MATERIAL SAFETY DATA SHEET
MAY BE USED TO COMPLY WITH OSHA'S
HAZARD COMMUNICATION STANDARD
29CRF 1910.1200

EMERGENCY TELEPHONE NUMBER +82-63-830-4160/61
INFORMATION TELEPHONE NUMBER +82-63-830-4161
DATE PREPARED: 5/31/06 SIGNATURE OF PREPARER (OPTIONAL)

SECTION 1 CHEMICAL PRODUCT / NAME

Product/Chemical Name: **CLT-EF (CLT-14EF)**
CTG Product No: **IVR83096**
CAS Number: Mixture
Other Designations: N/A
General Use: Laser Printer

SECTION 2 COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient Name:	CAS NUMBER	EU NUMBER	%	OSHA PEL	ACGIH TLV	OTHER LIMITS
				Toner is regulated under OSHA as particulate not otherwise regulated:		
Styrene-Acrylate resin	25036-16-2		30-45			
Magnetite	1309-38-2		45-55			
Polyolefin	Trade Secret		1-5			
Metal Complex	Trade Secret		1-5			
Silica	67762-90-7		1-2			

NDA = NO DATA AVAILABLE
N/A = NOT APPLICABLE

SECTION 3 HAZARDOUS IDENTIFICATION

NFPA/HMIS	
HEALTH	1
FLMMBLTY.	1
REACTIVITY	1
PPE (Sec.8)	-

Primary Entry Routes: Inhalation
Target Organs: N/A
Acute Effects: N/A
Inhalation: Slight irritation of respiratory tract.
Eye: Dust may cause irritation by mechanical abrasion.
Skin: Slight irritation.
Ingestion: None known.
Carcinogenicity: N/A
Medical Conditions Aggravated By Long-Term Exposure: Accumulation of dust in the respiratory system may cause congestion.
Chronic Effects: If these materials are used in a manner that could generate airborne particles (dust), it is recommended that the dust may be treated as a NUISANCE PARTICULATE according to the American Conference of Government Industrial Hygienists (ACGIH)(TLV=10mg/m^3).

SECTION 4 FIRST AID MEASURES

Inhalation: Remove to fresh air. Treat any irritation symptomatically. Call a physician if condition persists.
Eye Contact: In case of contact immediately flush with plenty of low pressure water for at least 15 minutes. Remove any contact lenses to ensure thorough flushing.
Skin Contact: Wash well with soap and running water.
Ingestion: N/A
After first aid, get appropriate in-plant paramedic or community medical support if serious signs and symptoms perist.
Note to Physicians: N/A
Special Precautions / Procedures: N/A

SECTION 5 FIRE FIGHTING MEASURES

Flash Point: N/A
Flash Point Method: N/A
Burning Rate: N/A
Auto Ignition Temperature: Not Determined
LEL: N/A
UEL: N/A
Flammability Classification: 1 Slight (HMIS, NFPA)
Extinguishing Media: Water spray, dry chemical, foam, carbon dioxide, or halon type extinguishers.
Unusual Fire of Explosion Hazards: May form flammable dust-air mixture.
Hazardous Combustion Products: Carbon monoxide, carbon dioxide, nitrogen oxide and smoke. Under certain conditions some aliphatic aldehydes and carboxylic acids may form.
Fire-Fighting Instructions: Do not release runoff from fire controls methods to sewers or waterways.
Fire-Fighting Equipment: Because fire may produce toxic thermal decomposition products, wear a self-contained breating apparatus (SCBA) with full facepiece operated in pressure-demand or positive-pressure mode.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Spill / Leak Procedures: N/A
Small Spills: Scoop into a container for disposal, suction up remaining material with a high efficiency vacuum cleaner.
Large Spills: Scoop into a container for disposal, suction up remaining material with a high efficiency vacuum cleaner.
Containment: For large spills, avoid suspending particles, collect for later disposal. Do not release into sewers or waterways.
Cleanup: No special requirements.
Regulatory Requirement: N/A

SECTION 7 HANDLING AND STORAGE

Handling Precautions: Keep containers closed at all times. Avoid creating dust. Keep away from ignition sources.
Storage Requirements: Store in a cool, dry location.
Regulatory Requirement: N/A

