

## **Packing Material Information**

### **ABSTRACT**

TI works closely with suppliers who are committed to using environmentally-friendly substances of their products. The following sections list the packing materials that TI uses when shipping products to customers. For more information on packing material not listed in this report, contact TI customer support.

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**Trademarks**

All trademarks are the property of their respective owners.

**1 Tray End Cap**
**Table 1. Tray End Cap**

Substance	CAS No	% By Weight	Component
ABS	9003-56-9	99%	
CB	1333-86-4	1%	

**2 Strap**
**Table 2. Strap**

Substance	CAS No	% By Weight	Component
Polypropylene		70~80%	Polymer
Carbon		20~30%	Conductive material

**3 Tape and Reel**
**3.1 Carrier Tape**
**Table 3. Carrier Tape**

Substance	CAS No	% By Weight	Component
Polypropylene	9003-53-6	70~80%	Polymer
Carbon Black	1333-86-4	20~30%	Conductive material

**3.2 Reel**
**Table 4. Reel**

Substance	CAS No	% By Weight	Component
Polypropylene	9003-53-6	90~95%	Polymer
Carbon Powder		~5% - 10%	Conductive material

**3.3 Cover Tape**
**Table 5. Cover Tape**

Substance	CAS No	% By Weight	Component
Polyethylene Terephthalate	25038-59-9	30~50%	
Polyethylene	24937-78-8	50~70%	

## 4 IC Tray

### 4.1 PES Compound

**Table 6. PES Compound**

Substance	CAS No	% By Weight	Component
Polyethersulfone	25667-42-9	70~85%	Polymer
Conductive Carbon	7440-44-0	15~30%	Conductive material
Mica	12001-26-2	5~20%	Filler

### 4.2 PPO Compound

**Table 7. PPO Compound**

Substance	CAS No	% By Weight	Component
Polyphenylene Oxide	00092-71-7	60~85%	Polymer
Carbon Black	1333-86-4	15~25%	Conductive material
Antioxide	26683-19-8	<1%	
Mica	12001-26-2	5~20%	Filler

### 4.3 PSU Compound

**Table 8. PSU Compound**

Substance	CAS No	% By Weight	Component
Polysulfone	25154-01-2	45~65%	Polymer
Polycarbonate	25766-59-0	5~15%	Conductive material
Conductive Carbon		20~30%	Used to make the tray static dissipative
Glass		10~25%	Filler

### 4.4 PPE Compound

**Table 9. PPE Compound**

Substance	CAS No	% By Weight	Component
Poly Phenylene ether	25134-01-4	35~55%	Polymer
Conductive Carbon		25~35%	Conductive material
Glass		10~25%	Filler

### 4.5 ABS

**Table 10. ABS**

Substance	CAS No	% By Weight	Component
Acrylonitrile Butadiene Styrene	9003-56-9	75~90%	Polymer
Glass		10~15%	Filler

## 5 Magazines, Pins and End-Plugs

**Table 11. Magazines, Pins and End-Plugs**

Substance	CAS No	% By Weight	Component
PVC	9002-86-2	85~92%	Polymer
Dibutyl or Dimethyl Tin Mecaptoester		1~2%	Stabilizer
Acrylic		1~2%	Process aid
MBS		6~10%	Modifier
Complex esters of fatty acids and/or alcohol		1.5~3.2%	Lubricant
Glycerol Esters			
Oxidized Polyethylene			
Ultra-marine blues and violets		As required	Toner

## 6 Labels

**Table 12. Labels**

Substance	CAS No	% By Weight	Component
Paper		80~85%	Substrate
Acrylic Latex		15~20%	Adhesive

## 7 Dunnage

### 7.1 Bubble Pack

**Table 13. Bubble Pack**

Substance	CAS No	% By Weight	Component
Polyethylene	9002-88-4	~99.5	Substrate
Methyl Ammonium Methosulfate	018602-17-0	~0.5%	Antistatic agent

## 8 Drypack

### 8.1 Moisture Barrier Bag

**Table 14. Moisture Barrier Bag**

Substance	CAS No	% By Weight
Aluminum	7429-90-5	15-25
Polycaproamide (Caprolactam)	25038-54-4	10-16
Polyethylene	9002-88-4	<45
Polyester	25038-59-9	<15

**Table 15. Moisture Barrier Bag - With Cross Linked Polymer**

Substance	CAS No	% By Weight
Aluminium Foil	7429-90-5	<20
Cross-Linked Polyurethane Resin	53504-41-9	<4
Polyamide	63428-83-1	10
Polyethylene	9002-88-4	<70
Polyester	25038-59-9	<2

## 8.2 Desiccant - Bentonite Clay

**Table 16. Desiccant - Bentonite Clay**

Substance	CAS No	% By Weight	Component
SiO <sub>2</sub>	60676-86-0	64.82%	
Al <sub>2</sub> O <sub>3</sub>	1344-28-1	18.29%	
Fe <sub>2</sub> O <sub>3</sub>	1309-37-1	6.2%	
MgO	1309-48-4	5.45%	
CaO	1305-78-8	3.49%	
TiO <sub>2</sub>	13463-67-7	0.80%	
H <sub>2</sub> O	7732-18-5	0.5%	
Na <sub>2</sub> O	12401-86-4	0.23%	
K <sub>2</sub> O	12136-45-7	0.20%	

## 8.3 Humidity Indicator Card (5-10-60% HIC)

**Table 17. Humidity Indicator Card (5-10-60% HIC)**

Substance	CAS No	% By Weight	Component
Fibrous cellulose	9004-34-6	99.75	Substrate
Cobalt Dibromide (CoBr <sub>2</sub> )	7789-43-7	0.25	Humidity sensitive, color change indication on card

## 9 Yanginic Chip Tray

**Table 18. Yanginic Chip Tray**

Substance	CAS No	% By Weight	Component
Polystyrene	9003-53-6	50~70%	
Polystyrene Copolymer	Mixture	15~30%	
Carbon Black	133-86-4	10~20%	
Antioxidant	Mixture	0.5~2%	

## 10 Boxes

**Table 19. Boxes**

Substance	CAS No	% By Weight	Component
Paper		>97%	
Cornstarch		<2%	For gluing walls and corrugated board together
Carbon Black	1333-86-4	<3%	Conductive surface (If required) and ink colorant

## 11 Bags

**Table 20. Static Shielding Bag**

Substance	CAS Number	% by weight
Polyethylene	9002-88-4	60
Polyester	25038-59-9	37
Cross-Linked Polyurethane Resin	53504-41-9	2
Proprietary Coating		<1%

**Table 21. Conductive Kraft Paper Bag**

Substance	CAS Number	% by weight
Kraft Paper	65996-61-4	99
Proprietary Coating		<1

**Table 22. Velostat Conductive Bag**

Substance	CAS Number	% by weight
Polyolefin	83136-87-2	95
Conductive Additives	n/a	5

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## Revision History

NOTE: Page numbers for previous revisions may differ from page numbers in the current version.

<b>Changes from A Revision (June 2017) to B Revision</b>	<b>Page</b>
• The Abstract was updated. ....	1
• Update was made in <a href="#">Section 8.3</a> . ....	5

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