

# TRYPTONE

Version No:2.0  
Page 1 of 7

GHS SAFETY DATA SHEET

## Section 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

### PRODUCT NAME

TRYPTONE

### OTHER NAMES

"casein hydrolysate", "trypsin digest of casein", "pancreatic digest of proteins"

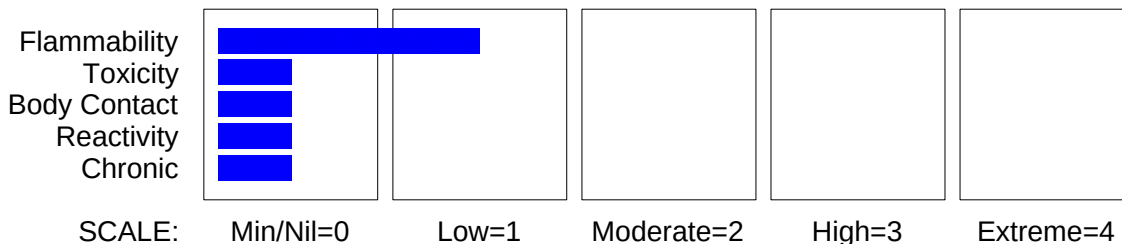
### PRODUCT USE

An extremely rich source of amino acid nitrogen, may be recommended for the preparation of sterility test media, Dubos medium, media used in the canning industry; also for production of indole, the material having a high tryptophan content.

### SUPPLIER

Company: S D FINE- CHEM LIMITED  
Address:  
315- 317, T.V. INDUSTRIAL ESTATE,  
248, WORLI,  
MUMBAI- 400030.INDIA.  
technical@sdfine.com  
Telephone: 91- 22- 24959898  
Telephone: 91- 22- 24959899  
Fax: 91- 22- 24937232

### HAZARD RATINGS



## Section 2 - HAZARDS IDENTIFICATION

### EMERGENCY OVERVIEW

#### HAZARD

Not hazardous  
No hazards determined by using GHS criteria

#### PRECAUTIONARY STATEMENTS

continued...

# TRYPTONE

Page 2 of 7

---

## Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

---

| NAME     | CAS RN | %   |
|----------|--------|-----|
| tryptone | None   | >90 |

---

## Section 4 - FIRST AID MEASURES

---

### SWALLOWED

- Immediately give a glass of water.
- First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.

### EYE

- If this product comes in contact with the eyes:
- Wash out immediately with fresh running water.
  - Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.
  - If pain persists or recurs seek medical attention.
  - Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

### SKIN

- If skin or hair contact occurs:
- Flush skin and hair with running water (and soap if available).
  - Seek medical attention in event of irritation.

### INHALED

- If fumes or combustion products are inhaled remove from contaminated area.
- Other measures are usually unnecessary.

### NOTES TO PHYSICIAN

Treat symptomatically.  
Sterile isotonic saline is the preferred eye irrigant.

---

## Section 5 - FIRE FIGHTING MEASURES

---

### EXTINGUISHING MEDIA

Carbon dioxide.  
Dry chemical powder.  
Foam.  
Water spray or fog.

### FIRE FIGHTING

Alert Fire Brigade and tell them location and nature of hazard.

- Wear breathing apparatus plus protective gloves for fire only.
- Prevent, by any means available, spillage from entering drains or water courses.

If safe to do so, remove containers from path of fire.  
Cool fire exposed containers with water spray from a protected location.  
Use fire fighting procedures suitable for surrounding area.

### FIRE/EXPLOSION HAZARD

Combustible.  
Not considered to be a significant fire risk.

continued...

# TRYPTONE

May emit clouds of acrid smoke.  
Other decomposition products include: nitrogen oxides (NO<sub>x</sub>).

## **FIRE INCOMPATIBILITY**

Avoid contact with strong oxidisers.

---

## **Section 6 - ACCIDENTAL RELEASE MEASURES**

---

### **EMERGENCY PROCEDURES**

#### **MINOR SPILLS**

Clean up all spills immediately.  
Wear impervious gloves and safety glasses.  
Use dry clean up procedures and avoid generating dust.  
Place in suitable containers for disposal.

