

# Material Safety Data Sheet

## Material Safety Data Sheet [Writing, Printing, Photocopy, and Special Paper]



Daehan Paper Co.

256, Sangjeongssangcheong-ro, Osong-eup,  
Heungdeok-gu, Cheongju-si,  
Chungcheongbuk-do, Korea 361-952

Date of issue :  
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Tel : +8243 249 6192  
Fax : +8243 234 1808

### 1. Product Identification

Product	Manufacturing Location
<b>Trade Name : E-Plus</b>	<b>Daehan Paper Co.</b>
<b>Type :</b> Coated Paper	256, Sangjeongssangcheong-ro, Osong-eup, Heungdeok-gu, Cheongju-si, Chungcheongbuk-do, Korea 361-952
<b>Usage :</b> Writing, Printing, and etc.	Tel : +8243 249 6192 Fax : +8243 234 1808
<b>Form :</b> Roll and sheet	
<b>Hazards Identification :</b> No dangerous ingredients	

### 2. Composition/Information on Ingredients

Name	CAS NO.	Percent(%)
<b>Pulp(Cellulose)</b>	65996-61-4	70-85
<b>Calcium Carbonate &amp; Clay</b> (CaCO <sub>3</sub> , Al <sub>2</sub> O <sub>3</sub> 2SiO <sub>2</sub> 2H <sub>2</sub> O)	1318-59-8 1332-58-7	10-25
<b>Moisture(H<sub>2</sub>O)</b>	7732-18-5	4-8
<b>Latex(1,3 Butadiene Styrene)</b>	9003-55-8	1-2
<b>Starch(C<sub>6</sub>H<sub>10</sub>O<sub>5</sub>)<sub>n</sub></b>	9005-25-8	0.1-0.5

### 3. Hazards Identification and Cautions

**Appearance and odour :** the products are odourless writing, printing, and photocopy papers

**Carcinogenic List :** Not list

**No dangerous ingredients**

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### 4. Emergency and First Aid Measures

**Ingestion** : not applicable for product in purchased form

**Eye Contact** : dust may mechanically irritate the eyes, resulting in redness or watering. Flush with water to remove dust particles. Consult a physician if irritation persists.

**Skin Contact** : not applicable for product in purchase form

**Skin Absorption** : not applicable for product in purchase form

**Inhalation** : excessive dust concentrations may cause unpleasant obstruction in the nasal passages. Remove to fresh air. Consult a physician if persistent irritation, severe coughing, or breathing difficulty occurs.

### 5. Fire-Fighting Measures

**Flash Point(method used)** : not applicable

**Flammable Limits** : LEL – see 'Unusual Fire and Explosion Hazards'  
UEL – not applicable

**Extinguishing Media** : Water

**Auto-ignition Temperature** : 235°C(450° F)

**Special Fire-fighting Measures** : none

**Unusual Fire and Explosion Hazards'** : depending on moisture content, particle diameter, and rate of heating, cellulose dust may explode in the presence of an ignition source. An airborne concentration of 30,000 mg/m<sup>3</sup> is often used as there 'lower explosive limit(LEL)' for cellulose pulps. If material becomes wet, microbial action can cause spontaneous combustion.

### 6. Accidental Release Measures

**Steps to be taken in case material is released or spilled** : not applicable for products.

Cleaning dust for recovery or disposal. Use approved dust respirator and goggles where ventilation is not possible and exposure limits may be exceeded

### 7. Handling and Storage

**Precaution for handling and storage** : No special handling precaution are required for product in purchased form. Keep product in cool, dry place away from open flame. Minimise dust generation and accumulation. Avoid breathing dust and contact with eyes.

### 8. Exposure Controls/Personal Protection

**Personal Protective Equipment** : not applicable for product in purchased form.

(Respiratory protection, Protective gloves, Eye Protection, Other protective clothing or equipment, Work/hygiene practices : use protection If the product is used in such a way as to generate high dust levels.)

