ITW Specialty Films #460 Chonhung-Ri, Songgo-Ub, Chonan-City Chungchongnam-Do. Korea Tel: 82-417-559-4150 Fax: 82-417-567-0882

Specialty Films

1.

P110

### 2. COMPOSITION / INFORMATION ON INGREDIENTS:

### GENERAL DESCRIPTION OF CHEMICAL CHARACTER:

Thermal Transfer Ribbon with heat transferable coatings.

Chemical characteristics

PET Carrier

10 ~ 20 %

Carbon Black Carnauba wax

10 ~ 30 %

Candelilla wax 20 ~ 40 %

Resin & etc

5~15%

HAZARDOUS INGREDIENTS

CAS NO.

RISK PHRASES

None

Not Applicable

Not Applicable

### 3. HAZARDS IDENTIFICATION.

RISKS FOR HUMAN HEALTH

This product is relatively innocuous substance and is not expected to cause harm. Mechanical irritation of the eyes, nose and throat may occur if slitting. Suggest 10mg/Cu.M for inert or nuisance particulate if debris is generated during slitting, etc.

ENVIRONMENTAL RISKS

No data available

#### 4. FIRST AID MEASURES.

SKIN

If irritations are felt after contact with skin, wash with plenty of mild soap

and water.

EYES

In case of contact with eyes, rinse immediately with plenty of water for at

least 15 minutes and seek medical advice.

INGESTION

If swallowed, get medical attention

### PRODUCT NAME: «P110»

### 5. FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA:

Foam, Dry Powder, CO2, Water

UNUSUAL FIRE AND EXPLOSION HAZARD

In case of fire do not breath fumes.

Particular risk arising from the products/products of combustion /generated gases: carbon mono-oxide, carbon dioxide.

PROTECTIVE EQUIPMENT

Breathing apparatus should be worn.

# 6. ACCIDENTAL RELEASE MEASURES

Not Applicable

# 7. HANDLING & STORAGE

HANDLING

Wash throughly after handling and before eating or smoking. Eye protection is recommended if ribbon is being slit or cut. Use adequate ventilation - nuisance particles are being generated.

STORAGE

Store in air atmosphere, sheltered from light and at temperature below 40 degrees C. Avoid proximity of flame and heat sources. Store 24 hours in room temperature before slitting.

### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

TECHNICAL PROTECTION MEASURES

This product will slowly photo degrade with UV light exposure, shelter from light.

PERSONAL PROTECTIVE EQUIPMENT

Goggle for eye protection and particle mask for nose and throat protection during slitting

proc-

ess.

### PRODUCT NAME: «P110»

#### 9. PHYSICAL & CHEMICAL PROPERTIES

FORM

Ink coated film

COLOR

Black

ODOR

Little or no odor

CHANGE IN PHYSICAL

MELTING POINT/MELTING LANGE

Ink: 70 +,-5 degrees C

Film: 256~265 degrees C

BOLING POINT/RANGE

FLASH POINTS

IGNITION TEMPERATURE DANGER OF EXPLOSION

EXPLOSION LIMIT VAPOR PRESSURE

SOLUBILITY PH-VALUE

VISCOSITY

Not Applicable

Not Applicable

> 150 degrees C

Not Applicable

#### 10. STABILITY AND REACTIVITY

STABILITY

HAZARDOUS DECOMPOSITION PRODUCTS

Stable

Terephthalic acid, CO and aldehyde

above 300 degrees C

#### 11. TOXICOLOGICAL INFORMATION

HEALTH EFFECTS

None known

ACUTE TOXICITY

Not tested

### Other Information:

This product has been formulated to ensure that it complies with the RoHS Directive as per the European Union's RoHS Legislation( Directive 2002/95/EC ); that is that the TTR will contain levels below those listed below. The purpose of this Directive is to approximate the laws of the Member States on the restrictions of the use of hazardous substances in electrical and electronic equipment and to contribute to the protection of human health and the environmentally sound recovery and disposal of waste electrical and electronic equipment.

The limits for which are listed here:

Lead Cadmium

Pb Cd

1,000 ppm 100 ppm

Chromium Mercury

Cr+6 Hg

1,000 ppm

PBB

Polybrominated biphenyl

1,000 ppm 1,000 ppm

PBDE

Polybrominated biphenyl ethers 1,000 ppm

### PRODUCT NAME: «P110»

### 12. ECOLOGICAL INFORMATION

AQUATIC TOXICITY

Not Available.

BIODEGRADABILITY

Not Available

EFFECT ON EFFLUENT TREATMENT

Not Available

### 13. DISPOSAL CONSIDERATION

DISPOSAL DEFINITION

Scrap film from slitting, ribbon after printing barcode.

WASTE DISPOSAL

Disposal in accordance with local state and federal regulations.

### 14. TRANSPORT INFORMATION

No special

# 15. REGULATORY INFORMATION

No special.

# 16. OTHER INFORMATION

No liability is accepted for any injury, loss damage or cost arising directly or indirectly from the use of any information contained within this MSDS since the customer's treatment of the product is necessarily out of our control.

The data complied above is based on current knowledge and experience. The purpose of this Safety Data Information is to describe the products in terms of their safety requirements. The data does not signify any warranty with regard to the products workability