## Canon MATERIAL SAFETY DATA SHEET

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SECTION 1	IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING
Product Name:	Canon Starter (Magenta) for CLC700
Product Code:	1465A001AA / F42-0422
Manufacturer:	Canon Inc., 30-2, Shimomaruko 3-Chome, Ohta-ku, Tokyo, Japan, Ph# 03-3758-2111
Supplier:	Canon USA, Inc., One Canon Park, Melville, NY 11747, USA
Phone #:	1-800-OK-CANON 24 Hr. Emergency CHEMTREC # 1-800-424-9300
MSDS #:	TN0071-0505

## SECTION 2 COMPOSITION/INFORMATION ON INGREDIENTS

## Hazardous Ingredient(s)

Chemical Name	CAS #	Weight %	EU Symbol	EU R-Phrase
Ferrite including copper and zinc	66402-68-4	90 - 95	None	None
		(AsCu:10-12)		

Chemical Name	USA OSHA PEL	ACGIH TLV
Ferrite including copper and zinc	Not established	Not established

Chemical Name	EU ILV	DFG MAK
Ferrite including copper and zinc	Not established	1.0mg/m <sup>3</sup> (As Cu and its compounds:Inhalable fraction)



Overview:

## SECTION 2 COMPOSITION/INFORMATION ON INGREDIENTS - Continued

Carcinogen			
Chemical Name	CAS #	Reference	
None			
Other Ingredient(s)			
Chemical/Generic Name		Weight %	
Polyester resin		3 - 10	
Pigment		< 1	

# SECTION 3 HAZARDS IDENTIFICATION Emergency Magentaish gray fine powder, slight plastic odor.

Potential Health Eff	fects and Symptoms:
Inhalation:	Exposure to excessive amounts of dust may cause physical irritation to respiratory tract.
Ingestion:	Practically non-toxic. Ingestion is a minor route of entry for intended use of this product.
Eye:	May cause transient slight irritation.
Skin:	May cause slight irritation.
Chronic Effects:	Prolonged inhalation of excessive amounts of dust may cause lung damage. Use of this product as intended does not result in inhalation of excessive amounts of dust.
Medical Condition	ons Generally known to be Aggravated by Exposure: Not determined.



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## SECTION 4 FIRST AID MEASURES

First Aid Measu Inhalation:	res: If symptoms are experienced, move victim to fresh air and obtain medical advice.
Ingestion:	Rinse mouth. Drink 1 or 2 glasses of water. If irritation or discomfort occurs, obtain medical advice immediately.
Eye:	Do not allow victim to rub eye(s). Flush with lukewarm, gently flowing water for 5 minutes or until particle is removed. If irritation persists, obtain medical attention.
Skin:	Wash with soap and water. If irritation persists, obtain medical advice.
Note to Physicians:	None

## SECTION 5 FIRE FIGHTING MEASURES

Fire Fighting Measures:	
Extinguishing Media:	$CO_2$ , water, dry chemicals
Unsuitable Extinguishing Media:	None
Special Fire Fighting Procedures:	None
Unusual Fire and Explosion Hazards:	Can form explosive dust-air mixtures when finely dispersed in air.
Fire and Explosive Proper	ties:
Flash Point(°C):	Not applicable
Flammable(Explosive) Limits:	Not applicable
Autoignition Temperature(°C):	Not available
Flammability:	Not-flammable (Test method : Directive 92/69/EEC, A10 Flammability (Solids))

## SECTION 5 FIRE FIGHTING MEASURES - Continued

Canon

Fire and Explosive Proper	rties - Continued:
Autoflammability:	Not applicable
<b>Explosive Properties:</b>	Can form explosive dust-air mixtures when finely dispersed in air.
Oxidizing Properties:	Not available
Hazardous Combustion Products:	$\overline{\mathrm{CO}_2,\mathrm{CO}}$
Other Properties:	Not available

## SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal Precautions: Avoid breathing dust.

Environmental Precautions:	Do not wash away into sewer.
Method for Cleaning Up:	Sweep slowly spilled powder on to paper, and carefully transfer into a waste container. Clean remainder with wet paper, wet cloth or a vacuum cleaner. If a vacuum cleaner is used, it must rate as a dust explosion-proof type. Fine powder can form explosive dust-air mixtures.

SECTION 7 HANDLING AND STORAGE

Handling:Avoid breathing dust.Use with adequate ventilation.

Storage:

Keep away from oxidizing materials.

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## SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines:	USA OSHA(TWA/PEL):15mg/m3 (Total dust)		
1		5mg/m3 (Respirable fraction)	
	ACGIH(TWA/TLV):	10mg/m3 (Inhalable particulate)	
		3mg/m3 (Respirable particulate)	
	DFG (MAK) :	4 mg/m3 (Inhalable fraction)	
		1.5 mg/m3 (Respirable fraction)	(Also refer to SECTION 2)

Engineering Controls: Use adequate ventilation.