**Ventilation** : use natural or mechanical ventilation to keep dust level below the permissible Exposure limit

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### 9. Physical and Chemical properties

**Boiling Point(@760 mm Hg)** : not applicable  
**Vapor Pressure(mm Hg)** : not applicable  
**Vapor Density(air = 1:1 atmosphere)** : not applicable  
**Specific Gravity(H<sub>2</sub>O = 1)** : 0.7-1.1  
**Melting Point** : not applicable  
**Evaporation Rate(Butyl acetata = 1)** : not applicable  
**Solubility in Water(% by weight)** : negligible - insoluble  
**% Volatile by Volume[@21°C(70F)]** : not applicable  
**pH** : 6.0 – 9.5

### 10. Stability and Reactivity

**Stability** : Stable  
**Conditoins to avoid** : avoid open flame and sparks.  
**Incompatibility** : bromine pentafluoride(BrF<sub>5</sub>), hydrogen peroxid(H<sub>2</sub>O<sub>2</sub>), sodium hypochlorite(NaClO), sodium nitrate(NaNO<sub>3</sub>), Fluorine(F<sub>2</sub>), strong oxidising agents.  
**Hazardous decomposition or by-products** : combustion product include carbon monoxide(CO) and carbon dioxide(CO<sub>2</sub>).  
**Hazardous polymerisation** : will not occur(none has been reported)

### 11. Toxicological Information

None available for product in purchased form. Individual component information is listed below where available.

**Cellulose** : LC<sub>50</sub>(Administered dose resulting in death to 50% of experimental animals ; rat, inhalation) = 5,800 mg/m<sup>3</sup>/4 hours.

**Calcium Carbonate(CaCO<sub>3</sub>)** : Applied to rabbit eyes with no toxic effects noted(*concentration and exposure duration not specified*). Rats exposed to 81.2 mg/m<sup>3</sup> for 90 min. were sacrificed 1 hour and 21 hours after exposure : not pathologic effects wer noted.

**Starch** : none ; treated as a nuisance dust.

**Source** : *NIOSH registry of Toxic Effects of Chemical Substances(RTECS), NIOSH(National Institute for Occupational Safety and Health)(provide by Canadian Centre for Occupational Health and Safety, CCINFO may 1995); Lewis, R.J., Sr. 1992, Sax's Dangerous Properties of Industrial Materials, Eighth Edition, Van Nostrand Reinhold, NY*

### 12. Ecological Information

Generally considered chemically inert in the environment. Used material which has become contaminated may have significantly different characteristics based on the contaminant and should be evaluated accordingly.

**Environmental Fate** : no information found.

**Environmental toxicity** : no information found.

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### 13. Disposal Considerations

Waste Disposal Method : incineration or dry land disposal is acceptable when disposed or discarded in purchased form. Used material which has become contaminated may have significantly different characteristics based on the contaminant and should be evaluated accordingly. However, it is the user's responsibility to determine at the time of disposal whether your product meets local or national criteria for hazardous waste. Dispose in accordance with national and local regulations.

### 14. Transport Information

**Korea Ship Safety Regulation** : Not regulated

**Hazards Classification** : not classified

**Reportable Quantities** : not applicable

**UN(United Nations) Number** : not applicable

**NA(North America) Number** : not applicable

### 15. Regulation Information

**Korea Industrial Safety and Health Regulation** : not regulated

It is the user's responsibility to determine what regulator, information is relevant to the usage of this product.

### 16. Other Information

**Additional information available from producer.**

**User's Responsibility** : The information contained in this MSDS is based on the experience of occupational health and safety professionals and comes from sources believed to be accurate or otherwise technically correct. It is the user's responsibility to determine if this information is suitable for their applications and to follow safety precaution as may be necessary.

This document is intended only as a guide to the appropriate precautionary handling of the material. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose. We Believe this information to be reliable and up-to-date as of the date of publication, but make no warranty that it is.