

# Material Safety Data Sheet CLP-C300A, CLP-C350A, CLT-C409S,CLT-C4092S

Revised Date June 30, 2009 Set Up Date December 15, 2005

CAS RN Trade Secret Trade Secret Trade Secret Trade Secret

#### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

COMPANY : Samsung Electronics Company 416, Maetan-3Dong, Yeongtong-Gu, Suwon-City, Gyeonggi-Do, Korea 443-742 TELEPHONE NO. : 82-31-200-8311 EMERGENCY TELEPHONE NO. : 82-31-200-8311

#### 2. COMPOSITION / INFORMATION ON INGERDIENTS

SUBSTANCE / MIXTURE	: Mixture
CHEMICAL NAME	: Cyan Toner
INGREDIENTS AND CONCENT	TRATION RANGE
Ingredients	Concentration Range(%)
Polyester resin	75 - 90
Wax	1 – 10
Cyan pigment	2 - 10
Silica	1 – 5

#### 3. HAZARDS IDENTIFICATION

FIRE AND EXPLOSION HAZARD	: May cause risk of dust explosion.
POTENTIAL HEALTH EFFECTS	: To the best of our investigation, no special hazards have to be mentioned.
ENVIRONMENTAL EFFECTS	: To the best of our investigation, no information available.

#### 4. FIRST-AID MEASURES

IN CASE OF EYE CONTACT	: Immediately hold eyelids open and flush with a stream of water for at least 15 minutes. If necessary seek medical attention.
IN CASE OF SKIN CONTACT IN CASE OF INHALATION IN CASE OF INGESTION	<ul> <li>Wash material off the skin with plenty seek medical attention.</li> <li>Wash material off the skin with plenty seek medical attention.</li> <li>Remove person to fresh air. If necessary</li> <li>Seek medical attention. Never give anything by mouth to an unconscious person. If possible, rinse out mouth and give one or two glasses of water or milk to drink.</li> </ul>

#### 5. FIRE-FIGHTING MEASUARES

EXTINGUISHING MEASURES	: Risk of producing harmful gases such as carbon monoxide and nitrogen
EXTINGUISHING AGENTS	oxides.Avoid inhalation of smoke or gases. : In case of small fire use powder, carbon dioxide. In case of large fire shut off air by spraying with water or foam.

#### 6. ACCIDENTAL RELEASE MEASURES

: In case of spill vacuum material immediately. Then wipe up remainder in waste cloth.

# 7. HANDLING AND STORAGE

HANDLING	: Fight fire from upwind position.
	Avoid inhalation of dust.
	Prevent generation of dust
	Avoid inhalation of fine dust .
STORAGE	: Protect from sun. Store in a cool room.(under 40 C)

# 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ACGIH(TLV) OSHA(PEL) VENTILATION	: Not established : Not established : Use local exhaust ventilation or general ventilation
PROTECTIVE MEASURES RESPIRATORY PROTECTIVE	: Dust respirator
EQUIPMENTS EYE PROTECTIVE EQUIPMENTS HAND PROTECTIVE EQUIPMENTS PROTECTIVE CLOTHINGS	: Safety goggles : Rubber gloves : Use as appropriate to situation.

# 9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE	: Cyan powder
ODOUR	: Odourless
BOILING POINT	: No data available
VAPOUR PRESSURE	: No data available
VAPOUR DENSITY	: No data available
VOLATILITY	: No data available
MELTING / FREEZING POINT	: No data available
SPECIFIC GRAVITY	: 1.2 ( 20.0 ℃)
SOLUBILITY	
WATER SOLUBILITY	: No data available
SOLVENT SOLUBILITY	: A part of component is soluble in toluene, chloroform and
	tetrahydrofuran
рН	: No data available
VISCOSITY	: No data available
OCTANOL / WATER	: No data available
PARTITION COEFFICIENT	
OTHER INFORMATION	: None

