SAMSUNG ELECTRONICS

MATERIAL SAFETY DATA SHEET

[1.CHEMICAL PRODUCT AND COMPANY IDENTIFICATION]

PRODUCT NAME : SAMSUNG MODEL CLP-500D5Y YELLOW LASER TONER CARTRIDGE
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
USA INFORMATIONAL TELEPHONE NO: 1-800-SAMSUNG

[2.COMPOSITION / INFORMATION ON INGERDIENTS]

SUBSTANCE OR PREPARATION : Preparation

INGREDIENTS AND CONCENTRATION RANGE

Ingredients	Concentration Range(%)	CAS RN
Yellow 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 MEASUARES]

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.

[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 an adequate ventilation.
Use local exhaust ventilation, in case of generation of dust.

LIMIT VALUES :

ACGIH(TLV) : TWA 3mg/m3(respirable particulate)
TWA 10mg/m3(inhalable particulate)(Particulates Not Otherwise Classified)

OSHA(PEL) : Not established

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

[9.PHYSICAL AND CHEMICAL PROPERTIES]

PHYSICAL STATES

FORM : Pulverizing powder

COLOUR : Red

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 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 ºC) (68 ºF)
SOLUBILITY
WATER SOLUBILITY : Insoluble
SOLVENT SOLUBILITY : Partially soluble in toluene, chloroform and tetrahydrofurane.
OCTANOL/WATER PARTITION COEFFICIENT : No data available
OTHER DATA : No data available

[10.REACTIVITY AND STABILITY]

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

[11.TOXICOLOGICAL INFORMATION]

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 : 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

[12.ECOLOGICAL INFORMATION]

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

BIOACCUMULATION : No information available
ECOTOXICITY
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
	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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