

**Collagenase Type I**  
**CAS NO 9001-12-1****MATERIAL SAFETY DATA SHEET**  
**SDS/MSDS****SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1 Product identifiers**

Product name : **Collagenase Type I** Source : Clostridium histolyticum Suggested for epithelial, liver, lung and adrenal primary cell isolations  
Cell Culture Tested  
CAS-No. : 9001-12-1

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

Identified uses : Laboratory chemicals, Industrial & for professional use only.

**1.3 Details of the supplier of the safety data sheet**

Company : Central Drug House (P) Ltd  
7/28 Vardaan House  
Ansari Road Daryaganj  
New Delhi -110002  
INDIA

Telephone : +91 11 49404040  
Email : [care@cdhfinechemical.com](mailto:care@cdhfinechemical.com)

**1.4 Emergency telephone number**

Emergency Phone # : +91 11 49404040 (9:00am - 6:00 pm) [Office hours]

**SECTION 2: Hazards identification****2 Hazards Identification****2.1 Classification of the substance or mixture**

**CLP Classification-Regulation (EC) No. 1272/2008[EU-GHS/CLP]**

Skin corrosion or irritation, (Category 2), H315  
Serious eye damage or eye irritation, (Category 2A), H319  
Sensitisation, respiratory, (Category 1), H334  
Specific target organ toxicity, single exposure, Respiratory tract irritation, (Category 3), H335

**2.2 Label elements**

**Labeling according to Regulation (EC) No.1272/2008**



Pictogram  
Signal word Danger

Hazard Statement(s)

H315 Causes skin irritation  
H319 Causes serious eye irritation  
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled  
H335 May cause respiratory irritation

### Precautionary Statement(s)

- P261 Avoid breathing dust/fume/gas/mist/vapours/spray.  
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P342 + P311 IF experiencing respiratory symptoms: call a POISON CENTER or doctor/physician.

### 2.3 Other Hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

## SECTION 3 Composition/Information On Ingredients

### 3.1 Substances

- Molecular Weight : 68 – 130 KDA  
CAS No. : 9001-12-1  
EC No. : 232-582-9

Component	Classification	Concentration
Collagenase Type I, From Clostridium histolyticum, Cell Culture Tested		
CAS No. : 9001-12-1 EC No. : 232-582-9	<b>As Per EC Regulation 1272/2008</b> Skin Irrit. 2; Eye Irrit. 2A; Resp. Sens. 1; STOT SE 3 H315; H319; H334; H335	100%

For the full text of the H-Statements and classification mentioned in this Section, see Section 16

## SECTION 4 First Aid Measures

### 4.1 Description of first aid measures

#### **General advice**

Consult a physician. Show this safety data sheet to the doctor in attendance.

#### **If inhaled**

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

#### **In case of skin contact**

Wash with plenty of soap and water. Consult a physician.

#### **In case of eye contact**

Rinse immediately with plenty of water for at least 15 minutes. Consult a physician.

#### **If swallowed**

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

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

The most important known symptoms and effects are described in the labeling (see section 2.2) and/or in section 11.

### 4.3 Indication of immediate medical attention and special treatment needed

No data available

## **SECTION 5 Fire Fighting Measures**

### **5.1 Extinguishing media**

#### ***Suitable extinguishing media***

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

#### ***Unsuitable extinguishing media***

No data available.

### **5.2 Special hazards arising from the substance or mixture**

Nature of decomposition products not known, Combustible

### **5.3 Precautions for fire-fighters**

Wear self contained breathing apparatus for fire fighting if necessary

### **5.4 Further information**

No data available

## **SECTION 6 Accidental Release Measures**

### **6.1 Personal precautions, protective equipment and emergency procedures**

Wear respiratory protection. Avoid breathing vapours, mist or gas. Ensure adequate ventilation.

Evacuate personnel to safe areas.

### **6.2 Environmental precautions**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into environment must be avoided.

### **6.3 Methods and materials for containment and cleaning up**

Sweep up and shovel. Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13). Keep in suitable, closed containers for disposal.

### **6.4 Reference to other sections**

For disposal see Section 13.

## **SECTION 7 Handling and Storage**

### **7.1 Precautions for safe handling**

Avoid contact with skin and eyes. Avoid inhalation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. For precautions see section 2.2

### **7.2 Conditions for safe storage, including any incompatibilities**

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

***Recommended Storage Temperature*** : 2 - 8°C

### **7.3 Specific end uses**

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

## **SECTION 8 Exposure Controls/Personal Protection**

### **8.1 Control parameters**

Components with workplace control parameters

### **8.2 Exposure controls**

***Appropriate engineering controls***

Handle in accordance to general industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

**Personal protective equipment**

**Hygiene measure**

Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with the product.

