



# MATERIAL SAFETY DATA SHEET

## [1.CHEMICAL PRODUCT AND COMPANY IDENTIFICATION]

PRODUCT NAME : ML-1210D3  
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

INGREDIENTS CONTRIBUTING TO : None

THE HAZARD

## [3.HAZARDS IDENTIFICATION]

MOST IMPORTANT HAZARDS :

ADVERSE HUMAN HEALTH : To the best of our investigation, no special hazards have to be  
EFFECTS mentioned.

ENVIRONMENTAL EFFECTS : To the best of our investigation, no information available.

PHYSICAL AND CHEMICAL : This material is not dangerous in case of usual handling.

HAZARDS May cause risk of dust explosion

CLASS NAME FOR MSDS : 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 : No information available  
MEDIA

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.

[6.ACCIDENTAL RELEASE MEASURES]

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

[7.HANDLING AND STORAGE]

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

[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)	: TWA 3.5mg/m <sup>3</sup> ,(2000 year edition) Carbon black
OSHA(PEL)	: PEL 3.5mg/m <sup>3</sup> ,(2000 year edition) Carbon black
PERSONAL PROTECTIVE EQUIPMENT	
RESPIRATORY PROTECTION	: Dust respirator
HAND PROTECTION	: Rubber gloves
EYE PROTECTION	: Safety goggles
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 : Powder  
COLOUR : Black  
ODOUR : Odourless  
pH : Not applicable

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

BOILING POINT : No data available  
MELTING POINT : No data available  
DECOMPOSITION : No data available  
TEMPERATURE

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 ( 20.0°C ) ( 68°F )

**SOLUBILITY**

WATER SOLUBILITY : Insoluble

SOLVENT SOLUBILITY : Partially soluble in toluene, chloroform and tetrahydrofurane.

OCTANOL/WATER PARTITION COEFFICIENT : No data available

**OTHER DATA**

OTHER DATA : No data available

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**[10.REACTIVITY AND STABILITY]**

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STABILITY : Stable in general.

HAZARDOUS REACTIONS : This material may cause risk of dust explosion.

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 : Oral, rat, LD50 : > 2000 mg/kg

LOCAL EFFECTS :

CORROSIVITY : No information available

SKIN IRRITATION : No information available

EYE IRRITATION : No information available

SENSITIZATION : No information available

CHRONIC TOXICITY/LONG TERM TOXICITY : No information available

CARCINOGENICITY : No information available

IARC : Group 2B,(2000 year edition)

Carbon black

NTP : Not established

OSHA : Not established

MUTAGENICITY : Ames test (Salmonella typhimurium TA98,TA100,TA1535,TA1537, TA1538, Escherichia coli WP2uvrA) : Negative

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

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**[13.DISPOSAL CONSIDERATIONS]**

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Review "HANDLING AND STORAGE (Section 7)".  
Dispose of waste(after vacuuming) in accordance with local,state, and federal regulations.

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**[14.TRANSPORTATION INFORMATION]**

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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.

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**[15.REGULATORY INFORMATION]**

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Follow all regulations in your country or region

INVENTORIES : ENCS(Japan) Yes  
TSCA(USA) Yes  
EINECS(EU) No(ELINCS)  
AICS(Australia) No  
DSL(Canada) No  
ECL(Korea) Yes  
PICCS(Philippines) Yes

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**[16.OTHER INFORMATION]**

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REFERENCE : -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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