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls:
Venilation: Provide general or local exhaust ventilation systems to maintain airborne concentrations below OSHA PELs (sec.2). Local exhaust ventilation is preferred because it prevents contaminant dispersion into the work area by controlling it at its source.
Administrative Controls:
Respiratory Protection: Seek professional advise prior to respirator selection and use. Follow OSHA respirator regulations (29 CFR 1910.134) and, if necessary, wear a MSHA/NIOSH-approved respirator. Select respirator based on its suitability to provide adequate worker protection for given working conditions, level of airborne contamination, and presence of sufficient oxygen. For emergency or nonroutine operation (cleaning spills, reactor vessels, or storage tanks), wear an SCBA. *Warning! Air-purified respirators do not protect workers in oxygen-deficient atmosheres.*
Protective Clothing/Equipment: Wear chemically protective gloves, boots, aprons, and gauntlets to prevent prolonged or repeated skin contact. Wear protective eyeglasses or chemical safety goggles, per OSHA eye and face protection regulations (29CFR 1910.133). Contact lenses are not eye protective devices. Appropriate protection must be worn instead of, or in conjunction with contact lenses.
Safety Stations: Make emergency eyewash stations and washing facilities available in work area.
Contaminated Equipment: Separate contaminated wprk clothing from street clothes. Launder before re-use. Remove this material from your shoes and clean personal protective equipment.
Comments: Never eat, drink, or smoke in works areas. Practice good personal hygiene after using this material, especially before eating, drinking, using the toilet, or applying cosmetics.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Physical State:		**Water Solubility:**	Negligible
Appearance and Odor:	Black, free flowing powder, slight odor	**Other Solubilities:**	N/A
Odor Threshold:	N/A	**Boiling Point:**	N/A
Vapor Pressure:	N/A	**Freezing/Melting Point:**	100-150 C (Softening Point)
Vapor Density (Air=1):	Heavier than air.	**Viscosity:**	N/A
Formula Weight:	N/A	**Refractive Index:**	N/A
Density:	N/A	**Surface Tension:**	N/A
Specific Gravity:	(H_2O)=1, at 4°C): 1.0-1.5	**% Volatile:**	N/A
pH:	N/A	**Evaporation Rate:**	N/A

SECTION 10 STABILITY AND REACTIVITY

Stability: Stable
Polymerization: N/A
Chemical Incompatibilities: N/A
Conditions to Avoid: None
Hazardous Decomposition Products: CO and CO2 and other decombustion products when burned

SECTION 11 TOXICOLOGICAL INFORMATION

Eye Effects: N/A

Skin Effects: N/A

Toxicity Data:*

Acute Inhalation Effects: N/A
Acute Oral Effects: N/A
Chronic Effects: N/A
Carcinogenicity: N/A

Mutagenicity: Ames Test Negative (Estimated from the results of testing the constituent components)
Teratogenicity: N/A

**See NIOSH, RTECS for additional toxicity data.*

SECTION 12 ECOLOGICAL INFORMATION

Ecotoxicity: N/A
Environmental Fate: N/A
Environmental Degradation: N/A
Soil Absorption / Mobility: N/A

SECTION 13 DISPOSAL CONSIDERATIONS

Disposal: Waste material may be incinerated / or recycled for its Iron Oxide under conditions which meet all federal, state, and local environmental regulations.
Disposal Regulartory Requirements: N/A
Container Cleaning and Disposal: N/A

SECTION 14 TRANSPORT INFORMATION

DOT Transportation Data (49 CFR 172.101): Not specifically listed.

Shipping Name: N/A
Shipping Symbol: N/A
Hazard Class: N/A
ID No: N/A
Packing Group: N/A
Label: N/A
Special Provisions: N/A

Packaging Authorizations
a) Exceptions: N/A
b) Non-bulk Packaging: N/A
c) Bulk Packaging: N/A

Quantity Limitations
a) Passenger, Aircraft, or Railcar: N/A

Vessel Stowage Requirements
a) Vessel Stowage: N/A
b) Other: N/A

SECTION 15 REGULATORY INFORMATION

EPA Regulations:

RCRA Hazardous Waste Number: Not listed (40 CFR 261.33)

RCRA Hazardous Waste Classification: (40 CFR 261): Not classified

CERCLA Hazardous Substance (40 CFR 302.4) listed unlisted specific per RCRA, sec. 3001;
CWA sec.311 (b)(4);

CWA, Sec. 307(a),CAA,Sec.112

CERCLA Reportable Quantity(RQ), Not listed

SARA 311/312 Codes: N/A

SARA Toxic Chemical (40 CFR 372.65): Not listed

SARA EHS (Extremely Hazardous Substance) (40CFR 355): Not listed, Threshold Planning Quantity (TPQ)

OSHA Regulations:

Air Containment (29 CFR 1910.1000< Table Z-1-A): Particulates not otherwise regulated.

State Regulations: Check your states regulations that may specifically list copy machine toner.

SECTION 16 OTHER INFORMATION

Prepared By: N/A

Revision Notes: N/A

Additional Hazard Rating System: N/A