## MATERIAL SAFETY DATA SHEET

$1 \cdot$ Products and company identification

| Manufacturer's name | TAIWAN FIRST LI-BOND CO., LTD. |
| :--- | :--- |
| Address | No.13 Chung Cheng Rd. Min Hsiung Industrial Area Chia-Yi <br> Taiwan R.O.C |
| Telephone Number | $886-5-221-8801$ |
| Fax Number | $886-5-221-8803$ |
| Trade Name And Synonyms: | Hot melt adhesive LI-BOND 1161 |
| Chemical name | Polyolefin Copolymer |

## $2 \cdot$ Health hazard data

| Hazard category : None |
| :--- |
| Health Effects: The vapor may cause eye, nose and throat irritation. |
| Environment: No information is available |
| Physical and chemical hazard: No information is available |
| Special hazard: The melting adhesive may attach on the skin. |
| Main symptoms : No information is available |
| Contents of indication : None |

## 3 - Composition / information on ingredients

| Chemical feature : thermal plastic |  |  |
| :--- | :---: | :---: |
| ELEMENTS | Ratio $(\%)$ | CAS No. |
| ETHYLENE VINYL ACETATE | $60 \sim 80 \%$ | $24937-78-8$ |
| POLYETHYLENE | $5 \sim 20 \%$ | $9002-88-4$ |
| TACKIFIERS | $15 \sim 30 \%$ | $69430-35-9$ |
| ANTIOXIDANT | $0.1 \sim 2 \%$ | $6683-19-8,31570-04-4$ |

## 4 - First aid measures

| EYES | Do not rub eyes .Immediately flush eyes with large amounts of water <br> for 15 Minutes lifting the lower and upper lids. Seek medical <br> attention if necessary. |
| :---: | :--- |
| SKIN | If skin contact at application temperature, immediately immerse <br> contacted area in cold water to reduce temperature and relieve pain. <br> Do not attempt to peel adhesive from skin <br> seek medical attention as needed. |
| INHALATION | Remove to fresh air place |
| INGESTION | N.A |

## $5 \cdot$ Fire and explosion data

Extinguishing Media: Carbon. Dioxide. Dry Chemical. Chemical Foam.
Special Fire Fighting Procedures: Air mask.
Unusual Fire and explosion hazards: None

## 6 - Accidental release measures

Steps to be taken in case material is released or spilled :
Do not touch the melt until the spilled material cools down to room temperature Then the cold material is easily to be scrapped up.
Waste disposal method:
Disposal of in accordance with Federal, State and local anti-pollution regulation.

## $7 \cdot$ Handling and storage

Handling : No harm at the room temperature.
Storage : Store in cool, dry place. To prevent trash, impurities, water in the carton or bag when it was open.

## 8 - Exposure controls /personal protection

| Respiratory protection | Not normally required |
| :--- | :--- |
| Protection gloves | Use cotton gloves. Use thermal resistant gloves |
| Eye protection | Safety goggles or face shield |
| Other protective equipment | Overalls with long sleeves, safety shoes, aprons |

9 - Physical data

| Appearance : Solid | PH value : N.D. |
| :--- | :--- |
| Color : White translucent | Solubility in water: Insoluble |
| Form : Stick | Soft point $: 90^{\circ} \mathrm{C}$ |
| Flash point : above $200^{\circ} \mathrm{C}$ (closed) | Vapor pressure: N.A |
| Spontaneous Temperature : N.A | Specific Gravity : (water=1) about 0.95 |

## $10 \cdot$ Stability and reactivity

| Stability | This material is stable under normal handling and <br> storage conditions. |
| :--- | :--- |
| Reactivity | Heating temperature exceeds $200^{\circ} \mathrm{C}$, easy to <br> make polymer physical deterioration, the <br> viscosity rise, and thus change its Features |

## 11•Toxicological information

Skin information: no information is available.
Eye irritation: no information is available.
Sensitization: no information is available.

## 12•Ecological information

BIODEGRADATION: Not applicable.
BIOACCUMLATION: No information is available.
AQUATIC TOXICITY: No information is available.
OTHER INFORMATION: None

## $13 \cdot$ Disposal considerations

Can be land filled for cured product or burned in a chemical incinerator equipped with an afterburner and scrubber.
Do not dispose the emptied container unlawfully.
Observe all federal, state, and local laws.

## 14•Transport information

DOT HAZARD CLASS: N.A
DOT HAZARD MATERIALS: N.A
UN/UA: N.A
EMERGENCY RESPONSE GUIDE NUMBER: N.A

## $15 \cdot$ Regulatory information

Fire precaution rule

## $16 \cdot$ Other information

| Reference :Hazardous chemical substances in Chinese database, EPA |  |
| :--- | :--- |
| Organization that prepared the MSDS | Address/telephone number : <br> No.13 Chung Cheng Rd. Min Hsiung Industrial Area <br> Chia-Yi Taiwan R.O.C |
| Telephone Number | 886-5-221-8801 |
| Schedule person | R\&D S.L. Lo |
| Date that the MSDS was prepared | 2013.6 .7 |

