

Safety Data Sheet

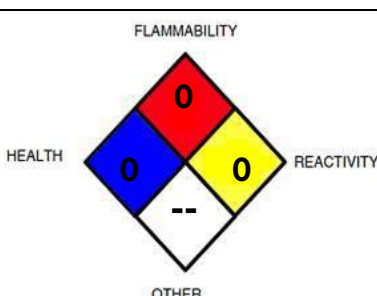
Section 1: Product & Company Identification

Product Name:	HRV 3C™ (Turbo3C™ Protease)
Product #:	H-1192
Synonyms:	HRV 3C Protease; Cysteine Protease; PreScission Site
Supplier:	AG Scientific Holdings, LLC 9950 Scripps Lake Drive, Suite 104 San Diego CA 92131 Tele# + 858-452-9925
Emergency Tele#:	ChemTel, Tele# in USA 1-800-255-3924, International 1-813-248-0585

Section 2: Composition / Information on Ingredients

Component	CAS#	EC #	Concentration
HRV3C Protease	-	-	2 mg/mL
Tris-HCl	1185-53-1	-	25 mM
NaCl	7647-14-5	-	50 mM
TCEP	51805-45-9	-	1 mM
Glycerol	56-81-5	-	50%

Section 3: Hazards Identification

Symbols	N/A
HMIS Classification	

NFPA Classification	 <p>The diagram is a diamond-shaped hazard diamond. The top triangle is red and contains the number '0'. The bottom triangle is white and contains the text '--'. The left triangle is blue and contains the number '0'. The right triangle is yellow and contains the number '0'. The labels 'HEALTH', 'FLAMMABILITY', 'REACTIVITY', and 'OTHER' are positioned around the diamond.</p>
----------------------------	---

Section 4: First Aid Measures

General Overview:	Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.
Inhalation:	If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
Skin:	Wash off with soap and plenty of water. Consult a physician.
Eyes:	Flush eyes with water as a precaution.
Ingestion:	Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.
	See section 11 for more detailed information on health effects & symptoms.

SECTION 5: Fire Fighting Measures

Flammability of the product:	No data available
Extinguishing Media:	Use water spray, alcohol-resistant foam, dry chemical, or carbon dioxide.
Hazardous thermal (de)composition products:	Carbon oxides
Special Fire Fighting Procedures:	Wear self-contained breathing apparatus for firefighting if necessary.
Flash Point:	No data available




Section 6: Accidental Release Measures

Personal Precautions:	Use personal protective equipment. Avoid breathing vapors, mist, or gas. Ensure adequate ventilation
Environmental Precautions:	Do not let product enter drains.
Methods for Clean-up:	Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

SECTION 7: Handling & Storage

Storage:	Keep container tightly closed in a dry and well-ventilated place. Recommended storage temperature -20°C Storage class (TRGS 510): 12: Non-Combustible Liquids
Handling:	For precautions see section 2.2.

SECTION 8: Exposure controls / Personal Protection

Respiratory Protection:	 <p>Where risk assessment shows air-purifying respirators are appropriate use a fullface respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).</p>
Skin and Body:	  <p>Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.</p> <p>Impervious clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.</p>
Eyes:	

	 <p>Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).</p>
Ventilation/Engineering Measures:	Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday. Do not let product enter drains.
Hygiene:	Handle in accordance with good industrial hygiene and safety practice.
Other:	<p>Components with workplace control parameters: Glycerol (CAS 56-81-5) Value: TWA, Control Parameters: 10 mg/m³ Basis: USA. ACGIH Threshold Limit Values (TLV) Remarks: Upper respiratory tract irritation</p> <p>Value: TWA, Control Parameters: 15 mg/m³ Basis: USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants.</p> <p>Value: TWA, Control Parameters: 5 mg/m³ Basis: USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants.</p> <p>Value: TWA, Control Parameters: 5 mg/m³ Basis: USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants.</p> <p>Value: TWA, Control Parameters: 15 mg/m³ Basis: USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants.</p> <p>Value: PEL, Control Parameters: 10 mg/m³ Basis: California permissible exposure limits for chemical contaminants (Title 8, Article 107)</p> <p>Value: PEL, Control Parameters: 5 mg/m³ Basis: California permissible exposure limits for chemical contaminants (Title 8, Article 107)</p>