# 10. REACTIVITY AND STABILITY

FLASH POINT AUTOIGNITION TEMPERATURE EXPLOSIVE LIMIT IN AIR(LEC) EXPLOSIVE LIMIT IN AIR(UEC) COMBUSTIBILITY OXIDIZABILITY SELF-REACTIVITY / EXPLOSIVITY REACTIVITY AND STABILITY HAZARDOUS COMBUSTION	<ul> <li>Not applicable</li> <li>No data available</li> <li>No data available</li> <li>No data available</li> <li>Yes</li> <li>No</li> <li>This material may cause risk of dust explosion.</li> <li>Stable in general.</li> <li>No information available</li> </ul>
OR DECOMPOSITION PRODUCTS	: No information available
OTHER INFORMATION	: None

#### **11. TOXICOLOGICAL INFORMATION**

CORROSIVITY SKIN IRRITATION EYE IRRITATION SENSITIZATION ACUTE TOXICITY	: No data available : No data available : No data available : No data available : No data available
SUBCHRONIC EFFECTS	: No data available
CHRONIC EFFECTS	: No data available
CARCINOGENICITY	: No data available
IARC	: Group 3.The agent is not classifiable as to its carcinogenicity to humans.(Silica) Group 2B. The agent is possibly carcinogenic to humans.(Carbon
NTP	: None of this product's components are listed
OSHA	: None of this product's components are listed
MUTAGENICITY	: Ames test (TA98, TA100, TA1535, TA1537, TA1538, WP2urvA) : Negative
REPRODUCTIVE EFFECTS	: No data available
TERATOGENICITY	: No data available
OTHER INFORMATION	: None.

#### 12. ECOLOGICAL INFORMATION

BIODEGRADABILITY	: No data available
BIOACCUMULATION	: No data available
FISH TOXICITY	: No data available
OTHER INFORMATION	: None

# **13. DISPOSAL CONSIDERATIONS**

Review "HANDLING AND STORAGE(Section7)" Dispose of waste in accordance with local, state and federal regulations. Passed to a licensed waste contractor. Incinerate with little portions. Risk of producing harmful gases such as carbon monoxide and nitrogen oxides

#### 14. TRANSPORTATION INFORMATION

PRECAUTIONS	Follow all regulations in your country or region. : Review "ACCIDENTAL RELEASE MEASURES (Section6)" Review "HANDLING AND STORAGE (Section7)" Handle container carefully to avoid shock. Do not fall or crash Keep dry
PROPER SHIPPING NAME	: Non hazardous
HAZARD CLASS	: Not applicable
UN NO.	: Not applicable
PACKING GROUP	: Not applicable
HAZARD LABELS	: Not applicable

#### **15. REGULATORY INFORMATION**

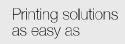
EINECS	
TSCA	

Follow all regulations in your country or region. : No (ELINCS) : Yes

#### **16. OTHER INFORMATION**

**REFERENCES** : None

To the best of the manufacturer's knowledge, the information contained herein is accurate. However, neither the manufacturer, nor any of its affiliates, make any representations or warranties (expressed or implied), nor assumes any liability(including liability for any direct, incidental, consequential, or other damages) with respect to the accuracy or completeness of the information contained herein. Such information may be (without limitation) invalid if the specified material is used in combination with another ,in a particular process, or under unusual conditions. Determination of suitability therefore. All materials may present unknown hazards and should be used with appropriate caution. The manufacture cannot and does not guarantee that the hazards described herein are the only ones that exist.







# Material Safety Data Sheet CLP-K300A, CLP-K350A, CLT-K409S,CLT-K4092S

Revised Date June 30, 2009 Set Up Date August 29, 2007

# 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

COMPANY : Samsung Electronics Company 416, Maetan-3Dong, Yeongtong-Gu, Suwon-City, Gyeonggi-Do, Korea 443-742 TELEPHONE NO. : 82-31-200-8311 EMERGENCY TELEPHONE NO. : 82-31-200-8311

