Material Safety Data Sheet

Section 1 - Chemical Products & Company Identification

Name: MICR Toner
Chemical Family: Thermoplastic Powder (MICR)
Manufacturer's Name: Source Technologies, Inc.
Address: 2910 Whitehall Park Dr., Charlotte, NC 28273
Telephone: 704-969-7500

P/N: STI-204511T-12A8960, STI-204062-12A9143 & STI-204062H-012A9498
Product Use: Print Cartridge

Section 2 - Composition/Information On Ingredients

Component	Percent (Wt.)	Cas#	Osha Pel	Acgih Tlv
Styrene Acrylate Copolymer	45-60	58048-89-8	None	None
Iron Oxides	25-40	1317-61-9	None	None
Iron Oxides	1-15	1309-37-1	10 mg/m^3 TWA	5 mg/m^3 TWA (dust & fumes as Fe)
Copolymer NJTSRN 80100451-5022	1-4	Trade Secret	None	None
Styrene Acrylic Copolymer NJTSRN 80100451-5029	1-4	Trade Secret	None	None

Section 3 - Hazards Identification

The following information is based on data obtained from testing of the toner contained in this product and on the characteristics of toner component chemicals.

Primary Routes of Entry: Inhalation of toner dust, skin contact
Signs and Symptoms of Exposure: Large amounts of toner on skin or mucus membranes (mouth, eyes & nose) may cause discomfort.
Medical Conditions Aggravated by Exposure: None known. Exposures to high airborne dust concentrations, including toner, may aggravate existing respiratory conditions.
Physical Hazards: As with most finely divided dusts, explosion is possible when extremely high concentrations of dust and an ignition source are present. Not a hazard when using adequate workplace controls.

Potential Health Effects

Inhalation

Short Term Exposure - As with exposure to high concentrations of any dust, minimal respiratory tract irritation may occur if excessive amounts of toner dust are inhaled.
Long Term Exposure - Chronic inhalation exposure to excessive concentrations of iron oxide-containing dusts has resulted in an often asymptomatic condition identified as siderosis, a relatively benign pneumoconiosis, cause by deposition of iron oxide particles in the lung.

Skin Contact

Short Term Exposure - Toner is not a skin irritant and has low dermal toxicity.
Long Term Exposure - Rare individuals may note skin rash with repeated contact.

Eye Contact

Short Term Exposure - Toner may act as a mechanical irritant.
Long Term Exposure - No adverse chronic effects known.

Ingestion

Short Term Exposure - Test data indicates toner is of low acute oral toxicity. Swallowing excessive amounts of pure iron oxide can cause the same toxic effects caused by swallowing excessive amounts of any insoluble iron salt or iron dietary supplement. Initial symptoms include abdominal pain, seizures, and increased heart and breathing rates. Exposure not probable with intended use.
Long Term Exposure - Toner is not expected to be chronically toxic. Chronic exposure to high doses of pure iron oxide has caused cardiovascular, liver, and blood component effects. Exposure not probable with intended use.

Section 4 - First Aid Measures

Inhalation: Remove to fresh air. Seek medical attention if breathing becomes difficult.
Skin Contact: Wash affected area with soap and water. Seek medical attention if irritation develops and persists.
Eye Contact: Do not rub eyes. Flush immediately with plenty of water. Remove contact lenses and continue flushing for at least 15 minutes. Seek medical attention if irritation develops and persists.
Ingestion: Immediately rinse mouth out with plenty of water. Within 30 minutes of ingestion, give victim a small glass of water or milk (NEVER give anything by mouth to an unconscious person). If a large amount of toner has been ingested, contact physician or poison center. Do not induce vomiting unless instructed to do so by a physician or poison center.

