

MATERIAL SAFETY DATA SHEET (MSDS)

PAPAIN (PURE)

1. Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Trade name : PAPAIN (PURE)

Product code : P0152500100

Identification of the product: Papain

CAS No: 9001-73-4 EC No :232-627-2 Annex No :647-007-00-0

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use : Industrial. For professional use only.

1.3. Details of the supplier of the safety data sheet

Company identification SUVCHEM
Chaitanya Town

Chaitanya Tower, 2nd Floor, Office # 206,

Siddharth Nagar, S.V. Road,

Goregaon (West), Mumbai - 400062,

Maharashtra, India.

Contact: +91 22 28725393 / 94 / 95

Email ID: info@suvchem.com/care@suvchem.com

1.4. Emergency telephone number

Phone no. : + 91 22 28725393 / 94 / 95 (9:00am - 6:00 pm) [Office hours]

2. Hazards identification -DSD

2.1. Classification of the substance or mixture

Classification EC 67/548 or EC 1999/45

Classification : Xi; R36/37/38

Xn; R42

Hazard Class and Category Code(s), Regulation (EC) No 1272/2008 (CLP)

Health hazards : Specific Target Organ Toxicity - Single exposure - Respiratory tract irritation -

Category 3 - Warning (CLP: STOT SE 3) H335

Eye irritation - Category 2A - Warning (CLP : Eye Irrit. 2) H319 Skin irritation - Category 2 - Warning (CLP : Skin Corr. 2) H315

Respiratory sensitization - Category 1 - Danger (CLP: Resp. Sens. 1) H334

2.2. Label elements



MATERIAL SAFETY DATA SHEET (MSDS)

PAPAIN (PURE)

2. Hazards identification -DSD (continued)

Labelling EC 67/548 or EC 1999/45

Symbol(s)



Symbol(s) : Xn : Harmful

R Phrase(s) : R36/37/38 : Irritating to eyes, respiratory system and skin.

R42: May cause sensitization by inhalation.

S Phrase(s) : S2 : Keep out of the reach of children.

S22 : Do not breathe dust.S24 : Avoid contact with skin.

S26 : In case of contact with eyes, rinse immediately with plenty of water and seek

medical advice.

S36/37: Wear suitable protective clothing and gloves.

Contains : Papain

Labelling Regulation EC 1272/2008 (CLP)

Hazard pictograms





Signal words : Danger

Hazard statements : H319 : Causes serious eye irritation.

H315: Causes skin irritation.

H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H335: May cause respiratory irritation.

Precautionary statements

• **General** : P102: Keep out of reach of children.

P103: Read label before use.

P101: If medical advice is needed, have product container or label at hand.

• **Prevention** : P285: In case of inadequate ventilation wear respiratory protection.

P280: Wear protective gloves, protective clothing, eye protection, face protection.

P271: Use only outdoors or in a well-ventilated area.

P261: Avoid breathing dust, fume, gas, mist, vapours, spray.

P264: Wash thoroughly after handling.

• Response : P302+P352: IF ON SKIN : Wash with plenty of soap and water.

P332+P313: If skin irritation occurs: Get medical advice.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

P304+P340: IF INHALED : Remove to fresh air and keep at rest in a position

comfortable for breathing.

P342+P311: If experiencing respiratory symptoms : Call a POISON CENTER or

doctor.

P363: Wash contaminated clothing before reuse.



MATERIAL SAFETY DATA SHEET (MSDS)

PAPAIN (PURE)

2. Hazards identification -DSD (continued)

• Storage : P403+P233: Store in well-ventilated place. Keep container tightly closed.

P405: Store locked up.

• **Disposal considerations** : P501: Dispose of this material and its container to hazardous or special waste

collection point, in accordance with local, regional, national and/or international

regulation.

Contains : Papain

2.3. Other hazards

Other hazards : The substance does not fulfil the criteria to be identified as PBT substance or vPvB

substance according to Annex XIII of Regulation REACH.

