

**MATERIAL SAFETY DATA SHEET** **AX 1405L/HP1100/FX3-160B5L**

Date of Issue: 01/04/05 May be used to comply with OSHA's Hazard Communication Standard 29CFR 1910.1200  
 Authorised by .....

**SECTION 1 IDENTIFICATION OF THE MATERIAL AND SUPPLIER**

**Product/Material Name:** AX 1405L Micrographics / HP1100 / FX3-160B5L **Supplier Details:** RTS Imaging Pty Ltd  
14 – 24 Cottam Avenue  
BANKSTOWN NSW 2200  
AUSTRALIA  
**Other Name(s):**  
**Recommended Use:** Toner for Laser Printer  
**Emergency Contact:**  
 Mon – Fri 8.30am-5pm **(02) 9793 3900**  
 After Hours **0419 220 020**  
 The toner is contained within the cartridge which itself is a sealed unit. The toner should never contact the user or the environment when the cartridge is handled in the manner specified.

**SECTION 2 HAZARDS IDENTIFICATION**

**Classification:** Non-Hazardous **Physical State:** Particulate / dust  
**Overview:** If these materials are used in a manner that could generate airborne particles (dust), it is recommended that the dust be treated as a NUISANCE PARTICULATE according to the American Conference of Government Industrial Hygienists (ACGIH) (TLV=10mg/m<sup>3</sup>). This MSDS is supplied to cover eventualities such as mis-use, fire and accidental damage.  
**Risk Phrases:** R36/37/38 Irritant to eyes, respiratory system and skin.  
 (Slight –see below). **HMIS**  
H 1  
F 1  
R 0  
**PPE**  
Sec.8  
**Safety Phrases:** S22 Do not breathe dust  
 S24 Avoid contact with skin  
 S25 Avoid contact with eyes.  
**Potential Health Effects:** Refer Section 11, Toxicological Information.

**SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS**

Ingredient Name:	CAS NUMBER	%	OSHA PEL	ACGIH TLV	OTHER LIMITS
Styrene-Acrylate Copolymer	25036-16-2	43-53%			Toner is regulated under OSHA as particulate not otherwise regulated:  OSHA PEL: 15mg/m <sup>3</sup> 5mg/m <sup>3</sup> for respirable fraction  <b>ACGIH TWA: 10mg/m<sup>3</sup> for nuisance particulate</b>
Magnetite (Iron oxide)	1317-61-9	40-50%			
Polypropylene Wax	9003-07-0	1-5%			
Metal Complex Dye	31714-55-3	0.1-1.0%			

**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:** After first aid, get appropriate in-plant paramedic or community medical support if serious sign and symptoms persist.  
**Note to Physicians:** None necessary.  
**Special Precautions/Procedures:** None necessary.  
**Medical Conditions Aggravated by Long Term Exposure:** Accumulation of dust in the respiratory system may cause congestion.

