available
<b>Hazard Class:</b>	NA	NA			
<b>UN Number:</b>	NA	NA			
<b>Package Group:</b>	NA	NA			

There are no unreasonable risks (health, safety, or property), that this product would pose when transported in commerce. Hazard class definitions (49 CFR, Part 173) are not applicable to this product.

### Section 15: REGULATORY INFORMATION

#### OSHA HAZARD COMMUNICATION STANDARD (29 CFR 1910.1200):

This product is considered hazardous under the Occupational Safety & Health Administration Hazard Communication Standard.

#### TOXIC SUBSTANCE CONTROL ACT (TSCA):

CAS# 56-81-5 is listed on the TSCA Inventory.  
CAS# 9014-01-1 is listed on the TSCA Inventory.  
CAS# 10043-35-3 is listed on the TSCA Inventory.  
CAS# 1303-96-4 is listed on the TSCA Inventory.  
CAS# 1310-73-2 is listed on the TSCA Inventory.  
CAS# 7732-18-5 is listed on the TSCA Inventory.

**CERCLA (Comprehensive Response Compensation, and Liability Act):** NA

**Section 15: REGULATORY INFORMATION (cont.)**

**SARA TITLE III (Superfund Amendments and Reauthorization Act):**

- **SECTION 302 (Extremely Hazardous Substances):** NA
- **SECTION 311/312 HAZARD CLASS:** Acute, Chronic
- **SECTION 313 (Toxic Chemicals):** NA

**CALIFORNIA PROPOSITION 65:**

This product contains no listed substances known to the State of California to cause cancer, birth defects or other reproductive harm, at levels that would require a warning under the statute.

**Section 16: OTHER INFORMATION**

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