# 2. HAZARDS IDENTIFICATION

MOST IMPORTANT HAZARDS AND EFFECTS	
GHS CLASSIFICATION	
PHYSICAL AND CHEMICAL HAZARDS	: Not classified
HEALTH HAZARDS	
ACUTE TOXICITY (Oral)	: Not classified
ACUTE TOXICITY (Dermal)	
ACUTE TOXICITY (Inhalation)	: Not applicable(Vapours)
SKIN CORROSION / IRRITATION	: Not classified
SERIOUS EYE DAMAGE / EYE IRRITATION	: Not classified
RESPIRATORY SENSITIZATION	: Classification not possible
SKIN SENSITIZATION	: Not classified
GERM CELL MUTAGENICITY	: Classification not possible
CARCINOGENICITY	: Category 2
REPRODUCTIVE TOXICITY	: Classification not possible
SPECIFIC TARGET ORGAN SYSTEMIC TOXIC	ΤY
- SINGLE EXPOSURE	: Classification not possible
- REPEATED EXPOSURE	: Category 1(lung)
ASPIRATION HAZARD	: Classification not possible
ENVIRONMENTAL HAZARDS	
HAZARDOUS TO THE AQUATIC ENVIRONMENT	-
- ACUTE TOXICITY	: Classification not possible
- CHRONIC TOXICITY	: Classification not possible
GHS LABEL ELEMENTS	
PICTOGRAMS OR SYMBOLS	:

SIGNAL WORD HAZARD STATEMENTS

PRECAUTIONARY STATEMENTS PREVENTION

- ٨
- : Danger : Suspected of causing cancer Causes damage to organs thro

Causes damage to organs through prolonged or repeated exposure (lung)

: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.

Material Safety Data Sheet	
RESPONSE	Do not breathe dust/fume/gas/mist/vapours/spray. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. if needed, use personal protective equipment as required. : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, If present and easy to do. Continue rinsing. IF ON SKIN: Gently wash with plenty of soap and water. IF exposed or concerned: Get medical attention/advice.
STORAGE	: Store locked up. Protect from sun. Store in a well-ventilated room (under 40 C)
DISPOSAL SAFE HANDLING ADVICE	: Passed to a licensed waste contractor.

# 3. COMPOSITION / INFORMATION ON INGERDIENTS

# SUBSTANCE OR MIXTURE : MixtureINGREDIENTS AND CONCENTRATION RANGEIngredientsConcentration Range(%)Polyester resin75 - 90Wax1 - 10Carbon black2 - 10Silica1 - 5

# 4. FIRST-AID MEASURES

IN CASE OF INHALATION IF exposed or concerned IN CASE OF SKIN CONTACT IF exposed or concerned IN CASE OF EYE CONTACT	<ul> <li>Remove to fresh air and keep at rest in a position comfortable for breathing.</li> <li>Get medical attention/advice.</li> <li>Gently wash with plenty of soap and water.</li> <li>Get medical attention/advice.</li> <li>Rinse cautiously with water for several minutes. Remove contact lenses.</li> </ul>
IF exposed or concerned IN CASE OF INGESTION IF exposed or concerned	If present and easy to do. Continue rinsing. : Get medical attention/advice. : Call a POISON CENTER or doctor/physician if you feel unwell. : Get medical attention/advice.

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# 5. FIRE-FIGHTING MEASUARES

EXTINGUISHING MEDIA NOT SUITABLE EXTINGUISHING MEDIA	: Water Spray, powder : No information available
SPECIFIC HAZARDS	: May produce irritating or toxic gases in a fire.
SPECIFIC METHODS	: Keep away from sources of ignition and use appropriate extinguishing media. Fight fire from upwind position if possible.
PROTECTION OF FIREFIGHTERS	: Use goggles in combination with dust mask, and another protection as appropriate to situation.

## 6. ACCIDENTAL RELEASE MEASURES

PERSONAL PREAUTIONS,	: Use mask, goggles and protective gloves.
PROTECTIVE EQUIPMENT AND	Large spills : Remove person to safety.
EMERGENCY PROCEDURE	Ensure adequate ventilation. Treat from upwind position.
ENVIRONMENTAL PRECAUTIONS	: Do not discharge into the drains, surface waters or ground water
directly.	
METHODS FOR CLEANING UP	: Prevent dispersion of dust.
	Sweep or vacuum by dust-explosion-proof type cleaner.
PREVENTION OF SECONDARY	: No information available
HAZARDS	

