

# ECOtrend Collagen — Material Safety Data Sheet

(This data was prepared under Art. 41 of the Industrial Safety Health Law)

N/A = Not Applicable

Revised: 4/1/2006

## Section 1 - Product & Company Identification

- A. Product Name: ECOTREND COLLAGEN
- B. Product Description: Environment-friendly natural water-based paint.
- C. Hazardous: N/A
- D. Use: Interior and exterior paint for residential and commercial use.
- E. Manufacturer
  - 1) Company Name: DO Co., Ltd.
  - 2) Address: 551-1, Yongsan-dong, Yuseong-gu, Daejeon, Republic of Korea
  - 3) Telephone (Emergency): 042-935-8926-8
  - 4) Dept./ Person in charge: Research Center / Person in charge of research
- F. Supplier/Distributor: ECOtrend Corp.
- G. Preparation (Dept/Person): Mi-Jin Kang
- H. Issue Date: 2003. 5. 1.

## Section 2 - Composition & Ingredient Information

Component	CAS No.	Content (%)
Water	7732-18-5	15~20
HYDROLYZED COLLAGEN	-	10~30
NATURAL AMINO-ACRYLIC EMULSION	-	10~20
TALC	14807-98-6	5~10
TITANIUM DIOXIDE	13463-67-7	5~25
CALCIUM CARBONATE	-	5~20
Other Additives	-	0.1~1

## Section 3 - Hazards Identification

- A. Emergency Overview: This product should be used under well ventilated conditions.
- B. Eye contact: May cause irritation
- C. Skin contact: May cause irritation
- D. Inhalation: May cause irritation
- E. Ingestion: May cause the same effect as reported in other exposures.
- F. Chronic effect and symptoms: Refer to the effect on eye, skin, inhalation and ingestion.

## Section 4 - First Aid Measures

- A. Eye contact: Flush eyes with large amounts of water or saline solution for 10-20 minutes or until residue is completely removed. Consult a physician.
- B. Skin contact: Wash contaminated area with soap and water for 5-10 minutes or until residue is completely removed.
- C. Inhalation: Vapors will not cause health problems if exposed to small amounts. However, if you are exposed to high levels of dust during spray coating, consult a physician.
- D. Ingestion: Seek immediate emergency medical attention.
- E. Notice for medical attention: No specific antidote. Give medical treatment according to the symptom.

## Section 5 - Fire Fighting Measures

- A. Flash Point: Nonflammable
- B. Auto-ignition Temperature: Nonflammable
- C. Min./Max. Flammable Limits: N/A

- D. Classification and Restrictions under the Fire Services Act: N/A
- E. Extinguishing Media: N/A
- F. Fire Fighting Procedures and Equipment: N/A
- G. Hazardous Material Combustion: N/A
- H. Prohibited Extinguishing Media: N/A

## Section 6 - Accidental Release Measures

- A. Measures to Protect the Human Body: Avoid skin contact from released material.
- B. Measures to Protect the Environment: Remove the pollutants immediately and prevent them from migrating into other areas, e.g. water or soil.
- C. Purification and Removal: Pollutants should be cleaned up with absorbent materials such as sand or cloth, and placed in closed container for disposal.

## Section 7 - Handling & Storage

- A. Handling: Wear protective equipment, gloves, safety glasses and clothes during spray coating. Install ventilation though few vapors are produced.
- B. Storage: Avoid contact with acid or alkali. Avoid freezing during transportation and storage.

## Section 8 - Exposure Controls & Personal Protection

- A. Engineering Controls: N/A
- B. Respiratory Protection: N/A
- C. Eye Protection: Wear safety glasses.
- D. Hand Protection: Wear protective gloves.
- E. Body Protection: Wear protective clothes and equipment.
- F. Hygienic Notice: Observe the federal and local government regulations.
- G. Exposure Limits: N/A

## Section 9 - Physical/Chemical Properties

- A. Appearance: Liquid
- B. Odor: Mild, non-irritant
- C. pH: 7~10.
- D. Boiling point/range: 100°C
- E. Melting point/range: N/A
- F. Explosiveness: N/A
- G. Oxidation: N/A
- H. Vapor Pressure: N/A
- I. Specific Gravity: 1.35~1.45
- J. Distribution Coefficient: N/A
- K. Vapor Density: > 1
- L. Viscosity: 85~120 KU/25°C
- M. Molecular Weight: N/A

## Section 10 - Stability & Reactivity

- A. Chemical Stability: Stable under normal temperature and pressure.
- B. Substances to Avoid: N/A
- C. Hazardous Decomposition Products: N/A
- D. Hazardous Polymerization: No report on hazardous polymerization under normal temperature and pressure.

## Section 11 - Toxicological Information

- A. Acute Oral Toxicity: N/A
- B. Acute Toxicity on Inhalation: N/A
- C. Sub-acute Toxicity: Refer to above Section 3, "Hazards Identification"
- D. Chronic Toxicity: Refer to above Section 3, "Hazards Identification"
- E. Mutagenicity: N/A
- F. Effect on next generation (generative toxicity): N/A
- G. Carcinogenicity: N/A
- H. Other: N/A

## Section 12 - Ecological Information

- A. Aquatic and Ecological Toxicity: N/A
- B. Soil Change: Can affect environment when exposed or disposed.
- C. Residue and Decomposition: N/A
- D. Accumulation in the body of animals: Impossible.

## Section 13 - Disposal Considerations

- A. Restrictions under the Waste Control Act: None
- B. Method: These materials should be incinerated at very high temperatures.
- C. Notice: Observe the federal and local government regulations.

## Section 14 - Transportation Information

- A. Classification and restrictions according to marine transportation and storage of hazardous substances under the Ships Safety Act: N/A
- B. Notice: Observe the federal and local government regulations.
- C. Classification and restrictions according to other foreign transportation laws: N/A

## Section 15 - Regulatory Information

- A. Regulations under the Industrial Safety Health Law: Art. 41 (Preparation and provision of MSDS)
- B. Regulations under chemicals control related laws including hazardous chemicals control laws of other departments: N/A

## Section 16 - Other Information

- A. Source
  - 1. Standard Preparation and Provisions of MSDS (Rev. Notification of the Ministry of Labor No. 96-58)
  - 2. Actual Preparation of MSDS (Ministry of Labor, Korea Occupational Safety and Health Agency, 1996.2)
  - 3. Actual Preparation of MSDS for Mixtures (Korea Occupational Safety and Health Agency)

*This MSDS was prepared by KISCO-NET of the Korea Occupational Safety and Health Agency and are considered to be highly reliable, but our company assumes no responsibility for the use and certitude of this data.*