**Eye/face protection**

Faceshield and safety goggles.

**Skin protection**

Handle with gloves.

**Body protection**

Complete suit protecting against chemicals.

**Respiratory protection**

Air-purifying respirators.

**Environment exposure controls**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

**SECTION 9 Physical and chemical properties**

**9.1 Information on basic physical and chemical properties**

Appearance	White to dark brown powder
Odour	No data available
Odour Threshold	No data available
pH	No data available
Melting/freezing point	No data available
Initial boiling point and boiling range	No data available
Flash point	No data available
Upper/lower flammability or explosive limits	No data available
Evaporation rate	No data available
Flammability (Solid, gas)	No data available
Vapour pressure	No data available
Relative density	No data available
Water Solubility	No data available
Partition coefficient: n-octanol/water	No data available
Autoignition Temperature	No data available
Decomposition Temperature	No data available
Viscosity	No data available
Explosive properties	No data available
Oxidizing properties	No data available
Vapour density	No data available
Thermal decomposition	No data available

**9.2 Other safety information**

No data available

## **SECTION 10 Stability and Reactivity**

### **10.1 Reactivity**

No data available

### **10.2 Chemical stability**

Stable under recommended storage conditions.

### **10.3 Possibility of hazardous reactions**

No data available

### **10.4 Conditions to avoid**

Incompatible material

### **10.5 Incompatible materials**

No data available

### **10.6 Hazardous decomposition products**

Other decomposition products - refer section 5.2.

In the event of fire - refer section 5.

## **SECTION 11 Toxicological Information**

### **11.1 Information on toxicological effects**

#### ***Acute toxicity***

No data available

#### ***Skin corrosion/irritation***

No data available

#### ***Serious eye damage/eye irritation***

No data available

#### ***Respiratory or skin sensitisation***

No data available

#### ***Germ cell mutagenicity***

No data available

#### ***Carcinogenicity***

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

#### ***Reproductive toxicity***

No data available

#### ***Specific target organ toxicity- single exposure***

No data available

#### ***Specific target organ toxicity - repeated exposure***

No data available

#### ***Aspiration hazard***

No data available

#### ***Additional Information***

RTECS : Not available

## **SECTION 12 Ecological Information**

### **12.1 Toxicity**

No data available

**12.2 Persistence and degradability**

No data available

**12.3 Bioaccumulative potential**

No data available

**12.4 Mobility in soil**

No data available

**12.5 PBT and vPvB assessment**

PBT and vPvB assessment not available Chemical safety assessment is not required

**12.6 Other adverse effects**

Discharge into the environment must be avoided.

**SECTION 13 Disposal Considerations**

**13.1 Waste treatments methods**

**Product**

Offer surplus and non-recyclable solutions to a licensed disposal company. Dissolve or mix the material with a combustive solvent and burn in chemical incinerator equipped with an afterburner and scrubber.

**13.2 Contaminated packaging**

Dispose of as unused product.

**SECTION 14 Transport Information**

**14.1 UN-No**

ADNR : ADR : IATA\_C : IATA\_P : IMDG : RID :

**14.2 UN proper shipping name**

ADNR : Not dangerous goods  
ADR : Not dangerous goods  
IATA\_C : Not dangerous goods  
IATA\_P : Not dangerous goods  
IMDG : Not dangerous goods  
RID : Not dangerous goods

**14.3 Transport hazard class(es)**

ADNR : - ADR : - IATA\_C : - IATA\_P : - IMDG : - RID : -

**14.4 Packaging group**

ADNR :- ADR :- IATA\_C :- IATA\_P :- IMDG :- RID :-

**14.5 Environmental hazards**

ADNR : No ADR : No IMDG : Marine Pollutant : No IATA\_C : No IATA\_P : No RID : No

**14.6 Special precautions for use**

No data available

**SECTION 15 Regulatory Information**

This safety datasheet complies with the requirements of Regulation(EC) No. 1907/2006.

**15.1 Safety health and environment regulations/legislation specific for the substance or mixture**

No data available

**15.2 Chemical Safety Assessment**

No data available

## **SECTION 16 Other information**

Text of H-Statements and EUH-Phrases mentioned in section 3

H315	Causes skin irritation
H319	Causes serious eye irritation
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled
H335	May cause respiratory irritation
Skin Irrit. 2	Skin corrosion or irritation, Category 2
Eye Irrit. 2A	Serious eye damage or eye irritation, Category 2A
Resp. Sens. 1	Sensitisation, respiratory, Category 1
STOT SE 3	Specific target organ toxicity, single exposure, Respiratory tract irritation, Category 3

### **Further Information**

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Central Drug House (P) Ltd and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See [www.cdhfinechemical.com](http://www.cdhfinechemical.com) for additional terms and conditions of sale.