3. Composition/information on ingredients

Substance / Preparation : Papain

EC No :232-627-2 Annex No :647-007-00-0

Substance.

 Substance name
 Contents
 CAS No
 EC No
 Annex No
 REACH Ref.
 Classification

 Papain
 100 %
 9001-73-4
 232-627-2
 647-007-00-0
 --- Xi; R36/37/38 R42

Resp. Sens. 1 _ H334 Eye irrit 2 _ H319 Skin Irrit. 2 _ H315 STOT SE 3 _ H335

Contains no other components or impurities which will influence the classification of the product.

4. First aid measures

4.1. Description of first aid measures

Inhalation : If experiencing respiratory symptoms : Call a POISON CENTER or doctor if you feel

unwell. Remove to fresh air and keep at rest in a position comfortable for breathing.

Skin contact : Specific treatment (see on this label). Get medical advice. If skin irritation occurs :

Wash contaminated clothing before reuse. Wash with plenty of soap and water.

Eye contact : If eye irritation persists : Get medical advice. Remove contact lenses, if present and

easy to do. Continue rinsing. Rinse cautiously with water for several minutes.

Ingestion : Obtain emergency medical attention. Rinse mouth. Do NOT induce vomiting.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms relating to use : Causes serious eye irritation.

Causes skin irritation.

May cause allergy or asthma symptoms or breathing difficulties if inhaled. May

cause respiratory irritation.



MATERIAL SAFETY DATA SHEET (MSDS)

PAPAIN (PURE)

4. First aid measures (continued)

4.3. Indication of any immediate medical attention and special treatment needed

General information : Never give anything by mouth to an unconscious person. If you feel unwell, seek

medical advice (show the label where possible).

5. Fire-fighting measures

5.1. Extinguishing media

Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.

Unsuitable extinguishing media: Do not use a heavy water stream.

Surrounding fires : Use water spray or fog for cooling exposed containers.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products : Under fire conditions, hazardous fumes will be present.

5.3. Advice for fire-fighters

Protection against fire : Do not enter fire area without proper protective equipment, including respiratory

protection.

Special procedures : Exercise caution when fighting any chemical fire. Avoid (reject) fire-fighting water to

enter environment.

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For emergency responders : Equip cleanup crew with proper protection.

Ventilate area.

For non-emergency personnel : Evacuate unnecessary personnel.

6.2. Environmental precautions

Environmental precautions : Prevent entry to sewers and public waters. Notify authorities if product enters

sewers or public waters.

6.3. Methods and material for containment and cleaning up

Clean up methods : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as

possible. Store away from other materials. Collect spillage.

6.4. Reference to other sections



MATERIAL SAFETY DATA SHEET (MSDS)

PAPAIN (PURE)

6. Accidental release measures (continued)

See section 8. Exposure controls/personal protection

7. Handling and storage

7.1. Precautions for safe handling

Handling: Wash thoroughly after handling.

Wash thoroughly after handling. Use only outdoors or in a well-ventilated area.

Avoid breathing dust, fume, gas, mist, vapours, spray.

Technical protective measures

: Provide good ventilation in process area to prevent formation of vapour.

Special precautions

: Avoid breathing dust, fume, gas, mist, vapours, spray.

7.2. Conditions for safe storage, including any incompatibilities

Storage : Keep only in the original container in a cool, well ventilated place. Keep container

tightly closed.

Storage - away from : Strong bases. Strong acids. Sources of ignition. Direct sunlight.

7.3. Specific end use(s)

Specific end use(s) : None.

8. Exposure controls/personal protection

8.1. Exposure controls

Personal protection : Avoid all unnecessary exposure.

• Respiratory protection : In case of inadequate ventilation wear respiratory protection.

• Hand protection : Wear protective gloves.

Skin protection
 Eye protection
 Chemical goggles or safety glasses.
 Others
 Wear suitable protective clothing.
 Chemical goggles or safety glasses.
 When using, do not eat, drink or smoke.

8.2. Control parameters

Occupational Exposure Limits : No data available.

