



# Material Safety Data Sheet

Revision Date : 2023.06.27

Ver 2.0

## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product name** : ASCE<sup>plus</sup> Derma Signal Kit SRLV [Vial 2. DILUENT]  
**Company** : ExoCoBio Inc.  
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**Web site** : [www.exocobio.com](http://www.exocobio.com)

## 2. HAZARDS IDENTIFICATION

### Globally Harmonized System of Classification and Labelling of Chemicals (GHS)

Physical hazard : Not applicable

Health hazard : Not applicable

Environment hazard : Not applicable

### Label elements including precautionary statements

Symbol / Signal word : Not applicable

Hazard statements / Precautionary statements : Not applicable

### NFPA Rating

Health : 0

Flammability : 0

Reactivity : 0

Water reactivity : 0

## 3. COMPOSITION ON INGREDIENTS

| No. | INCI Name          | CAS No.    |
|-----|--------------------|------------|
| 1   | Water              | 7732-18-5  |
| 2   | Sodium Hyaluronate | 9067-32-7  |
| 3   | Sodium Chloride    | 7647-14-5  |
| 4   | Sodium Bicarbonate | 144-55-8   |
| 5   | Disodium Phosphate | 10028-24-7 |
| 6   | Sodium Phosphate   | 13472-35-0 |

|    |                    |            |
|----|--------------------|------------|
| 7  | Potassium Chloride | 7447-40-7  |
| 8  | Alanine            | 56-41-7    |
| 9  | Arginine           | 74-79-3    |
| 10 | Histidine          | 71-00-1    |
| 11 | Isoleucine         | 73-32-5    |
| 12 | Leucine            | 61-90-5    |
| 13 | Lysine HCL         | 10098-89-2 |
| 14 | Phenylalanine      | 63-91-2    |
| 15 | Proline            | 147-85-3   |
| 16 | Serine             | 56-45-1    |
| 17 | Threonine          | 72-19-5    |
| 18 | Valine             | 72-18-4    |
| 19 | sh-Decapeptide-7   | –          |
| 20 | sh-Octapeptide-4   | –          |
| 21 | sh-Oligopeptide-9  | –          |
| 22 | sh-Pentapeptide-5  | –          |

## 4. FIRST AID MEASURES

### In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

### In case of skin contact

Not applicable

### If inhaled

If breathed in, move person into fresh air.

If not breathing, give artificial respiration.

### If swallowed

Never give anything by mouth to an unconscious person.

### Potential health effect

May be harmful if swallowed.

### Other medical attention.

Medical personnel should be aware of the protective measures of the substance.

## 5. FIRE-FIGHTING MEASURES

### Flammable properties

Flash point : No flash occurred under 93 °C (Rapid equilibrium method)

Autoignition temperature : No spontaneous combustion under 200 °C

Burning rate : Did not ignite. at 20 °C (UN TDG test & criteria – Test N1)

**Suitable extinguisher**

Water spray, alcohol-resistant foam, dry chemical, carbon dioxide

**Specific hazards arising from the chemical**

No data available

**Special protective equipment for fire-fighters**

Wear self-contained breathing apparatus for fire fighting if necessary.

## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions**

Do not eat, drink or smoke when using this product.

**Environmental precautions**

No data available

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

Keep in suitable, closed containers for disposal.

## 7. HANDLING AND STORAGE

**Precautions for safe handling**

Do not eat, drink or smoke when using this product.

**Conditions for safe storage**

Keep container tightly closed.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Components with workplace control parameter**

KOSHA : No data available

US ACGIH : No data available

**General Measures** : No special measures required.

**Individual Protection Media** : No special media required.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance** : Clear liquid

**pH** : 7.0 ~ 9.0

**Flash point** : No flash occurred under 93 °C (Rapid equilibrium method)

**Autoignition temperature** : No spontaneous combustion under 200 °C

**Water solubility** : Soluble at 20 °C

**Boiling point (Initial)** : > 97 °C

**Flammability**

Burning rate : Did not ignite. at 20 °C

※ UN TDG test & criteria – Test N1

**Explosive properties** : No self-reaction hazard

※ UN TDG test & criteria – Test E3

**Oxidizing properties** : No oxidizing hazard

※ UN TDG test & criteria – Test O1

**Melting range** : No data available

**Vapour pressure** : No data available

**Decomposition temperature** : No data available

**Partition coefficient (n-octanol/water)** : No data available

**Viscosity** : No data available

**Lower explosion limit / Upper explosion limit** : No data available

## 10. STABILITY AND REACTIVITY

**Chemical stability**

Stable under general condition.

**Conditions to avoid**

Avoid inhalation of vapor, mist or gas.

**Materials to avoid**

Substances which, in contact with water, emit flammable gases

**Hazardous decomposition products**

Carbon oxides

## 11. TOXICOLOGICAL INFORMATION

**Acute toxicity**

Oral                      rat                      LD50 : > 2,000 mg/kg

※ from US NLM / ECHA

Inhalation              rat                      LC50 : No data available

Skin                      rabbit      LD50 : No data available

**Skin irritation** : Not applicable

**Eye irritation** : Not applicable

**Respiratory sensitization** : Not applicable

**Skin sensitization** : Not applicable

**Germ cell mutagenicity** : Not applicable

**Carcinogenicity** : Not applicable

**Reproductive toxicity** : Not applicable

**Specific target organ toxicity** – single exposure (GHS) : Not applicable

**Specific target organ toxicity** – repeated exposure (GHS) : Not applicable

**Aspiration hazard** : Not applicable

## 12. ECOLOGICAL INFORMATION

### Toxicity

Fish                      LC50 : No data available

※ from US NLM / ECHA

Crustacean      EC50 : No data available

Algae                      EC50 : No data available

**Persistence and degradability** : No data available

**Bioaccumulative potential** : No data available

**Mobility in soil** : No data available

**Other adverse effects** : No data available

## 13. DISPOSAL CONSIDERATIONS

### Disposal consideration

Observe all environmental regulations.

### Disposal precaution

Keep in suitable, closed containers for disposal.

## 14. TRANSPORT INFORMATION

**UN TDG** : Not dangerous goods

**IATA** : Not dangerous goods

**IMDG** : Not dangerous goods

**Marine pollution** : Not applicable

**Special precaution**

Fire EmS Guide : F-A (Recommendation)

Spillage EmS Guide : Not dangerous goods

## 15. REGULATORY INFORMATION

**Korea Industrial Safety and Health Act (GHS)** : Not applicable

**Korea Hazardous Materials Safety Control Act** : Not hazardous material

**Korea Chemicals Control Act** : Not toxic chemical

**Korea Persistent Organic Pollutants Control Act** : Not applicable

**US OSHA Hazards (GHS)** : Not applicable

## 16. OTHER INFORMATION

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**Acronyms and Websites**

- ECHA : European chemical agency, <http://echa.europa.eu/>
- US NLM : U.S. National Library of Medicine, <http://chem.sis.nlm.nih.gov/chemidplus/>
- HSDB : US Hazardous Substances Data Bank, <http://toxnet.nlm.nih.gov/>
- CCRIS : US Chemical Carcinogenesis Research Information System, <http://toxnet.nlm.nih.gov/>
- IARC : International Agency for Research on Cancer, <http://monographs.iarc.fr/>
- JP NITE : Japan National Institute of Technology and Evaluation, <http://www.safe.nite.go.jp/>