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	COMPANY/UNDER		NCE/PREPARA	ATION AND	OF THE
Product Name:	Canon Starter (Black) for CLC700				
Product Code:	1453A001AA / F42-	0402			
Manufacturer:	Canon Inc., 30-2, Shimomaruko 3-Chome, Ohta-ku, Tokyo, Japan, Ph# 03-3758-				
Supplier:	Canon USA, Inc., One Canon Park, Melville, NY 11747, USA				
Phone #:	1-800-OK-CANON 24 Hr. Emergency CHEMTREC # 1-800-424-9300			4-9300	
MSDS #:	TN0044-0506				
SECTION 2	COMPOSITION/INFO	ORMATION ON	INGREDIENTS	3	
Hazardous Ingredi	ient(s)				
Chemical Name		CAS#	Weight %	EU Symbol	EU R-Phrase
Carbon Black		1333-86-4	< 1	None	None
Ferrite including	copper and zinc	66402-68-4	90 - 95 (AsCu:10-12)	None	None
Chemical Name		USA OSHA P		ACGIH TL	
Chemical Name Carbon Black		USA OSHA P 3.5 mg/m³ (TW		ACGIH TL 3.5 mg/m³ (
	copper and zinc		/A)		(TWA)
Carbon Black Ferrite including Chemical Name	copper and zinc	3.5 mg/m³ (TW Not established	VA)	3.5 mg/m³ (Not establis DFG MAK	(TWA)
Carbon Black Ferrite including	copper and zinc	3.5 mg/m³ (TW	VA)	3.5 mg/m³ (Not establis	(TWA)



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Carcinogen Chemical Name Carbon Black (<1%) Other Ingredient(s) Chemical/Generic N Polyester resin		CAS # 1333-86-4	Reference
Other Ingredient(s) Chemical/Generic N)	1333-86-4	T. D. C. O. D.
Chemical/Generic N			IARC: Group 2B. NTP; OSHA; Annex 1 to 67/548/EEC: Not listed.
	_		
Polyester resin	lame		Weight %
			3 - 10
SECTION 3 HA	AZARDS IDENTIFICA	TION	
Emergency Overview:	Gray fine powder, sligh	it plastic odo	r.
	• •	amounts of d	ust may cause physical irritation to respiratory
	Practically non-toxic. In product.	ngestion is a	minor route of entry for intended use of this
Eye:	May cause transient slight irritation.		
Skin:	May be non irritant.		
	_		mounts of dust may cause lung damage. Use of sult in inhalation of excessive amounts of dust.
	ns Generally known to Not determined.	be Aggravate	ed by Exposure:

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SECTION 4 FII	RST AID MEASURES		
First Aid Measures: Inhalation:	If symptoms are experienced, move victim to fresh air and obtain medical advice.		
•	Rinse mouth. Drink 1 or 2 glasses of water. If irritation or discomfort occurs, obtain medical advice immediately.		
	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 I Physicians:	None		
SECTION 5 FI	RE FIGHTING MEASURES		
Fire Fighting Measure	es:		
Extinguishing Med	ia: CO ₂ , water, dry chemicals		
Unsuitable Extinguishing Med	None ia:		
Special Fire Fighting Procedure	None es:		
Unusual Fire and Explosion Hazards	Can form explosive dust-air mixtures when finely dispersed in air.		
Fire and Explosive Pr Flash Point(°C):	•		
Flammable(Explos	Not applicable ive) Not applicable		
Limits: Autoignition Temperature(°C):	Not available		
Flammability:	Not-flammable (Test method : Directive 92/69/EEC, A10 Flammability (Solids))		
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SECTION 5 FIRE	EFIGHTING MEASURES - Continued				
Fire and Explosive Pro	operties - Continued:				
Autoflammability:	Not applicable				
Explosive Properties	Can form explosive dust-air mixtures when finely dispersed in air.				
Oxidizing Properties	S: Not available				
Hazardous Combustion Produc	CO ₂ , CO				
Other Properties:	Not available				
SECTION 6 ACC	IDENTAL 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 ontainer. Clean remainder with wet paper, wet cloth or a vacuum cleaner. f a vacuum cleaner is used, it must rate as a dust explosion-proof type. Fine lowder can form explosive dust-air mixtures.				
SECTION 7 HAN	IDLING AND STORAGE				
Handling:	Avoid breathing dust. Use with adequate ventilation.				
Storage:	Keep away from oxidizing materials.				