#### **MAJOR SPILLS**

Wear impervious gloves and safety glasses.  
If exposure to workplace dust is not controlled, respiratory protection is required; wear SAA approved dust respirator.  
Prevent, by any means available, spillage from entering drains or water courses.  
Use dry clean up procedures and avoid generating dust.  
Recover uncontaminated product in clean, dry, labelled containers.  
Collect residues and seal in labelled drums for disposal.  
Wash spill area with large quantities of water.  
**Personal Protective Equipment advice is contained in Section 8 of the MSDS.**

---

## **Section 7 - HANDLING AND STORAGE**

---

### **PROCEDURE FOR HANDLING**

- Limit all unnecessary personal contact.
- Wear protective clothing when risk of exposure occurs.
- Use in a well-ventilated area.
- Avoid contact with incompatible materials.
- When handling, DO NOT eat, drink or smoke.
- Keep containers securely sealed when not in use.
- Avoid physical damage to containers.
- Always wash hands with soap and water after handling.
- Work clothes should be laundered separately.
- Use good occupational work practice.
- Observe manufacturer's storing and handling recommendations.
- Atmosphere should be regularly checked against established exposure standards to ensure safe working conditions are maintained.

### **SUITABLE CONTAINER**

- Packaging as recommended by manufacturer.
- Check that containers are clearly labelled.

### **STORAGE INCOMPATIBILITY**

Segregate from strong oxidisers.

### **STORAGE REQUIREMENTS**

Observe manufacturer's storing and handling recommendations.

# TRYPTONE

Store in a cool, dry place.  
Store away from strong oxidisers.  
Protect containers against physical damage.  
Keep containers securely sealed.

## SAFE STORAGE WITH OTHER CLASSIFIED CHEMICALS



+: May be stored together  
O: May be stored together with specific precautions  
X: Must not be stored together

## Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

### EXPOSURE CONTROLS

#### MATERIAL DATA

These "dusts" have little adverse effect on the lungs and do not produce toxic effects or organic disease. Although there is no dust which does not evoke some cellular response at sufficiently high concentrations, the cellular response caused by P.N.O.C.s has the following characteristics:

- the architecture of the air spaces remain intact,
- scar tissue (collagen) is not synthesised to any degree,
- tissue reaction is potentially reversible.

Extensive concentrations of P.N.O.C.s may:

- seriously reduce visibility,
- cause unpleasant deposits in the eyes, ears and nasal passages,
- contribute to skin or mucous membrane injury by chemical or mechanical action, per se, or by the rigorous skin cleansing procedures necessary for their removal. [ACGIH]

This limit does not apply:

- to brief exposures to higher concentrations
- nor does it apply to those substances that may cause physiological impairment at lower concentrations but for which a TLV has as yet to be determined.

This exposure standard applies to particles which

- are insoluble or poorly soluble\* in water or, preferably, in aqueous lung fluid (if data is available) and
- have a low toxicity (i.e.. are not cytotoxic, genotoxic, or otherwise chemically reactive with lung tissue, and do not emit ionizing radiation, cause immune sensitization, or cause toxic effects other than by inflammation or by a mechanism of lung overload).

#### PERSONAL PROTECTION



# TRYPTONE

## Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

### EYE

None required when handling small quantities.

OTHERWISE:.

- Safety glasses.

### HANDS/FEET

No special equipment needed when handling small quantities.

OTHERWISE: Wear general protective gloves, eg. light weight rubber gloves.

### OTHER

No special equipment needed when handling small quantities

OTHERWISE:

- Overalls
- Eyewash unit.

### RESPIRATOR

| Protection Factor | Half- Face Respirator | Full- Face Respirator | Powered Air Respirator |
|-------------------|-----------------------|-----------------------|------------------------|
| 10 x ES           | P1 Air- line*         | - -                   | PAPR- P1 -             |
| 50 x ES           | Air- line**           | P2                    | PAPR- P2               |
| 100 x ES          | -                     | P3                    | -                      |
|                   |                       | Air- line*            | -                      |
| 100+ x ES         | -                     | Air- line**           | PAPR- P3               |

\* - Negative pressure demand \*\* - Continuous flow.

The local concentration of material, quantity and conditions of use determine the type of personal protective equipment required.

For further information consult your

Occupational Health and Safety Advisor.

