Material Safety Data Sheet

REVIEWED 23/2/2008

1. Identification of Substance

Name: *forensic*GEM™

Manufacturer: ZyGEM Corporation Ltd, Waikato Innovation Park, Ruakura Road, Hamilton, New Zealand. Tel : +64 7 8570870

2. Composition

Description: Neutral metalloproteinase from *Bacillus* species strain EA1.
Classification: Peptidease family M4 (Thermolysin family)
Purpose: For the enzymatic hydrolysis of proteins.

3. Hazards

Emergency Overview: Caution – this substance is not yet fully tested. To our knowledge, there are no known hazards but w recommend handling all chemicals with caution.

Potential Health Effects

Inhalation:	Not determined
Ingestion:	Not determined
Skin:	Not determined
Eyes:	Not determined
Chronic Exposures:	Not determined
Target Organs:	Not determined

4. First Aid Measures

Potentially harmful. Avoid prolonged or repeated exposure. Wash thoroughly after handling. If eye or skin contact occurs, wash affected area with water for 15 minutes and seek medical advice. If inhaled, move individual to fresh air and seek medical advice. If swallowed, seek medical advice.

5. Fire Fighting Measures

Use CO_2, dry powder or water.

6. Accidental Release Measures

Wash with plenty of water

7. Handling and Storage

Store at <= -20°C. Protect material from long-term exposure to light; may be exposed to light for short periods of time.

8. Exposure Controls / Personal Protection

Wear appropriate gloves, protective clothing and eyewear and follow safe laboratory practices.

9.Stability and Reactivity

Thermal Decomposition: No decomposition if used according to specifications.

Dangerous Reactions: No dangerous reactions identified.

Dangerous Products of Decomposition: No dangerous decomposition products identified.

10. Toxicological Information

RTECS Number: None known

Toxicity: We are not aware of any toxicity data for this product.

Health Hazards: We are not aware of any reported health hazards for this product. We recommend treating all chemicals with caution.

Carcinogenicity: Not listed by NTP, IARC or OSHA.

11. Ecological Information

No know ecological effects. Dispose of appropriately for any chemical substance

12. Regulations

US Toxic Substances Control Act (TSCA): Not listed

US Other: Not applicable

EEC EINECS Number: Not identified

EEC Risk Statements: Not determined

Other Country Regulations: None identified

13 Other Information

The preparation contains a low concentration of a proteinase that has been produced in synthetic form using an *Escherichia coli* K12 strain. This bacterial species is universally used and is a non-hazardous, non-pathogenic debilitated bacterial species. High temperatures are used in the production of the enzyme to kill all living cells and then the enzyme is purified to mass spectroscopy grade homogeneity. Subsequent to this meticulous purification, the potential for any trace DNA is totally removed by enzymatic treatment.