

MATERIAL SAFETY DATA SHEET

[1.CHEMICAL PRODUCT AND COMPANY IDENTIFICATION]

PRODUCT NAME: MLT-D206L, MLT-D206S, MLT-D2082L, MLT-D2082S,

MLT-D208L, MLT-D208S

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 OR PREPARATION : Preparation

INGREDIENTS AND :

CONCENTRATION RANGE

Ingredients Concentration Range(%) CAS RN

Black toner

INGREDIENTS CONTRIBUTING TO : None

THE HAZARD(JAPAN)

[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 IN : Not applicable

JAPAN

[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 MEASUARES]

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.



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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

: Prevent dispersion of dust.

Sweep or vacuum by dust-explosion-proof type cleaner.

PREVENTION OF SECONDARY

HAZARDS

: No information available

[7.HANDLING AND STORAGE]

HA NDLING

TECHNICAL MEASURES : Facilities storing or utilizing this material should be equipped with an

eyewash facility and a safety shower.

: Avoid inhalation of fine dust . **PRECAUTIONS** 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.

This material may cause risk of dust explosion.

ST ORAGE

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 an adequate ventilation.

Use local exhaust ventilation, in case of generation of dust.

LIM IT VALUES

ACGIH(TLV) : TWA 3.5mg/m3

Carbon black

TWA 2mg/m3(fume)

Paraffin wax

: TWA 3.5mg/m3 OSHA(PEL)

Carbon black

PE RSONAL PROTECTIVE EQUIPMENT

RESPIRATORY PROTECTION : Use dust mask, as appropriate to situation.

HAND PROTECTION : Rubber gloves

EYE PROTECTION : Safety goggles with side shield(Safety goggles or Face shield)

SKIN AND BODY : Full-body suit



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PROTECTION

HYGIENE MEASURES : No information available

[9.PHYSICAL AND CHEMICAL PROPERTIES]

PH YSICAL STATES

FORM : Pulverizing powder

COLOUR : Black : Odourless **ODOUR**

: No data available pΗ

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

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

TEMPERATURE

: No data available FLASH POINT **AUTOIGNITION TEMPERATURE** : No data available

EX PLOSION PROPERTIES

EXPLOSION : UPPER LIMIT No data available LOWER LIMIT No data available

VAPOUR PRESSURE : No data available VAPOUR DENSITY : No data available

(20.0°C) (68°F) **DENSITY** 1.2 g/mL

SO LUBILITY

WATER SOLUBILITY : Insoluble

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

OCTANOL/WATER PARTITION : No data available

COEFFICIENT

OTHER DATA : No data available

[10.REACTIVITY AND STABILITY]

STABILITY : Stable in general.

HAZARDOUS REACTIONS : Stable.

: No information available CONDITIONS TO AVOID MATERIALS TO AVOID : No information available HAZARDOUS DECOMPOSITION : No information available

PRODUCTS

OTHERS : No information available

[11.TOXICOLOGICAL INFORMATION]

ACUTE TOXICITY : Oral, rat, LD50 : > 5000 mg/kg

LOCAL EFFECTS

CORROSIVITY : No information available

: Rabbit, undiluted, 4 hour semi-occluded application (OECD404) : SKIN IRRITATION

Not irritant (According to the criteria of EU)

: Rabbit, undiluted, OECD405 : Not irritant (According to the criteria of EU) **EYE IRRITATION**

: Guinea pig, Guinea Pig Maximization Test : Negative **SENSITIZATION**

: No information available CHRONIC TOXICITY/LONG TERM

TOXICITY

NTP

OSHA

CARCINOGENICITY : No information available

IARC : Group2B : Possibly carcinogenic to humans

> Carbon black : Not established : Not established

MUTAGENICITY : Ames test (TA98,TA100,TA1535,TA1537,TA1538, WP2uvrA) : Negative

TERATOGENICITY : No information available REPRODUCTION TOXICITY : No information available



OTHER DATA : No information available

[12.ECOLOGICAL INFORMATION]

MOBILITY : No information available PERSISTENCE/ : No information available

DEGRADABILITY

BIOACCUMULATION : No information available

ECOTOXICITY

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

[13.DISPOSAL CONSIDERATIONS]

Review "HANDLING AND STORAGE (Section 7)".

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.

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]

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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