

Material Safety Data Sheet

(This MSDS is prepared pursuant to the provision of Article 41 of the Industrial Safety and Health Law)

1. PRODUCT AND COMPANY IDENTIFICATION

A. Product Name : **Hotmelt Adhesive**

- Product Code: EF-DTF-HMP

B. Recommended use of the chemical and restrictions on use

- Recommended use: Hotmelt Adhesive

- Restrictions on use: no data available

C. Company Details

- Manufacturer/Supplier: ECOFREEN CO., LTD.

- Address: #317, Ace Cheonggye Tower, 53 Seonggogae-ro, Uiwang-city, Gyeonggi-do, 16006, South Korea

- Telephone Number : +82 31 701 9702

- Fax Number : +82 70 7159 3540

D. Date Revised January, 01, 2021

E. MSDS Number: #501-11

2. HAZARDS IDENTIFICATION

A. Harmonized system of classification

- Acute toxicity (Inhale: Dust/Mist) : classification 4

B. Warning sign

- Pictorial symbol: No Research data

- Signal word: No Research data

- Hazard Phrase: No Research data

- Prevention Phrase

a. Prevention: Keep container tightly closed

b. Reponse: No Research data

c. Store: Store in a place well ventilated

d. Disuse: No Research data

C. Other hazard not for inclusion classification standard (NFPA)

- Health: No Research data

- Fire: No Research data

- Reactivity: No Research data

3. INGREDIENT OF ORGANIZING AND CONTENT

Chemical Name	CAS No.	Wt(%)
1,3-Benzenedicarboxylic, A polymerizing material, Content 1,4-Benzenedicarboxylic, 1,4-Butanediol AND Decandioic Acid	25214-81-7	100%

4. FIRST AID MEASURES

- A. Eyes contact: Immediately wash with running water or saline solution until removed, and get diagnosed with doctor if needed.
- B. Skin: Remove contaminated cloths or accessories, wash with running water, soap, or a neutral detergent until removed.
- C. Inhalation: Immediate move away from the place of exposure, inhale to fresh air. Contact hospital if needed.
- D. Eat: Please get assisted by doctors.
- E. Other suggestion: Observe the patient carefully.

5. FIRE FIGHTING MEASURES

- A. The proper (improper) Fire extinguisher
 - Great fire: alcohol resistant foam
 - Great fire: water spray/mist
 - Small fire: CO2
- B. Specific harmfulness caused by material
 - Steam can be caused faintness or suffocation without any consciousness.
- C. Prevention measure for fire suppression: No Research data

6. ACCIDENTAL RELEASE MEASURES

- A. Measure and equipment for body production: Please remove all the ignition source.
- B. Measures for environment: No Research data
- C. Purification or Remove method: Gather a leakage

7. HANDLING AND STORAGE

- A. Giudeline for Safety handling
 - Be careful the heat.
 - Take action on prevention of static electricity
- B. Safety store method
 - Please note materials and conditions to avoid

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

- A. Exposure standard of Product
 - Internal regulation: No Research data
 - ACGIH regulation: No Research data
 - Biological exposure standard: No Research data
- B. Proper engineering management: No Research data
- C. Personal protection
 - Respiratory Protection: No Research data
 - Eyes Protection: Wear the safety glasses to reduce the potential for eye contact
 - Hand Protection: No Research data
 - Body Protection: No Research data

9. PHYSICAL AND CHEMICAL PROPERTIES

- A. Appearance
 - Physical state: Solid
 - Color: White
- B. Odor: Almost odorless
- C. Odor threshold: No Research data
- D. Ph: No Research data
- E. Melting point/freezing point: No Research data
- F. Dry Boiling Point / Boiling point range: No Research data
- G. Flash point: No Research data
- H. Evaporation rate: No Research data
- I. Combustible (Solid, Gas): No Research data
- J. Upper / Lower explosive limit: No Research data
- K. Vapor pressure: No Research data
- L. Solubility: No Research data
- M. Vapor density: No Research data
- N. Specific gravity: 1.24g/cm³
- O. n-Octanol / Water partition coefficient: No Research data
- P. Emits flammable point: None
- Q. Temperature of decomposition: No Research data
- R. Viscosity: No Research data
- S. Molecular weight: No Research data

10. STABILITY AND REACTIVITY

- A. Chemical stability and harmful reaction: No Research data
- B. Condition to avoid: No Research data
- C. Material to avoid: No Research data
- D. Harmful substance (decomposition): No Research data

11. TOXICOLOGICAL INFORMATION

- A. Information of exposure route: No Research data
- B. Health harmfulness information
 - Irritant:
 - a. Ingestion: No Research data
 - b. Inhalation: No Research data
 - Skin causticity or irritation: No Research data
 - Eyes damage or irritation: No Research data
 - Acute Toxicity(harmful): No Research data
 - Carcinogenicity
 - a. Occupation safety and health acts: No Research data
 - b. IARC: No Research data
 - c. OSHA: No Research data
 - d. ACGIH: No Research data
 - e. NTP: No Research data
 - f. EU CLP: No Research data
 - Respiratory Toxicity: No Research data
 - Target Organ Toxicity: No Research data
 - Narconic Effects (once): No Research data
 - Narconic Effects (repeated exposure): No Research data
 - Aspiration: No Research data

12. ECOLOGICAL INFORMATION

- A. Ecological toxicity
 - Fish: No Research data
 - Crustaceans: No Research data
 - Algae: No Research data
- B. Persistence and Resolvability
 - Persistence: No Research data
 - Resolvability: No Research data
- C. Biological condensability
 - Condensability: No Research data
 - Biodegradability: No Research data
- D. Mobile soil: No Research data
- E. Others: No Research data

13. DISPOSAL CONSIDERATIONS

- A. Disposal method: Disuse container follow the regulation on waste control acts.

B. Matters that require attention for disposal: Refer to regulation on waste control acts.

14. TRANSPORT INFORMATION

- A. UN No. : No Research data
- B. PSN (Proper shipping name) No Research data
- C. Risk rank on delivery No Research data
- D. Container class No Research data
- E. Marine pollution: No Research data
- F. Safety measure for transportation
 - Fire emergency measure: No Research data
 - Spill emergency measure No Research data

15. REGULATORY INFORMATION

- A. Regulation by occupation safety and health acts No Research data
- B. Regulation by toxic Substances Control acts No Research data
- C. Regulation by Safety Control of Dangerous substances acts No Research data
- D. Regulation by Waste control acts: No Research data
- E. Other regulations
 - Internal regulation
 - a. Persistent organic pollutants acts: None
 - International regulation
 - a. OSHA Regulation (USA) None
 - b. CERCLA Regulation (USA) None
 - c. EPCRA Regulation (USA): None
 - d. EPCRA 304 Regulation (USA): None
 - e. EPCRA 313 Regulation (USA): None
 - f. Rotterdam Convention material: None
 - g. Stockholm Convention material: None
 - h. Montreal Protocol material: None
 - i. EU Classification: None
 - j. EU Classification (Hazard Phrase): None
 - k. EU Classification (Safety Phrase): None

16. OTHER INFORMATION

- A. Origin of Data: No Research data
- B. Date: 05, January, 2015
- C. Information of revision
 - Number of revision: 2
 - Final revision date: 01, January, 2021
- D. Others

- The informations as above are believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use.

- This data sheet for MSDS is edited and modified details refer to the MSDS provided by Korea Industrial Health Agency.