9. Physical and chemical properties

9.1. Information on basic physical and chemical properties



MATERIAL SAFETY DATA SHEET (MSDS)

PAPAIN (PURE)

9. Physical and chemical properties (continued)

Physical state at 20 °C : Solid.

Colour : Off white powder

Odour : N/A

Odour threshold: No data available.pH value: No data available.Melting point [°C]: No data available.

: N/A Decomposition point [°C] : N/A Critical temperature [°C] Auto-ignition temperature [°C] : N/A : N/A Flammability (solid, gas) : N/A Flash point [°C] : N/A Boiling point [°C] Initial boiling point [°C] : N/A : N/A Final boiling point [°C] **Evaporation rate** : N/A Vapour pressure [20°C] : N/A Vapour pressure mm/Hg : N/A Vapour density : N/A Density [g/cm3] : N/A Relative density, gas (air=1) : N/A

Solubility in water [% weight] : Soluble in water

: N/A

Solubility in water : N/A

Relative density, liquid (water=1)

Log Pow octanol / water at 20°C : No data available.

Solubility : N/A Viscosity at 40°C [mm2/s] : N/A

9.2. Other information

Explosive properties : N/A
Explosion limits - upper [%] : N/A
Explosion limits - lower [%] : N/A

Oxidising properties : No data available.

10. Stability and reactivity

10.1. Reactivity

Reactivity : Not established.



MATERIAL SAFETY DATA SHEET (MSDS)

PAPAIN (PURE)

10. Stability and reactivity (continued)

10.2. Chemical stability

Chemical stability : Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

Hazardous reactions : Not established.

10.4. Conditions to avoid

Conditions to avoid : Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Materials to avoid : Strong acids. Strong bases.

10.6. Hazardous decomposition products

Hazardous decomposition products : Fumes. Carbon monoxide. Carbon dioxide.

11. Toxicological information

11.1. Information on toxicological effects

Acute toxicity

Inhalation
 Based on available data, the classification criteria are not met.
 Based on available data, the classification criteria are not met.
 Ingestion
 Based on available data, the classification criteria are not met.
 Corrosion
 Based on available data, the classification criteria are not met.

Irritation : Causes serious eye irritation.

Causes skin irritation.

May cause respiratory irritation.

Sensitization : May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Mutagenicity: Based on available data, the classification criteria are not met.Carcinogenicity: Based on available data, the classification criteria are not met.Toxic for reproduction: Based on available data, the classification criteria are not met.STOT-single exposure: Based on available data, the classification criteria are not met.STOT-repeated exposure: Based on available data, the classification criteria are not met.Aspiration hazard: Based on available data, the classification criteria are not met.



MATERIAL SAFETY DATA SHEET (MSDS)

PAPAIN (PURE)

12. Ecological information

12.1. Toxicity

Toxicity information : Not established.

12.2. Persistence - degradability

Persistence - degradability : Biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential : Not established.

12.4. Mobility in soil

Mobility in soil : Not established.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment: The substance does not fulfil the criteria to be identified as PBT substance or vPvB

substance according to Annex XIII of Regulation REACH.

12.6. Other adverse effects

Environmental precautions : Avoid release to the environment.

13. Disposal considerations

13.1. Waste treatment methods

General : Avoid release to the environment. Dispose in a safe manner in accordance with

local/national regulations.

Dispose of this material and its container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

14. Transport information

14.1. Land transport (ADR-RID)

General information : Not regulated.

14.2. Sea transport (IMDG) [English only]

General information : Not regulated.



MATERIAL SAFETY DATA SHEET (MSDS)

PAPAIN (PURE)

In accordance with REACH Regulation (CE) No 1907/2006 and with CLP Regulation (CE) No 1272/2008

DISCLAIMER:

- SUVCHEM Products are to be used as Lab Chemicals for R&D only. Not for drug, medicinal, household or other uses.
- SUVCHEM shall not be responsible for any damage resulting from handling or from contact with the above product.
- **SUVCHEM** provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product.

End of document