# 7. HANDLING AND STORAGE

## HANDLING TECHNICAL MEASURES

TECHNICAL MEASURES	: Facilities Storing or utilizing this material should be equipped with an eyewash facility and a safety shower.
PRECAUTIONS	: Avoid inhalation of fine dust.
SAFE HANDLING ADVICE	: Use an adequate ventilation.
	Wash thoroughly after handling.
	Use personal protective equipment as required.
	Do not breathe dust/fume/gas/mist/vapours/spray.
	Do not eat, drink or smoke when using this product.
	This material may cause risk of dust explosion.
STORAGE	
SUITABLE STORAGE CONDITIONS	: Keep container tightly closed.
	Protect from sun. Store in a well-ventilated room(under 40 $$ $^\circ \! { m C}$ )
	Store locked up.
SAFE PACKAGINH MATERIALS	: No information available

#### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING MEASURES	: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use local exhaust ventilation, in case of generation of dust.
LIMIT VALUES	
ACGIH(TLV)	: 3.5mg/m3 TWA
	Carbon black
	TWA 2mg/m3
	Paraffin wax fume
	10mg/m3 TWA (inhalable particles, recommended);3mg/m3 TWA (respirable particles, recommended)(Particulates (insoluble or poorly soluble) not otherwise specified (PNOS))
OSHA(PEL)	: 3.5mg/m3 TWA
	Carbon black
	15mg/m <sup>3</sup> TWA (total dust);5mg/m <sup>3</sup> TWA(respirable fraction)
	(Particulates not otherwise regulated)
PERSONAL PROTECTIVE EQUIPMENT RESPIRATORY PROTECTION	: Use dust mask, as appropriate to situation.
HAND PROTECTION	: Rubber gloves
EYE PROTECTION SKIN AND BODY PROTECTION HYGIENE MEASURES	: Safety glasses with side shield(Safety goggles or Face shield) : Full-body suit : No information available

# 9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATES FORM COLOUR	: Pulverizing powder : Black
ODOUR	: Odourless
	: No data available
SPECIFIC TEMPERATURES/TEMPERATU	
AT WHICH CHANGES IN PHYSICAL STA BOILING POINT	: No information available
MELTING POINT	: No information available
FLASH POINT	: No data available
FLAMMABILITY OR EXPLOSIVE PROPER	
	: UPPER LIMIT: No information available
I LAWIWADILITT ON EXI LOSIVE	LOWER LIMIT: No information available
LIMITS	
VAPOUR PRESSURE	: No information available
VAPOUR DENSITY	: No information available
SPECIFIC GRAVITY(DENSITY) : 1.2 g/mL	
SOLUBILITY	
WATER SOLUBILITY	: Insoluble
SOLVENT SOLUBILITY	: Partially soluble in toluene, chloroform and tetrahydrofurane.
PARTITION COEFFICIENT :n-	: No information available
OCTANOL/WATER (log Pow)	: No information available
AUTOIGNITION TEMPERATURE	: No information available
DECOMPOSITION TEMPERATURE	: No information available
ODOUR THRESHOLD	: No information available
EVAPORATION RATE	: No information available
FLAMMABILITY (SOLID, GAS)	: No information available
VISCOSITY	: No information available
OTHER DATA	: No information available

# 10. REACTIVITY AND STABILITY

CHEMICAL STABILITY	: Stable in general.
POSSIBILITY OF HAZARDOUS	: Stable.
REACTIONS	
CONDITIONS TO AVOID	: No information available
INCOMPATIBLE MATERIALS	: No information available
HAZARDOUS DECOMPOSITION	: No information available
PRODUCTS	
OTHERS	: No information available

# **11. TOXICOLOGICAL INFORMATION**

: Rat, LD50 : > 5000mg/kg
: No information available
: No information available
: No information available

