

## Papain Material Safety Data Sheet

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### 1. Identification of the substance/preparation and company

*Papain Solution* for in-vitro diagnostic use only.

Product codes PN090

PN185, PN187, PN188 (for use within NHSBT)

NHSBT Reagents

14 Estuary Banks, Speke, Liverpool L24 8RB

Telephone: 0151 268 7157 Fax: 0151 268 7156

### 2. Composition/information on ingredients

Papain solution is produced from an extract prepared from crude Papain in M/15 phosphate buffer (Ph 5.3) and containing sorbitol (120mM), dipotassium EDTA (1mM) and L-cysteine hydrochloride (25mM) as an activator.

### 3. Hazards identification

Papain, dipotassium EDTA (0.4g/l) and L-cysteine (4 g/l) are classified as irritants, but at the concentration used within this reagent are not associated with any hazards.

### 4. First aid measures

Eye contamination: Immediate and prolonged irrigation with copious amounts of water. Seek medical advice

Skin contamination: Wash thoroughly with copious amounts of water. If skin is broken seek medical advice

Ingestion: Wash mouth with copious amounts of water and seek medical advice

Inhalation: N/A

### 5. Fire fighting measures

Non combustible. If involved in fire, use extinguishing media appropriate to the surrounding conditions.

### 6. Accidental release measures

Wearing disposable nitril gloves and goggles, wipe up spillage with absorbent paper towels. Wash spill site after material pick up is complete. Dispose of towels and gloves in a 'Hazardous waste for incineration' bag. Control spillage in accordance with HSE regulations.

### 7. Handling and storage

When handling product wear laboratory coats and disposable nitril gloves. Store the reagent at -20°C until ready for use.

Protect from contamination.

### 8. Exposure controls/personal protection

When handling product wear laboratory coats and disposable nitril gloves.

### 9. Physical and chemical properties

A clear liquid with proteolytic enzyme activity.

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- 10. Stability and reactivity**  
Store at  $-20^{\circ}\text{C}$  until used. Papain solution should be disposed of 24 hours after thawing.
- 11. Toxicological information**  
Data not available
- 12. Ecological Information**  
Data not available
- 13. Disposal Considerations**  
Dispose of in accordance with Hazardous waste regulations 2005 and any additional local regulations  
Also see 3
- 14. Transport Information**  
Suitable for transportation by road and rail.  
Packaging complies with regulations in CHIP (Chemicals Hazard Information and Packaging for Supply) regulations 2009
- 15. Regulatory information**  
For use in-vitro diagnostic tests by appropriately trained laboratory personnel.  
COSHH  
Health and Safety at work act 1974  
Registration, Evaluation, Authorisation and Restriction of Chemicals Regulations 2009  
Environmental Protection Act 1990  
Hazardous Waste Regulations 2005  
EEC/91/155
- 16. Other information**  
The information in this safety data sheet does not replace the user's own assessment of work place risk as required by other health and safety legislation.