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SECTION 8 EXP	OSURE C	ONTROL	S / PERSONAL PROTECTION
Exposure Guidelines:	USA OSH	A(TWA/PEI	L):15mg/m3 (Total dust)
_	ACGIH(T	WA/TI WY	5mg/m3 (Respirable fraction) 10mg/m3 (Inhalable particulate)
	Acom(1	WA/1LV).	3mg/m3 (Respirable particulate)
	DFG (MA	K):	4 mg/m3 (Inhalable fraction) 1.5 mg/m3 (Respirable fraction) (Also refer to SECTION 2)
Engineering Controls:	Use adeo	ulate venti	
Engineering Controls.	Osc adeq	iuaic venin	auton.
Dans and Dustaction Es			
Personal Protection Eq	`	<i>'</i>	. D 1
Respiratory Protection:	Requi	rea 🗷 No	ot Required
Eye/Face	Requi	red 🛛 No	ot Required
Protection:			
Skin Protection:	— Requi	red M Na	ot Required
DKIII I IUUCUUII.	∟ Kequi	ica 🖂 IV	n required
SECTION 9 PHYS	SICAL AN	ND CHEM	ICAL PROPERTIES
Appearance:		Gray fine	e powder
Odor:		Slight pla	astic odor
pH:		Not appl	
Boiling Point/Range(°C	C):	Not appl	
Melting Point/Range(°	*		(Softening point)
Decomposition Tempe	rature(°C)	:>200	
Flash Point(°C):		Not appl	
Flammable (Explosive)) Limits:	Not appl	icable
Autoignition Temperat	ture(°C):	Not avail	
Flammability:			mable (Test method : Directive 92/69/EEC, A10 Flammability
Autoflommobility		(Solids))	iochlo
Autoflammability: Explosive Properties:		Not apple	n explosive dust-air mixtures when finely dispersed in air.
			• •
Oxidizing Properties:		Not avail	
Vapor Pressure:		Not appl	
Vapor Density:	.:4	Not apple	icable
Density / Specific Grav	/1ty:	$\frac{4.0 - 5.0}{N_{\rm base}}$	
Water Solubility:		Negligib	
Fat Solubility:		•	soluble in toluene and xylene.
Partition Coefficient (n-Octanol/Water):		Not appl	icable
Percent Volatile:		Negligib	le
Evaporation Rate:		Not appl	icable
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SECTION 10 STA	ABILITY	Y AND REACTIVITY		
Stability:		Stable □ Unstable		
Conditions to Avoid:		None		
Materials to Avoid:		Strong oxidizers		
Hazardous Decomposition Products:		CO, CO ₂		
Hazardous Polymerization:		☐ May Occur ☑ Will Not Occur		
Conditions to Avo	oid:	None		
SECTION 11 TO	XICOLO	OGICAL INFORMATION		
Acute Toxicity:				
Inhalation:	Not av	railable		
T	Estima	oto : Pot I D50 > 5000 mg/kg		
Ingestion:	ESUIII	te : Rat, LD50 > 5000 mg/kg		
T	Estima	And Dallahi Annual and all also an insural landarian and a		
Eye:	Estima	te: Rabbit, transient slight conjunctival irritation only.		
G1-1	Estima	to Dobbit non imitant		
Skin:	Esuma	ate: Rabbit, non irritant.		
Sensitization:	Not av	railable.		
Schsitization.	1101 41	undote.		
Mutagenicity:	Estima	ate : Ames Test (Salmonella typhimurium) : Negative		
Reproductive	Not av	railable.		
Toxicity:	1,00 41			

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SECTION 11 TO	XICOLOGICAL INFORMATION - Continued		
Carcinogenicity:	The IARC evaluated carbon black as a Group 2B carcinogen, for which there is inadequate human evidence, but sufficient animal evidence. The latter is based upon the development of lung tumors in rats receiving chronic inhalation exposure to powdered carbon black at levels that induce particle overload of the lung. However, there is a two-year inhalation study of a toner containing carbon black which demonstrated no association between toner exposure and tumor development in rats.		
Others:	Chronic effects: Muhle et al. reported pulmonary response upon chronic inhalation exposure in rats to a toner enric 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 fibrosi was noted in 22% of the animals at 4 mg/m3, and a mild to moderate degree of fibrosis was observin 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 ECO	OLOGICAL INFORMATION		
Mobility:	Not available.		
Persistence / Degradability:	Not available.		
Bioaccumulation:	Not available.		
Ecotoxicity:	Not available.		
Other Adverse Effects:	Not available.		
SECTION 13 DIS	POSAL CONSIDERATION		
Method of Disposal:	Disposal should be subject to federal, state or local laws.		
SECTION 14 TRA	ANSPORT INFORMATION		
UN #: UN Shipping Name: UN Classification: UN Packing Group: Special Precautions:	None None None None None None		



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SECTION 15 REC	GULATORY 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	as in Relation to Protection of Man or the Environme	ent:
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 Na		Weight %
	ng copper and zinc	95 wt% (Maximum)
* *	ompounds(As Copper metal)	(12 wt%(Maximum))
Zinc and compounds(As Zinc metal) (14		(14 wt% (Maximum))
California Propositi		
Chemical Na	me	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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