Material Safety Data Sheet

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INFORMATION ON INGREDIENTS SKIN CORROSION / IRRITATION	: No information available
INFORMATION ON PRODUCT	: Rabbit, undiluted, 4 hours semi-occluded application test (OECD404): Not classified
SERIOUS EYE DAMAGE/IRRITATION INFORMATION ON PRODUCT RESPIRATORY OR SKIN SENSITIZATION	: Rabbit, undiluted, OECD405 : Not classified N
RESPIRATORY INFORMATION ON PRODUCT INFORMATION ON INGREDIENTS SKIN	: No information available : No information available
INFORMATION ON PRODUCT MUTAGENICITY (GERM CELL MUTAGEI	: Guinea pig, Guinea Pig Maximization Test : Negative
INFORMATION ON PRODUCT	: Ames test (TA98, TA100, TA1535, TA1537, TA1538, WP2uvrA) : Negative
INFORMATION ON INGREDIENTS CARCINOGENICITY	: No information available
INFORMATION ON PRODUCT INFORMATION ON INGREDIENTS IARC	<ul> <li>No information available</li> <li>Carbon black : Category 2;Ref.(1)</li> <li>Group 3 : Not classifiable as to its carcinogenicity to humans Silica, amorphous</li> <li>Group 2B : Possibly carcinogenic to humans.</li> <li>Carbon black</li> <li>Group 2B : Possibly carcinogenic to humans.</li> <li>Titanium dioxide</li> </ul>
NTP EU	: Not listed : Not listed
OSHA REPRODUCTION TOXICITY	: Not listed
INFORMATION ON PRODUCT INFORMATION ON INGREDIENTS SPECIFIC TARGET ORGAN SYSTEMIC <sup>-</sup> - SINGLE EXPOSURE	: No information available : No information available TOCICITY
INFORMATION ON PRODUCT INFORMATION ON INGREDIENTS - REPEATED EXPOSURE	: No information available : No information available
INFORMATION ON PRODUCT INFORMATION ON INGREDIENTS ASPIRATION HAZARD	: No information available : Carbon black : Category 1 (lung); Ref.(1)
INFORMATION ON PRODUCT INFORMATION ON INGREDIENTS OTHER INFORMATION	: No information available : No information available : No information available

# 12. ECOLOGICAL INFORMATION

ECOTOXICITY PERSISTENCE / DEGRADABILITY MOBILITY IN SOIL BIOACCUMULATION POTENTIAL OTHER ADVERSE EFFECTS No information available

#### **13. DISPOSAL CONSIDERATIONS**

Review "HANDING AND SRORAGE(Section7)" Passed to a licensed waste contractor. This product may cause risk of dust explosion.

Dispose of waste in accordance with local, state and federal regulations.

# 14. TRANSPORTATION INFORMATION

Follow all regulations in your country or region. INTERNATIONAL REGULATIONS UN CLASS / UN NUMBER : Not applicable SPECIAL PRECAUTIONS FOR USER : Review "ACCIDENTAL RELEASE MEASURES(Section 6)". Review "HANDLING AND STORAGE (Section 7)". Ensure containers without breakage or leakage. Ensure containers tightly fixed. Follow all regulations in your country or region. Avoid heating(keep under 40 C).

#### **15. REGULATORY INFORMATION**

Follow all regulations in your cou	untry or region.	
INVENTORIES	: ENCS(Japan)	Yes
	TSCA(USA)	Yes
	EINECS(EU)	No(ELINCS)
	AICS(Australia)	Yes
	DSL(Canada)	No(NDSL)
	ECL(Korea)	Yes
	PICCS(Philippines)	Yes
	IECSC(China)	Yes

#### **16. OTHER INFORMATION**

REFERENCES

: -Safety data sheet for chemical product – Part 1 : Content and order of sections(ISO 11014-1)

-International Chemical Safety Cards(ICSC) (Compiler's Guide) (1994) (1) GHS Classification Database, National Institute of Technology and Evaluation (NITE)

To the best of the manufacturer's knowledge, the information contained herein is accurate. However, neither the manufacturer, nor any of its affiliates, make any representations or warranties (expressed or implied), nor assumes any liability(including liability for any direct, incidental, consequential, or other damages) with respect to the accuracy or completeness of the information contained herein. Such information may be (without limitation) invalid if the specified material is used in combination with another ,in a particular process, or under unusual conditions. Determination of suitability of any material for any given purpose is the sole responsibility of the user who assumes all risk and responsibility therefore. All materials may present unknown hazards and should be used with appropriate caution. The manufacture cannot and does not guarantee that the hazards described herein are the only ones that exist.