Section 5 - Fire Fighting Measures

Flash Point: Not applicable
Autoignition: Not applicable
Flammability Limits (%): Not applicable
Extinguishing Media: Water, foam, carbon dioxide or dry chemical
Fire and Explosion Hazard: No unusual fire or explosion hazards are known for this product.
Fire Fighting: Fire may produce small amounts of hazardous decomposition products such as carbon dioxide, carbon monoxide, and unidentified organics. NIOSH approved self-contained breathing apparatus may be required if large volume of toner is involved.
Hazardous Combustion Products: Carbon monoxide, carbon dioxide, low molecular weight organics.

Section 6 - Accidental Release Measures

Occupational Spill: If a dust cloud is present due to a spill, remove all sources of ignition such as open sparks, flames or static discharge to prevent the ignition of the dust. Minimize dust generation during clean up. Sweep up spill with non-metallic broom and dust pan. Contain for disposal.

Section 7 - Handling And Storage
Store in a cool, dry place.

Section 8 - Exposure Controls/Personal Protection
Exposure Limits: **OSHA (PEL):** 5mg/m (dust; respirable dust; PNOR); 15mg/m (dust; total dust; PNOR)
ACGIH (TLV): 5mg/m (iron oxide dust and fume, measured as iron)
Ventilation: Local exhaust ventilation to maintain concentrations below exposure limits
Eye Protection: Safety glasses or goggles
Clothing: None required, coveralls recommended
Gloves: Suitable work gloves such as cotton or leather are recommended
Respirator: Respirator with NIOSH approval for airborne dust at concentrations above exposure limits

Section 9 - Physical And Chemical Properties
Description: Finely divided black powder with faint odor.
Melting Point: Not applicable
Freezing Point: Not applicable
Boiling Point: Not applicable
Pressurized: No
pH: Not applicable
Evaporation Rate: Not applicable
% Volatility: Not applicable
Specific Gravity (H20=1): 1.3
Water Solubility: Negligible

Section 10 - Stability And Reactivity
Stability: Stable
Conditions to Avoid: Ignition sources in combustible atmospheres of toner dust. Throwing toner into an open fire.
Incompatibilities: Strong oxidizing agents
Hazardous Decomposition: Carbon monoxide, carbon dioxide, low molecular weight organics
Polymerization: This product will not polymerize.

Section 11 - Toxicology Information
Acute Toxicity: Not expected to be acutely toxic.
Chronic Toxicity: Not expected to be chronically toxic if used with adequate workplace controls. Long term exposure to excessive concentrations of iron oxide-containing dusts has resulted in an often asymptomatic condition identified as siderosis, a relatively benign pneumoconiosis, caused by deposition of iron oxide particles in the lung. Ingestion of high doses of insoluble iron salts may result in cardiovascular, liver, and blood component effects.

Section 12 - Ecological Information
No data available

Section 13 - Disposal Information
This product is not a listed or hazardous waste in accordance with Federal Regulation 40 CFR Part 261. If discarded in its purchased form, this product would not be a hazardous waste either by listing or by characteristic. However, it is the responsibility of the product user to determine at the time of disposal whether a material has been contaminated and should be classified as a hazardous waste. Disposal is subject to local, state and federal regulations.

Section 14 - Transportation Information
This product is not regulated as a hazardous material by the **DOT**.

Section 15 - Regulatory Information
All ingredients are registered under the **Toxic Substances Control Act (TSCA)** or under polymer exemption. All ingredients are exempt, registered or considered registered (polymers) under **European Inventory of Existing Commercial Chemical Substances (EINECS)**. None of the product ingredients are listed as **Emergency Planning and Community Right-to-Know Act (EPCRA) - Section 302: Extremely Hazardous Substances (EHS)**. Components present above the minimum quantities of listed chemicals in **EPCRA Section 313 Supplier Notification:** This product contains <5 % of a zinc compound. No ingredients are listed as **OSHA, NTP** or **IARC** known or potential carcinogens. This product contains no known materials at levels which the State of California has found to cause cancer, birth defects or other reproductive harm - **California Proposition 65**.

Section 16 - Other
Disclaimer: Information is most current known to Lexmark at the time of preparation and is believed to be accurate. No warranty as to its accuracy or completeness is expressed or implied.