Personal Protection E	quipment(s):	
Respiratory Protection:	Required	Not Required
Eye/Face Protection:	Required	Not Required
Skin Protection:	Required	Not Required

## SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Magentaish gray fine powder
Odor:	Slight plastic odor
pH:	Not applicable
Boiling Point/Range(°C):	Not applicable
Melting Point/Range(°C):	100 - 150 (Softening point)
Decomposition Temperature(°C): >200	
Flash Point(°C):	Not applicable
Flammable (Explosive) Limits:	Not applicable
Autoignition Temperature(°C): Flammability:	Not available Not-flammable (Test method : Directive 92/69/EEC, A10 Flammability (Solids))
Autoflammability:	Not applicable
Explosive Properties:	Can form explosive dust-air mixtures when finely dispersed in air.
Oxidizing Properties:	Not available
Vapor Pressure:	Not applicable
Vapor Density:	Not applicable
Density / Specific Gravity:	4.0 - 5.0
Water Solubility:	Negligible
Fat Solubility:	Partially soluble in toluene and xylene.
Partition Coefficient (n-Octanol/Water):	Not applicable
Percent Volatile:	Negligible
Evaporation Rate:	Not applicable



## SECTION 10 STABILITY AND REACTIVITY

Stability			
Stability: Conditions to Avoid	Stable Unstable		
Conditions to Avoid	None		
Materials to Avoid:	Strong oxidizers	Strong oxidizers	
Hazardous Decompo Products:	ition $\overline{\text{CO, CO}_2}$		
Hazardous Polymeri	ation: 🗌 May Occur 🛛 Will Not Occur		
Conditions to Avo	•		
SECTION 11 TO	ICOLOGICAL INFORMATION		
Acute Toxicity:			
Inhalation:	Not available		
Ingestion:	Estimate : Rat, LD50 > 5000 mg/kg		
Eye:	Estimate : Rabbit, transient slight conjunctival irritation only.		
•			
Skin:	Estimate : Rabbit, mild irritant.		
Skiii:	Estimate : Kabbit, finite fifitant.		
<b>a</b>	NT / 111		
Sensitization:	Not available.		
Mutagenicity:	Estimate : Ames Test (Salmonella typhimurium) : Negative		
Reproductive	Not available.		
Toxicity:			



## SECTION 11 TOXICOLOGICAL INFORMATION - Continued

Carcinogenicity: Not available

Others: Chronic effects: Muhle et al. reported pulmonary response upon chronic inhalation exposure in rats to a toner enriched in respirable-sized particles compared to commercial toner. No pulmonary change was found at 1 mg/m3 which is most relevant to potential human exposure. A minimal to mild degree of fibrosis was noted in 22% of the animals at 4 mg/m3, and a mild to moderate degree of fibrosis was observed in 92% of the animals at 16 mg/m3. These findings are attributed to "lung overloading", a generic response to excessive amounts of any dust retained in the lung for a prolonged interval.

#### SECTION 12 ECOLOGICAL INFORMATION

Mobility:	Not available.
Persistence / Degradability:	Not available.
Bioaccumulation:	Not available.
Ecotoxicity:	Not available.
Other Adverse Effects:	Not available.

#### SECTION 13 DISPOSAL CONSIDERATION

Method of Disposal: Disposal should be subject to federal, state or local laws.

#### SECTION 14 TRANSPORT INFORMATION

UN #:	None
UN Shipping Name:	None
UN Classification:	None
UN Packing Group:	None
Special Precautions:	None



## SECTION 15 REGULATORY INFORMATION

EU Information: Information on the	Label:	
Symbol &	Not required	
Indication: R-Phrase:	Not required	
S-Phrase:	Not required	
Dangerous Component(s):	None	
Specific Provision	s in Relation to Protection of Man or the	Environment:
76/769/EEC:	Not regulated	
(EC)2037/2000:	Not regulated	
(EEC)2455/92:	Not regulated	
Others:	None	
USA Information: Information on the L	abel	
Signal Word:	Not required	
Hazard warning:	Not required	
Safety Advice:	Not required	
Hazardous Component(s):	None	
SARA Title III §313 Chemical Nar		Weight %
Ferrite including copper and zinc		95 wt% (Maximum)
	ompounds(As Copper metal)	(12 wt%(Maximum))
Zinc and compounds(As Zinc metal) (14 wt% (Maximum)		
California Proposition 65:		
Chemical Nat		Weight %
None		

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## SECTION 16 OTHER INFORMATION

#### Other Information:

None

Literature Reference:

- U.S. Department of Labor, 29CFR Part 1910
- U.S. Environmental Protection Agency, 40CFR Part 372
- U.S. Consumer Product Safety Commission, 16CFR Part 1500
- ACGIH, Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices
- U.S. Department of Health and Human Services National Toxicology Program, Annual Report on Carcinogens
- World Health Organization International Agency for Research on Cancer, IARC Monographs on the Evaluation on the Carcinogenic Risk of Chemicals to Humans
- DFG. List of MAK and BAT Values
- EU Directive 76/769/EEC, 67/548/EEC, 88/379/EEC
- EU Regulation (EC)2037/2000, (EEC)2455/92

#### Abbreviations:

"EU" stands for European Union.

"OSHA PEL" stands for PEL(Permissible Exposure Limit) under Occupational Safety and Health Administration. "ACGIH TLV" stands for TLV(Threshold Limit Value) under American Conference of Governmental Industrial Hygienists.

"EU ILV" stands for Indicative Limit Values for Occupational Exposure under EU Directive 91/322/EEC and 2000/39/EC.

"DFG MAK" stands for MAK(Maximale Arbeitsplatzkonzentrationen) under Deutsche Forschungsgemeinschaft. "TWA" stands for Time Weighted Average.

"IARC" stands for International Agency for Research on Cancer.

"NTP" stands for National Toxicology Program (USA).

"OSHA HCS" stands for Occupational Safety and Health Act, Hazard Communication Standard.

"FHSA" stands for Federal Hazardous Substances Act.

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