SECTION 9: Physical and Chemical Properties

Appearance & Odor:	Liquid
Formula	N/A
Molecular Wt.	N/A
Melting Pt.	No data available
Boiling Pt.	No data available
Density:	No data available
Vapor Pressure:	No data available
Evaporation Rate:	No data available
Vapor Density:	No data available
Solubility:	No data available
Flash Point:	No data available
Autoignition Temp:	No data available

SECTION 10: Stability and Reactivity

Stability:	Stable under recommended storage conditions.
Hazardous decomposition products:	Carbon oxides
Materials to Avoid:	Strong oxidizing agents
Conditions to avoid:	No data available

SECTION 11: Toxicological Information

RTECS#:	N/A
ACUTE Toxicity:	N/A
CHRONIC Toxicity:	N/A
Chronic Exposure: Carcinogen: Mutagen: Teratogen: Reproductive:	<p>IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen by IARC.</p> <p>AGGIH: No component of this product present at levels greater than or equal to 0.1% is identified as probable, potential human carcinogen by ACGIH.</p> <p>NTP: No component of this product present at levels greater than or equal to 0.1% is identified as known or anticipated human carcinogen by NTP.</p> <p>OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as known or potential human carcinogen by OSHA.</p> <p>EPA: No classification on carcinogenic data is available from EPA</p>

SECTION 12: Ecological Information

Ecotoxicity:	No data available
Mobility:	No data available
Persistence and degradability:	No data available
Bioaccumulative potential:	No data available
Other adverse effects:	No data available
Corrosivity Characteristic:	No data available
General Notes:	To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated.

SECTION 13: Disposal Considerations

Residue Waste or Unused product:	Offer surplus and non-recyclable solutions to a licensed disposal company.
Contaminated Packaging:	Dispose of as unused product.

SECTION 14: Transportation Information

UN ID#:	N/A
ADR / RID (LAND):	Not regulated
DOT regulations:	Not regulated
IMDG/IMO (SEA):	Not regulated
IATA/DGR (AIR):	Not regulated
Special Provisions:	N/A

SECTION 15: Regulatory Information

Health Phrases:	Not hazardous
Risk Phrases:	N/A
Safety Phrases:	N/A
EU Regulations:	N/A
US Regulations:	TSCA: Not listed California Proposition 65: No products were found Massachusetts State Right to Know: Glycerol (CAS 56-81-5) New Jersey State Right to Know: Glycerol (CAS 56-81-5) Pennsylvania State Right to Know: Glycerol (CAS 56-81-5)
U.S. Federal Regulations:	SARA 302/304 emergency planning and notification: No products were found. SARA 311/312 MSDS distribution-chemical inventory-hazard identification: Chronic health hazard

	<p>SARA 313 toxic chemicals notification and release reporting: No products were found.</p> <p>Clean Water Act (CWA) 307: No products were found. Clean Water Act (CWA) 311: No products were found. Clean Air Act (CAA) 112 accidental release prevention: No products were found. Clean Air Act (CAA) 112 regulated flammable substances: No products were found. Clean Air Act (CAA) 112 regulated toxic substances: No products were found. OSHA: No products were found.</p>
WHMIS (Canada):	N/A

SECTION 16: Other Information

LIABILITY STATEMENT: *The above information is believed to be correct but does not purport to be all-inclusive and shall be used only as a guide. AG Scientific shall not be held liable for any damages resulting from handling or from contact with the above product. AG Scientific products are for research purposes only. Not for human use or consumption.*