

Material Safety Data Sheet (MSDS)

Revision Number: 1.0		Last updated March 2013	
1) Product and Company Identification			
Product Name:		HCV NS3/4A protease, Mutant A156S, A156T, A156V, D168A, D168V, R155K, V170A, V36M, T54A	
Manufacturer/Supplier:		AnaSpec, Inc. www.anaspec.com 34801 Campus Drive Fremont, CA 94555 Tel: 510-791-9560 Fax: 510-791-9572 Email: service@anaspec.com	
Catalog Number		72022, 72023, 72031, 72032, 72033, 72034, 72035, 72036, 72037	
Unit Size		5ug, 10ug	
2) Hazards Identification			
<u>Emergency Overview:</u>			
GHS Hazard Classification:			
GHS Physical Hazards		Skin irritation Eye irritation	
GHS Health and Environmental Hazards		H316 Causes mild skin irritation H320 Causes mild eye irritation	
GHS Signal Words		Warning	
GHS Hazard Statements:		None	
GHS Precautionary Statements:		P280 Wear Eye Protection	
HMIS Classification			
Health hazard: 1 Flammability: 0 Physical hazards: 0			
NFPA Rating			
Health hazard: 1 Fire: 0 Reactivity Hazard: 0			

3) Composition / Information on Ingredients*Ingredients/Components:*

<i>Chemical Name:</i>	<i>CAS Number:</i>
HCV NS3/4A protease, Mutant A156S, A156T, A156V, D168A, D168V, R155K, V170A, V36M, T54A	N/A
20mM phosphate buffer and 20% glycerol	56-81-5

4) First Aid Measures

<i>Inhalation:</i>	Move subject to fresh air. If breathing is difficult, give oxygen. Give artificial respiration if breathing has stopped. Get prompt medical attention.
<i>Ingestion:</i>	Do NOT induce vomiting. If swallowed, wash out mouth with water if subject is conscious. Immediately consult a physician. Never give anything by mouth to an unconscious person.
<i>Skin:</i>	Remove contaminated clothing. Wash skin thoroughly with soap and water. Consult a physician.
<i>Eyes:</i>	Immediately flush eyes with large amount of water for at least 15 minutes. Consult a physician.

5) Fire Fighting Measures

<i>Extinguishing media:</i>	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
<i>Special firefighting procedures:</i>	Wear self contained breathing apparatus if fire fighting is necessary.
<i>Unusual fire and explosions hazards:</i>	None

6) Accidental Release Measures

<i>Spill response</i>	Soak up with inert absorbent material.
<i>Containment</i>	None.
<i>PPE</i>	Gloves, lab coat, goggles.

7) Handling and Storage

Store at –80 °C

8) Exposure Controls / Personal Protection

<i>Engineering controls</i>	None
<i>PPE</i>	Wear goggles, gloves and lab coat when handling this product. Where risk assessment shows air-purifying respirators are appropriate use a full-face 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).

9) Physical and Chemical Properties

<i>Physical State</i>	Liquid
<i>Odor</i>	Not determined
<i>Solubility in Water</i>	Soluble
<i>Specific Gravity</i>	Not determined
<i>pH</i>	7.5
<i>Boiling Point</i>	Not determined

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<i>Melting Point</i>	Not determined
<i>Flash Point</i>	Not determined
<i>Vapor Pressure:</i>	Not determined
<i>Vapor Density:</i>	Not determined

10) Stability and Reactivity

<i>Thermal Decomposition</i>	Stable under recommended storage conditions
<i>Dangerous Products of Decomposition Formed Under Fire Conditions</i>	Carbon oxides
<i>Dangerous Reactions</i>	No dangerous reactions known.

11) Toxicological Information

<i>RTECS Number</i>	Not listed.
<i>Toxicity</i>	Not identified
<i>Health Hazards</i>	May cause skin irritation. May cause eye irritation. May be harmful if inhaled. May be harmful if swallowed.
<i>Potential Hazards</i>	Not identified
<i>Carcinogenicity:</i>	Not listed by NTP, IARC, or OSHA
<i>OSHA Permissible Exposure Limit (PEL) Data</i>	Not identified
<i>ACGIH Threshold Limit Values (TLV)</i>	Not identified

12) Ecological Information

Do not allow product to reach ground water, watercourse, or sewage system.

13) Disposal Considerations

Consult local, state, or national regulations for proper disposal.

14) Transport Information

<i>Hazard Class</i>	This substance is considered to be non-hazardous for transport
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15) Regulatory Information

California Proposition 65: Not Listed
US TSCA (Toxic Substance Control Act): Not Listed
US CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act): Not Listed
US SARA Title III (Superfund Amendments and Reauthorization Act): Not Listed
US Other: Not listed
EC EINECS (European Inventory of Existing Commercial Chemical Substances) Number: Not Listed
EC Risk Statements: Not Determined
Other Country Regulations: Not Determined

16) Other Information

It is not intended for food, drug, household, agricultural or cosmetic use. A technically qualified individual experienced in handling potentially hazardous chemicals must supervise its use. The above information is believed to be correct but does not purport to be all-inclusive and shall be used only as a guide. Users should make independent decisions regarding completeness of the information based on all sources available. AnaSpec shall not be held liable for any damage resulting from handling or from contact with the above

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