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# Material Safety Data Sheet CLP-M300A, CLP-M350A, CLT-M409S, CLT-M4092S

Revised Date June 30, 2009 Set Up Date December 15, 2005

CAS RN Trade Secret Trade Secret Trade Secret Trade Secret

#### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

COMPANY : Samsung Electronics Company 416, Maetan-3Dong, Yeongtong-Gu, Suwon-City, Gyeonggi-Do, Korea 443-742 TELEPHONE NO. : 82-31-200-8311 EMERGENCY TELEPHONE NO. : 82-31-200-8311

# 2. COMPOSITION / INFORMATION ON INGERDIENTS

SUBSTANCE / MIXTURE	: Mixture
CHEMICAL NAME	: Magenta Toner
INGREDIENTS AND CONCENTE	RATION RANGE
Ingredients	Concentration Range(%)
Polyester resin	75 - 90
Wax	1 – 10
Magenta pigment	0.5 - 10
Silica	1 – 5

#### 3. HAZARDS IDENTIFICATION

FIRE AND EXPLOSION HAZARD	: May cause risk of dust explosion.
POTENTIAL HEALTH EFFECTS	: To the best of our investigation, no special hazards have to be mentioned.
ENVIRONMENTAL EFFECTS	: To the best of our investigation, no information available.

#### 4. FIRST-AID MEASURES

IN CASE OF EYE CONTACT	: Immediately hold eyelids open and flush with a stream of water for at least 15 minutes. If necessary seek medical attention.
IN CASE OF SKIN CONTACT	<ul> <li>Wash material off the skin with plenty seek medical attention.</li> <li>Remove person to fresh air. If necessary</li> <li>Seek medical attention. Never give anything by mouth to an</li></ul>
IN CASE OF INHALATION	unconscious person. If possible, rinse out mouth and give one or two
IN CASE OF INGESTION	glasses of water or milk to drink.

#### 5. FIRE-FIGHTING MEASUARES

EXTINGUISHING MEASURES	: Risk of producing harmful gases such as carbon monoxide and nitrogen
EXTINGUISHING AGENTS	oxides.Avoid inhalation of smoke or gases. : In case of small fire use powder, carbon dioxide. In case of large fire shut off air by spraying with water or foam.

#### 6. ACCIDENTAL RELEASE MEASURES

: In case of spill vacuum material immediately. Then wipe up remainder in waste cloth.

# 7. HANDLING AND STORAGE

HANDLING	: Fight fire from upwind position.
	Avoid inhalation of dust.
	Prevent generation of dust
	Avoid inhalation of fine dust .
STORAGE	: Protect from sun. Store in a cool room.(under 40 C)

# 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ACGIH(TLV) OSHA(PEL) VENTILATION	: Not established : Not established : Use local exhaust ventilation or general ventilation
PROTECTIVE MEASURES	, and the second s
RESPIRATORY PROTECTIVE EQUIPMENTS	: Dust respirator
EYE PROTECTIVE EQUIPMENTS HAND PROTECTIVE EQUIPMENTS	: Safety goggles : Rubber gloves
PROTECTIVE CLOTHINGS	: Use as appropriate to situation.

# 9. PHYSICAL AND CHEMICAL PROPERTIES

: Magenta powder
: Odourless
: No data available
: 1.2 ( 20.0 ℃)
: No data available
: A part of component is soluble in toluene, chloroform and
tetrahydrofuran
: No data available
: No data available
: No data available
: None

# 10. REACTIVITY AND STABILITY

FLASH POINT AUTOIGNITION TEMPERATURE EXPLOSIVE LIMIT IN AIR(LEC) EXPLOSIVE LIMIT IN AIR(UEC) COMBUSTIBILITY OXIDIZABILITY SELF-REACTIVITY / EXPLOSIVITY	<ul> <li>Not applicable</li> <li>No data available</li> <li>No data available</li> <li>No data available</li> <li>Yes</li> <li>No</li> <li>This material may cause risk of dust explosion.</li> </ul>
REACTIVITY AND STABILITY	: Stable in general.
HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS	: No information available
OTHER INFORMATION	: None

#### **11. TOXICOLOGICAL INFORMATION**

CORROSIVITY	: No data available
SKIN IRRITATION	: No data available
EYE IRRITATION	: No data available
SENSITIZATION	: No data available
ACUTE TOXICITY	: No data available
SUBCHRONIC EFFECTS	: No data available
CHRONIC EFFECTS	: No data available
CARCINOGENICITY	: No data available
IARC	: Group 3.The agent is not classifiable as to its carcinogenicity to humans.(Silica)
	Group 2B. The agent is possibly carcinogenic to humans.(Carbon
NTP	: None of this product's components are listed
OSHA	: None of this product's components are listed
MUTAGENICITY	: Ames test (TA98, TA100, TA1535, TA1537, TA1538, WP2urvA) : Negative
REPRODUCTIVE EFFECTS	: No data available
TERATOGENICITY	: No data available
OTHER INFORMATION	: None.

