



MATERIAL SAFETY DATA SHEET

[1.CHEMICAL PRODUCT AND COMPANY IDENTIFICATION]

PRODUCT NAME : CLP-K660A, CLP-K660B, TS2500K
 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 INGREDIENTS]

SUBSTANCE / MIXTURE : Mixture

CHEMICAL NAME : Black Toner

INGREDIENTS AND CONCENTRATION RANGE

Ingredients	Concentration Range(%)	CAS RN
Polyester resin	70 - 90	Trade Secret
Wax	1 - 10	Trade Secret
Carbon black	1 - 10	1333-86-4
Silica	1 - 5	Trade Secret

[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

ENVIRONMENTAL EFFECTS : To the best of our investigation, No special hazards have to be

[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 : Wash material off the skin with plenty of water and soap. If necessary seek medical attention.

IN CASE OF INHALATION : Remove person to fresh air. If necessary seek medical attention.

IN CASE OF INGESTION : 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.

[5.FIRE-FIGHTING MEASURES]

EXTINGUISHING MEASURES : Risk of producing harmful gases such as carbon monoxide and nitrogen oxides. Avoid inhalation of smoke or gases.

EXTINGUISHING AGENTS : 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) : Not established
OSHA(PEL) : Not established
VENTILATION : Use local exhaust ventilation or general ventilation

PROTECTIVE MEASURES

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 : Black 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

pH : No data available
VISCOSITY : No data available
OCTANOL / WATER : No data available
PARTITION COEFFICIENT

OTHER INFORMATION : None

[10.REACTIVITY AND STABILITY]

FLASH POINT	: Not applicable
AUTOIGNITION TEMPERATURE	: No data available
EXPLOSIVE LIMIT IN AIR(LEC)	: No data available
EXPLOSIVE LIMIT IN AIR(UEC)	: No data available
COMBUSTIBILITY	: Yes
OXIDIZABILITY	: No
SELF-REACTIVITY / EXPLOSIVITY	: This material may cause risk of dust explosion.
REACTIVITY AND STABILITY	: Stable in general
HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS	: No data 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.(Titanium) 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, WP2uvrA) : 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 "HANDING AND SRORAGE(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 LABE	: Not applicable

[15.REGULATORY INFORMATION]

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