



# MATERIAL SAFETY DATA SHEET

## [1.CHEMICAL PRODUCT AND COMPANY IDENTIFICATION]

PRODUCT NAME : CLP-510D3K  
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 OR PREPARATION : Preparation

### INGREDIENTS AND CONCENTRATION RANGE

Ingredients	Concentration Range(%)	CAS RN
Black Toner	Confidential	

INGREDIENTS CONTRIBUTING TO THE HAZARD(JAPAN) : None

## [3.HAZARDS IDENTIFICATION]

MOST IMPORTANT HAZARDS :  
ADVERSE HUMAN 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 about adverse effect in the environment available.  
PHYSICAL AND CHEMICAL HAZARDS : This material is not dangerous in case of usual handling.  
CLASS NAME FOR MSDS IN JAPAN : Not applicable

## [4.FIRST-AID MEASURES]

IN CASE OF INHALATION : Remove person to fresh air. 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 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 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 MEDIA : Water spray, powder  
NOT SUITABLE EXTINGUISHING MEDIA : 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 protections as appropriate to situation.

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**[6.ACCIDENTAL RELEASE MEASURES]**

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PERSONAL PRECAUTIONS	: Use mask, goggles and protective gloves. Large spills : Remove person to safety. 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	: Sweep or vacuum spills. Prevent dispersion of dust.
PREVENTION OF SECONDARY HAZARDS	: No information available

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**[7.HANDLING AND STORAGE]**

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HANDLING	
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	: Handle in well-ventilated areas. Use safety glasses and protective gloves as appropriate to situation. Wash hands and face and gargle after handling. Prevent generation of dust.
STORAGE	
STORAGE CONDITIONS	: Keep container tightly closed. Protect from sun. Store in a well-ventilated room (under 40 C).
PACKAGING MATERIALS	: No information available

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**[8.EXPOSURE CONTROLS / PERSONAL PROTECTION]**

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ENGINEERING MEASURES	: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use an adequate ventilation. Use local exhaust ventilation, in case of generation of dust.
LIMIT VALUES :	
ACGIH(TLV)	: TWA 3.5mg/m3,(2002 year edition) Carbon black  TWA 3mg/m3(respirable particulate) TWA 10mg/m3(inhalable particulate)(Particulates Not Otherwise Classified)
OSHA(PEL)	: PEL 3.5mg/m3,(2002 year edition) Carbon black
PERSONAL PROTECTIVE EQUIPMENT	
RESPIRATORY PROTECTION	: Use dust mask, as appropriate to situation.
HAND PROTECTION	: Rubber gloves
EYE PROTECTION	: Safety glasses with side shield(Safety goggles or Face shield)
SKIN AND BODY PROTECTION	: Full-body suit
HYGIENE MEASURES	: No information available

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**[9.PHYSICAL AND CHEMICAL PROPERTIES]**

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## PHYSICAL STATES

FORM	: Pulverizing powder
COLOUR	: Black
ODOUR	: Odourless



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pH : Not applicable

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SPECIFIC TEMPERATURES/TEMPERATURE RANGES AT WHICH CHANGES IN PHYSICAL STATE OCCUR

BOILING POINT : No data available  
MELTING POINT : No data available  
DECOMPOSITION TEMPERATURE : No data available  
FLASH POINT : Not applicable  
AUTOIGNITION TEMPERATURE : No data available

EXPLOSION PROPERTIES

EXPLOSION : UPPER LIMIT: No data available : LOWER LIMIT No data available  
VAPOUR PRESSURE : No data available  
VAPOUR DENSITY : No data available  
DENSITY : 1.2 g/mL (20 °C) (68 °F)  
SOLUBILITY  
WATER SOLUBILITY : Insoluble  
SOLVENT SOLUBILITY : Partially soluble in toluene, chloroform and tetrahydrofuran.  
OCTANOL/WATER PARTITION COEFFICIENT : No data available  
OTHER DATA : No data available

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[10.REACTIVITY AND STABILITY]

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

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[11.TOXICOLOGICAL INFORMATION]

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ACUTE TOXICITY : No information available  
LOCAL EFFECTS  
CORROSIVITY : No information available  
SKIN IRRITATION : No information available  
EYE IRRITATION : No information available  
SENSITIZATION : No information available  
ICITY : No information available  
IARC : Group2B,(2002 year edition)  
Carbon black  
Group3,(2002 year edition)  
Titanium dioxide  
Group 3,(2002 year edition)  
Amorphous Silica  
NTP : Not established  
OSHA : Not established  
MUTAGENICITY : No information available  
TERATOGENICITY : No information available  
REPRODUCTION TOXICITY : No information available  
OTHER DATA : No information available

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[12.ECOLOGICAL INFORMATION]

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MOBILITY : No information available  
PERSISTENCE/ DEGRADABILITY : No information available



ELECTRONICS

BIOACCUMULATION : No information available  
 ECOTOXICITY : No information available  
 AQUATIC TOXICITY : No information available  
 OTHER DATA : No information available

[13.DISPOSAL CONSIDERATIONS]

Review "HANDLING AND STORAGE(Section7)"  
 Dispose of waste(after vacuuming) in accordance with local,state, and federal regulations.

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

[14.TRANSPORTATION INFORMATION]

Follow all regulations in your country or region.

UN CLASS/UN NUMBER : Not applicable  
 PRECAUTIONS : 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.

[15.REGULATORY INFORMATION]

Follow all regulations in your country 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

[16.OTHER INFORMATION]

REFERENCES : -Safety data sheet for chemical products - Part 1: Content and order of sections(ISO 11014-1)  
 -International Chemical Safety Cards(ICSC) (Compiler's Guide)(1994)

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