

**1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING**

**Product code** OsrHSA  
**Product name** recombinant Human Serum Albumin 90, from *Oryza sativa* (rice grain)

## Company/Undertaking Identification

Cyagen Biosciences Inc.  
574 East Weddell Dr, Suite 6  
Sunnyvale, CA 94089, U.S.A.  
Tel: 800-921-8931

For research use only

**2. COMPOSITION/INFORMATION ON INGREDIENTS****Hazardous/Non-hazardous Components**

Chemical Name	CAS-No	EC-No	Concentration %
Albumins, human A class	70024-90-7	274-272-6	97%
Disodium hydrogen orthophosphate	7558-79-4	231-448-7	3%

This substance is not classified as dangerous according to Directive 67/548/EEC.

**3. HAZARDS IDENTIFICATION****Emergency Overview**

The product contains no substances which at their given concentration, are considered to be hazardous to health

**Form**  
lyophilized powder

### 3. HAZARDS IDENTIFICATION

#### Principle Routes of Exposure/

#### Potential Health effects

Eyes  
Skin  
Inhalation  
Ingestion

Flush eyes with water as a precaution.  
Wash off with soap and plenty of water.  
If breathed in, move person into fresh air. If not breathing give artificial respiration.  
May be harmful if swallowed.  
Never give anything by mouth to an unconscious person. Rinse mouth with water.

#### Specific effects

Carcinogenic effects  
Mutagenic effects  
Reproductive toxicity  
Sensitization

No information available  
No information available  
No information available  
No information available

#### Target Organ Effects

No information available

#### HMS

Health	0
Flammability	0
Reactivity	0

### 4. FIRST AID MEASURES

Skin contact  
Eye contact  
Ingestion  
Inhalation  
Notes to physician

Wash off immediately with plenty of water  
Rinse thoroughly with plenty of water, also under the eyelids.  
Never give anything by mouth to an unconscious person  
Move to fresh air  
Treat symptomatically.

### 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media  
Special protective equipment  
for firefighters

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.  
Wear self-contained breathing apparatus and protective suit

### 6. ACCIDENTAL RELEASE MEASURES

Personal precautions  
Methods for cleaning up

Avoid breathing vapors, mist or gas.  
Keep in suitable, closed containers for disposal.

### 7. HANDLING AND STORAGE

Handling  
Storage

Normal measures for preventive fire protection.  
Store in cool place. Keep container tightly closed in a dry and well-ventilated place.  
Containers which are opened must be carefully resealed and kept upright to prevent leakage.  
Recommended storage temperature: 2 - 8°C

### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

#### Occupational exposure controls

#### Exposure limits

Chemical Name	OSHA PEL (TWA)	OSHA PEL (Ceiling)	ACGIH OEL (TWA)	ACGIH OEL (STEL)
Albumins, human A class	-	-	-	-
Disodium hydrogen orthophosphate	-	-	-	-

## Personal protective equipment

<b>Respiratory protection</b>	Respiratory protection is not required. Where protection is desired, use multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
<b>Hand protection</b>	For prolonged or repeated contact use protective gloves.
<b>Eye protection</b>	Safety glasses with side-shields
<b>Skin and body protection</b>	Light weight protective clothing.
<b>Hygiene measures</b>	Handle in accordance with good industrial hygiene and safety practice
<b>Environmental exposure controls</b>	Prevent product from entering drains.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### General Information

**Form** lyophilized powder

### Important Health Safety and Environmental Information

<b>Boiling point/range</b>	°C No data available	°F No data available
<b>Melting point/range</b>	°C No data available	°F No data available
<b>Flash point</b>	°C No data available	°F No data available
<b>Autoignition temperature</b>	°C No data available	°F No data available
<b>Oxidizing properties</b>	No information available	
<b>Water solubility</b>	100% water soluble	
<b>pH</b>	6.5-7.5 (0.1g/ml solution)	

## 10. STABILITY AND REACTIVITY

<b>Stability</b>	Stable under recommended storage.
<b>Materials to avoid</b>	Strong oxidizing agents and high or low PH (PH>9 or PH<4)
<b>Hazardous decomposition products</b>	Hazardous decomposition products formed under fire conditions. - Nature of decomposition products not known.

## 11. TOXICOLOGICAL INFORMATION

### Acute toxicity

No information available

### Principle Routes of Exposure/ Potential Health effects

<b>Eye</b>	Mild eye irritation.
<b>Skin</b>	May be harmful if absorbed through skin. May cause skin irritation.
<b>Inhalation</b>	May be harmful if inhaled. May cause respiratory tract irritation.
<b>Ingestion</b>	May be harmful if swallowed.

### Specific effects

<b>Carcinogenic effects</b>	No information available
<b>Mutagenic effects</b>	No information available
<b>Reproductive toxicity</b>	No information available

**Sensitization**

No information available

**Target Orcia Effects**

No information available

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity effects**

No information available.

**Mobility**

No information available.

**Biodegradation**

Inherently biodegradable.

**Bioaccumulation**

Does not bioaccumulate.

**13. DISPOSAL CONSIDERATIONS**

Dispose of in accordance with local regulations

**14. TRANSPORT INFORMATION**

**IATA**

**Proper shipping name**

Not classified as dangerous in the meaning of transport regulations

**Hazard Class**

No information available

**Subsidiary Class**

No information available

**Packing group**

No information available

**UN-No**

No information available

**15. REGULATORY INFORMATION**

**International Inventories**

**U.S. Federal Reциulations**

**SARA 313**

This product is not regulated by SARA.

**Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CIFIR 61)**

This product does not contains HAPs.

**U.S. State Reaulations**

**California Proposition 65**

This product does not contain chemicals listed under Proposition 65

**WHMIS hazard class:**

Non-controlled



This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR

## 16. OTHER INFORMATION

This material is sold for research and development purposes only. It is not for any human or animal therapeutic or clinical diagnostic use. It is not intended for food, drug, household, agricultural, or cosmetic use. An individual technically qualified to handle potentially hazardous chemicals must supervise the use of this material.

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**End of Safety Data Sheet**