<b>SECTION 5 FIRE FIGHTING MEASURES</b>	
<b>Fire and Explosive Properties</b>	
• <b>Flash Point:</b>	The toner is a solid and does not flash.
• <b>Flash Point Method:</b>	Not applicable.
• <b>Burning Rate:</b>	Not combustible.
• <b>Auto Ignition Temperature:</b>	For reasons stated above the auto ignition was not determined.
• <b>LEL:</b>	Not Applicable.
• <b>UEL:</b>	Not Applicable.
• <b>Flammability Classification:</b>	1 Slight ( HMIS, NFPA )
• <b>Unusual Fire or Explosion Hazard</b>	May form flammable dust-air mixture.
<b>Extinguishing Media:</b>	Water spray, dry chemical, foam, carbon dioxide, or halon type extinguishers.
<b>Hazardous Combustion Products:</b>	Carbon monoxide, carbon dioxide, nitrogen oxide and smoke Under certain conditions some aliphatic aldehydes and carboxylic acids may form.
<b>Precautions for Fire Fighters &amp; Special protective Equipment</b>	
• <b>Fire-Fighting Instructions:</b>	Do not release runoff from fire control methods to sewers or waterways
• <b>Fire-Fighting Equipment:</b>	Because fire may produce toxic thermal decomposition products, wear a self-contained breathing apparatus ( SCBA ) with full facepiece operated in pressure-demand or positive pressure mode.
<b>SECTION 6 ACCIDENTAL RELEASE MEASURES</b>	
<b>Small Spills:</b>	Scoop into container for disposal. Suction up remaining material with high efficiency vacuum cleaner.
<b>Large Spills:</b>	Scoop into container for disposal. Suction up remaining material with high efficiency vacuum cleaner.
<b>Containment:</b>	For large spills, avoid suspending particles. Collect for later disposal. Do not release into sewers or waterways.
<b>Clean Up:</b>	No special requirements.
<b>Regulatory Requirement:</b>	None.
<b>SECTION 7 HANDLING AND STORAGE</b>	
<b>Handling Precautions:</b>	Keep cartridges sealed at all times until ready for use. Keep away from ignition sources.
<b>Storage Requirements:</b>	Store sensibly with other stationery supplies in a dry, cool location.
<b>Regulatory Requirements:</b>	None.
<b>SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION</b>	
<b>Exposure Standards:</b>	Toner is regulated under OSHA as particulate not otherwise regulated. OSHA PEL: 15mg/m <sup>3</sup> for respirable fraction. ACGIH TWA: 10mg/m <sup>3</sup> for nuisance particulate.
<b>Biological Limit Value:</b>	None allocated.
<b>Engineering Controls</b>	
• <b>Ventilation:</b>	Provide general or local exhaust ventilation systems to maintain airborne concentrations below OSHA PELs (as above). Local exhaust ventilation is preferred because it prevents contaminant dispersion into the work area by controlling it at its source.
• <b>Safety Stations:</b>	Make emergency eyewash stations and washing facilities available in work area.
<b>Personal Protective Equipment (PPE)</b>	
• <b>Administrative Controls:</b>	Seek professional advice prior to respirator selection and use.
• <b>Inhalation:</b>	Follow OSHA respirator regulations (29 CFR 1910.134) and, if necessary, wear 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 non-routine operation (cleaning spills, reactor vessels, or storage tanks), wear an SCBA. Warning! Air-purified respirators do not protect workers in oxygen-deficient atmospheres.
• <b>Skin:</b>	Wear chemically protective gloves, boots, aprons, and gauntlets to prevent prolonged or repeated skin contact.
• <b>Eye:</b>	Wear protective eyeglasses or chemical safety goggles, per OSHA eye-and face-protection regulations (29 CFR 1910.133). Contact lenses are not eye protective devices. Appropriate protection must be worn instead of, or in conjunction with contact lenses.
• <b>Contaminated Equipment</b>	Separate contaminated work clothing from street clothes. Launder before re-use. Remove this material from your shoes and clean personal protective equipment.
• <b>Additional Remarks</b>	Never eat, drink, or smoke in work areas. Practice good personal hygiene after using this material, especially before eating, drinking using the toilet, or applying cosmetics.