#### 12. ECOLOGICAL INFORMATION

BIODEGRADABILITY	: No data available
BIOACCUMULATION	: No data available
FISH TOXICITY	: No data available
OTHER INFORMATION	: None

# **13. DISPOSAL CONSIDERATIONS**

Review "HANDLING AND STORAGE(Section7)" Dispose of waste in accordance with local, state and federal regulations. Passed to a licensed waste contractor. Incinerate with little portions. Risk of producing harmful gases such as carbon monoxide and nitrogen oxides

#### 14. TRANSPORTATION INFORMATION

HAZARD LABELS

PRECAUTIONS	Follow all regulations in your country or region. : Review "ACCIDENTAL RELEASE MEASURES (Section6)" Review "HANDLING AND STORAGE (Section7)" Handle container carefully to avoid shock. Do not fall or crash Keep dry
PROPER SHIPPING NAME	: Non hazardous
HAZARD CLASS	: Not applicable
UN NO.	: Not applicable
PACKING GROUP	: Not applicable

: Not applicable

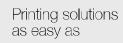
#### **15. REGULATORY INFORMATION**

EINECS TSCA Follow all regulations in your country or region. : No (ELINCS) : Yes

#### 16. OTHER INFORMATION

**REFERENCES** : None

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# Material Safety Data Sheet CLP-Y300A, CLP-Y350A, CLT-Y409S, CLT-T4092S

Revised Date June 30, 2009 Set Up Date December 15, 2005

CAS RN Trade Secret Trade Secret Trade Secret Trade Secret

#### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

COMPANY : Samsung Electronics Company 416, Maetan-3Dong, Yeongtong-Gu, Suwon-City, Gyeonggi-Do, Korea 443-742 TELEPHONE NO. : 82-31-200-8311 EMERGENCY TELEPHONE NO. : 82-31-200-8311

#### 2. COMPOSITION / INFORMATION ON INGERDIENTS

SUBSTANCE / MIXTURE CHEMICAL NAME	: Mixture : Yellow Toner
INGREDIENTS AND CONCENTR	
Ingredients	Concentration Range(%)
Polyester resin	75 - 90
Wax	1 – 10
Yellow pigment	0.5 - 10
Silica	1 – 5

#### 3. HAZARDS IDENTIFICATION

FIRE AND EXPLOSION HAZARD	: May cause risk of dust explosion.
POTENTIAL HEALTH EFFECTS	: To the best of our investigation, no special hazards have to be mentioned.
ENVIRONMENTAL EFFECTS	: To the best of our investigation, no information available.

#### 4. FIRST-AID MEASURES

IN CASE OF EYE CONTACT IN CASE OF SKIN CONTACT IN CASE OF INHALATION IN CASE OF INGESTION	<ul> <li>Immediately hold eyelids open and flush with a stream of water for at least 15 minutes. If necessary seek medical attention.</li> <li>Wash material off the skin with plenty seek medical attention.</li> <li>Remove person to fresh air. If necessary</li> <li>Seek medical attention. Never give anything by mouth to an unconscious person. If possible, rinse out mouth and give one or two glasses of water or milk to drink.</li> </ul>
5. FIRE-FIGHTING MEASUARES	

EXTINGUISHING MEASURES	: Risk of producing harmful gases such as carbon monoxide and nitrogen
EXTINGUISHING AGENTS	oxides.Avoid inhalation of smoke or gases. : In case of small fire use powder, carbon dioxide. In case of large fire shut off air by spraying with water or foam.

#### 6. ACCIDENTAL RELEASE MEASURES

: In case of spill vacuum material immediately. Then wipe up remainder in waste cloth.