## ENGINEERING CONTROLS

None under normal operating conditions.

If exposure to workplace dust is not controlled, respiratory protection is required; wear SAA approved dust respirator.

## Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

### APPEARANCE

Off-white powder. Characteristic odour. Miscible with water.

A tryptic hydrolysate of casein. Complies with the specification for a pancreatic digest of casein in the US Pharmacopeia. Moisture 3.6% approx., ash 8.1% approx., total nitrogen 13.2%.

The analysis of materials containing soluble degradation products of proteins presents considerable difficulties in the interpretation of results. Because of the overlap of nitrogen-containing fractions such as primary and secondary proteoses, peptones, polypeptides, and the non-specific nature of many analytical techniques - the results obtained are highly empirical and mean very little unless the nature of the sample and the method of analysis is known.

### PHYSICAL PROPERTIES

Solid.

Mixes with water.

Molecular Weight: Not applicable

Melting Range (°C): Not available

Boiling Range (°C): Not available.

Specific Gravity (water=1): Not available

continued...

# TRYPTONE

## Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

Solubility in water (g/L): Miscible  
pH (1% solution): 7, 2% autoclaved  
Volatile Component (%vol): Nil.  
Relative Vapour Density (air=1): Not applicable.  
Lower Explosive Limit (%): Not available.  
Autoignition Temp (°C): Not available.  
State: Divided solid

pH (as supplied): Not applicable  
Vapour Pressure (kPa): Not applicable.  
Evaporation Rate: Not applicable  
Flash Point (°C): Not applicable  
Upper Explosive Limit (%): Not available.  
Decomposition Temp (°C): Not available.

## Section 10 - CHEMICAL STABILITY AND REACTIVITY INFORMATION

### CONDITIONS CONTRIBUTING TO INSTABILITY

Product is considered stable and hazardous polymerisation will not occur.

## Section 11 - TOXICOLOGICAL INFORMATION

### POTENTIAL HEALTH EFFECTS

#### ACUTE HEALTH EFFECTS

##### SWALLOWED

Although ingestion is not thought to produce harmful effects (as classified under EC Directives), the material may still be damaging to the health of the individual, following ingestion, especially where pre-existing organ (e.g liver, kidney) damage is evident. Present definitions of harmful or toxic substances are generally based on doses producing mortality rather than those producing morbidity (disease, ill-health). Gastrointestinal tract discomfort may produce nausea and vomiting. In an occupational setting however, ingestion of insignificant quantities is not thought to be cause for concern.

##### EYE

Although the material is not thought to be an irritant (as classified by EC Directives), direct contact with the eye may produce transient discomfort characterised by tearing or conjunctival redness (as with windburn).

##### SKIN

The material is not thought to produce adverse health effects or skin irritation following contact (as classified by EC Directives using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable gloves be used in an occupational setting.

##### INHALED

The material is not thought to produce adverse health effects or irritation of the respiratory tract (as classified by EC Directives using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable control measures be used in an occupational setting.

#### CHRONIC HEALTH EFFECTS

As with any chemical product, contact with unprotected bare skin; inhalation of vapour, mist or dust in work place atmosphere; or ingestion in any form, should be avoided by observing good occupational work practice.

### TOXICITY AND IRRITATION

No data of toxicological significance identified in literature search.

# TRYPTONE

Page 7 of 7

---

## Section 12 - ECOLOGICAL INFORMATION

---

No data for tryptone.

---

## Section 13 - DISPOSAL CONSIDERATIONS

---

Recycle wherever possible.  
Bury residue in an authorised landfill.  
Decontaminate empty containers with water.  
Recycle containers if possible, or dispose of in an authorised landfill.

---

## Section 14 - TRANSPORTATION INFORMATION

---

HAZCHEM: None

NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS:UN, IATA,  
IMDG

---

## Section 15 - REGULATORY INFORMATION

---

### REGULATIONS

tryptone (CAS: None):  
No regulations applicable

---

## Section 16 - OTHER INFORMATION

---

The above information is believed to be accurate and represent the best information currently available to us, but does not represent any warranty expressed or implied of the properties of the product. User should make their own investigation to determine the suitability of the information for their particular purpose.

Issue Date: 30-Jun-2018