<b>SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES</b>			
<b>Appearance and Odour:</b>	Black, free flowing powder, odourless.		
<b>Odour Threshold:</b>	Not Applicable		
<b>Vapour Pressure:</b>	Not Applicable		
<b>Vapour Density (Air=1):</b>	Heavier than air.		
<b>Formula Weight:</b>	Mixture.		
<b>Density:</b>	Not Applicable		
<b>Specific Gravity:</b>	1.3-1.8		
<b>pH:</b>	Not Applicable		
<b>Water Solubility:</b>	Negligible		
<b>Boiling Point:</b>	Not Applicable		
<b>Freezing/Melting Point:</b>	110°C		
<b>Viscosity:</b>	Not Applicable		
<b>Refractive Index:</b>	Not Applicable		
<b>Surface Tension:</b>	Not Applicable		
<b>%Volatile:</b>	Nil		
<b>Evaporation Rate:</b>	Not Applicable		
<b>SECTION 10 STABILITY AND REACTIVITY</b>			
<b>Stability:</b>	This material is an extremely stable mixture of compatible solids.		
<b>Polymerisation:</b>	Not possible.		
<b>Chemical Incompatibilities:</b>	None.		
<b>Conditions to Avoid:</b>	None		
<b>Hazardous Decomposition Products:</b>	Carbon Monoxide, Carbon Dioxide, Oxides of Nitrogen.		
<b>Hazardous Reactions:</b>	None.		
<b>SECTION 11 TOXICOLOGICAL INFORMATION</b>			
<b>Primary Entry Route:</b>	Inhalation		
<b>Acute/Chronic Effects:</b>	If these materials are used in a manner that could generate airborne particles (dust), it is recommended that the dust be treated as a NUISANCE PARTICULATE according to the American Conference of Government Industrial Hygienists (ACGIH) (TLV=10mg/m <sup>3</sup> ).		
<b>Inhalation:</b>	Slight irritation of respiratory tract.		
<b>Eye:</b>	Dust may cause irritation by mechanical abrasion.		
<b>Skin:</b>	Very slight irritation.		
<b>Ingestion:</b>	None known.		
<b>Carcinogenicity:</b>	This material is not considered a carcinogen and is not regulated by OSHA.		
<b>Long Term Exposure:</b>	Accumulation of dust in the respiratory system may cause congestion.		
<b>Toxicity Data:</b>	See NIOSH, RTECS for additional toxicity data.		
<b>SECTION 12 ECOLOGICAL INFORMATION</b>			
<b>Ecotoxicity:</b>	None		
<b>Persistence/ Degradation:</b>	The components of the toner are biodegradable and/or natural to the environment and therefore only minimal degradation is possible.		
<b>Soil Absorption/Mobility:</b>	Soil absorption takes place quickly as 50% of the toner composition is Iron Oxide. There is no prospect of leaching to water table in concentrations considered dangerous.		
<b>SECTION 13 DISPOSAL CONSIDERATIONS</b>			
<b>Disposal/ Recycling:</b>	Waste material may be incinerated or recycled for its Iron Oxide under conditions that meet all federal, state and local environmental regulations.		
<b>Containers:</b>	Toner cartridges are recyclable when empty. Any residual toner is reclaimed at the time of re-filling.		
<b>Special Precautions for Landfill or Incineration</b>	Refer " Hazardous Combustion Products", Section 5.		
<b>SECTION 14 TRANSPORT INFORMATION</b>			
<b>UN Number:</b>	None allocated	<b>Packaging Authorisations:</b>	<b>Quantity Limitations:</b>
<b>UN Shipping Name:</b>	None allocated	a. Exceptions: Not Applicable	a. Passenger, Aircraft or Railcar: Not Applicable
<b>Class &amp; Subsidiary Risks:</b>	Not Applicable	b. Non-bulk packaging: Not Applicable.	<b>Vessel Stowage Requirements:</b>
<b>Packing Group:</b>	Not Applicable	Bulk Packaging: Not Applicable	a. Vessel stowage: Not Applicable
<b>Label:</b>	Not Applicable		Other: Not Applicable
<b>Special Precautions:</b>	Not Applicable		
<b>Hazchem Code:</b>	None allocated		

**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: Not Applicable  
 SARA Toxic Chemical ( 40 CFR 372.65 ) Not listed  
 SARA EHS (Extremely Hazardous Substance) (40 CFR 355 )' Not listed, Threshold Planning Quantity (TPQ )

**OSHA Regulations:**  
 Air Contaminant ( 29 CFR 1910.1000< Table Z-1-A ): Particulates not otherwise regulated.  
 State Regulations: Check your State regulations that may specifically list copy machine toner. All Ingredients are listed on the TSCA inventory

**SECTION 16 OTHER INFORMATION**

Prepared/Revised By: Gordon Cole, Independent Ink Technologies Pty Ltd (IIT)

Revision Notes: Original document by Wayne P Johnstone (IIT), 29/03/2001. Document revised to address requirements of "National Code of Practice for the Preparation of Material Safety Data Sheets, 2nd Ed {NOHSC:2011(2003)}", April 2003.

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