#### 7. HANDLING AND STORAGE

HANDLING	: Fight fire from upwind position.
	Avoid inhalation of dust.
	Prevent generation of dust
	Avoid inhalation of fine dust .
STORAGE	: Protect from sun. Store in a cool room.(under 40 C)

# 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ACGIH(TLV) OSHA(PEL)	: Not established : Not established
VENTILATION	: Use local exhaust ventilation or general ventilation
PROTECTIVE MEASURES	Ū.
RESPIRATORY PROTECTIVE	: Dust respirator
EQUIPMENTS	
EYE PROTECTIVE EQUIPMENTS	: Safety goggles
HAND PROTECTIVE EQUIPMENTS	: Rubber gloves
PROTECTIVE CLOTHINGS	: Use as appropriate to situation.

# 9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE	: Yellow powder
ODOUR	: Odourless
BOILING POINT	: No data available
VAPOUR PRESSURE	: No data available
VAPOUR DENSITY	: No data available
VOLATILITY	: No data available
MELTING / FREEZING POINT	: No data available
SPECIFIC GRAVITY	: 1.2 ( 20.0 ℃)
SOLUBILITY	
WATER SOLUBILITY	: No data available
SOLVENT SOLUBILITY	: A part of component is soluble in toluene, chloroform and tetrahydrofuran
рН	: No data available
VISCOSITY	: No data available
OCTANOL / WATER PARTITION COEFFICIENT	: No data available
OTHER INFORMATION	: None

#### 10. REACTIVITY AND STABILITY

FLASH POINT
AUTOIGNITION TEMPERATURE
EXPLOSIVE LIMIT IN AIR(LEC)
EXPLOSIVE LIMIT IN AIR(UEC)
COMBUSTIBILITY
OXIDIZABILITY
SELF-REACTIVITY / EXPLOSIVITY
REACTIVITY AND STABILITY
HAZARDOUS COMBUSTION
OR DECOMPOSITION PRODUCTS
OTHER INFORMATION

: Not applicable

- : No data available
- : No data available
- : No data available
- : Yes
- : No
- : This material may cause risk of dust explosion.
- : Stable in general.
- : No information available
- : None

#### **11. TOXICOLOGICAL INFORMATION**

CORROSIVITY SKIN IRRITATION EYE IRRITATION SENSITIZATION ACUTE TOXICITY	: No data available : No data available : No data available : No data available : No data available
SUBCHRONIC EFFECTS	: No data available
CHRONIC EFFECTS	: No data available
CARCINOGENICITY	: No data available
IARC	: Group 3.The agent is not classifiable as to its carcinogenicity to humans.(Silica) Group 2B. The agent is possibly carcinogenic to humans.(Carbon
NTP	: None of this product's components are listed
OSHA	: None of this product's components are listed
MUTAGENICITY	: Ames test (TA98, TA100, TA1535, TA1537, TA1538, WP2urvA) : Negative
REPRODUCTIVE EFFECTS	: No data available
TERATOGENICITY	: No data available
OTHER INFORMATION	: None.
2. ECOLOGICAL INFORMATION	

# 12. ECOLOGICAL INFORMATION

: No data available : No data available : No data available : None

## **13. DISPOSAL CONSIDERATIONS**

Review "HANDLING AND STORAGE(Section7)" Dispose of waste in accordance with local,state and federal regulations. Passed to a licensed waste contractor. Incinerate with little portions. Risk of producing harmful gases such as carbon monoxide and nitrogen oxides

# 14. TRANSPORTATION INFORMATION

PRECAUTIONS	Follow all regulations in your country or region. : Review "ACCIDENTAL RELEASE MEASURES (Section6)" Review "HANDLING AND STORAGE (Section7)" Handle container carefully to avoid shock. Do not fall or crash Keep dry
PROPER SHIPPING NAME	: Non hazardous
HAZARD CLASS	: Not applicable
UN NO.	: Not applicable
PACKING GROUP	: Not applicable
HAZARD LABELS	: Not applicable

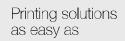
#### **15. REGULATORY INFORMATION**

EINECS TSCA Follow all regulations in your country or region. : No (ELINCS) : Yes

#### 16. OTHER INFORMATION

**REFERENCES** : None

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