

MATERIAL SAFETY DATA SHEET

MSDS 823562-001

Date: April 21, 2008

SECTION 1 – PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: HP4600 PhotoPrecise Chemical Toner - Black
PART NUMBER: 57470B, 57471B, 57472B, CTG4600B
COMPANY: Clover Technologies Group
ADDRESS: 4200 Columbus St, Ottawa, IL 61350
TELEPHONE: 800-464-0272 fax: 815-431-8120

SECTION 2 – COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient Name	CAS No.	Weight %		
Styrene-Acrylate Copolymer	58048-89-8	70 – 90	Total dust	Inhalable
Wax	Proprietary	5 - 15	15 mg/m ³	10 mg/m ³
Carbon Black	1333-86-4	3 - 10	Respirable	Respirable
Silica Amorphous	Proprietary	1 – 7	5 mg/m ³	3 mg/m ³

SECTION 3 – HAZARDS IDENTIFICATION

PRIMARY ENTRY ROUTES: Inhalation
TARGET ORGANS: N/A
ACCUTE EFFECTS: N/A
INHALATION: Minimal respiratory tract irritation may occur with exposure to large amounts of toner.
EYE: May cause eye irritation.
SKIN: Unlikely to cause skin irritation.
INGESTION: Ingestion is not an applicable route of entry for intended use.
CARCINOGENICITY: N/A
MEDICAL CONDITIONS AGGRAVATED BY LONG-TERM EXPOSURE: Accumulations 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 be treated as a NUISANCE PARTICULATE according to the American Conference of Government Industrial Hygienists (ACGIH)(TLV=10mg/m3)

SECTION 4 – FIRST AID MEASURES

INHALATION: Move to fresh air immediately. If symptoms occur, consult a physician.
EYE CONTACT: In case of contact immediately flush with large amounts of clean, lukewarm water (low pressure) for at least 15 minutes. Remove any contact lenses to ensure thorough flushing. If irritation persists, consult a physician.
SKIN CONTACT: Wash affected area thoroughly with soap and water. If irritation persists, consult a physician.
INGESTION: Dilute stomach contents with several glasses of water. If irritation persists, consult a physician.
After first aid, get appropriate in-plant paramedic or community medical support if serious sign and symptoms persist.
NOTE TO PHYSICIAN: N/A
SPECIAL PRECAUTIONS/PROCEDURES: N/A

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SECTION 5 – FIRE FIGHTING MEASURES

FLASH POINT	N/A
FLASH POINT METHOD:	N/A
BURNING RATE:	N/A
IGNITION TEMPERATURE:	N/A
LEL:	N/A
UEL:	N/A
EXTINGUISHING MEDIA:	Water spray, dry chemical, foam, carbon dioxide, or halon type extinguishers.
UNUSUAL FIRE OR EXPLOSION HAZARDS:	May form flammable dust-air mixture.
HAZARDOUS COMBUSTION PRODUCTS:	Carbon monoxide, carbon dioxide, and smoke. Under certain conditions some aliphatic aldehydes and carboxylic acids may form.
FIRE-FIGHTING INSTRUCTIONS:	Do not release runoff from fire control methods to sewers or waterways.
FIRE-FIGHTING EQUIPMENT:	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.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

SPILL/LEAK PROCEDURES:	Wear personal protective equipment as described in Section 8. Avoid breathing dust. Minimize the release of particles. Vacuum or sweep the material into a bag or other sealed container. If vacuum is used, the motor must be rated as dust tight. Dispose of waste toner in accordance with local requirements.
CLEANUP:	No special requirements.
REGULATORY REQUIREMENT:	Follow applicable OSHA regulations (29 CFR 1910.120)

SECTION 7 – HANDLING AND STORAGE

HANDLING PRECAUTIONS:	Keep containers closed at all times. Avoid creating dust. Keep away from ignition sources.
STORAGE REQUIREMENTS:	Store at room temperature. Keep away from strong oxidizers.
REGULATORY REQUIREMENTS:	N/A

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SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS:

VENTILATION:

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 advice 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 atmospheres.*

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 work 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 work 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:

APPEARANCE AND ODOR:

Black fine powder, faint odor

ODOR THRESHOLD:

N/A

VAPOR PRESSURE:

N/A

Vapor density (Air=1):

Heavier than air

FORMULA WEIGHT:

N/A

DENSITY:

N/A

SPECIFIC GRAVITY:

(H₂O=1, at 4°C): 1.0-1.2

Ph:

N/A

WATER SOLUBILITY:

Negligible

OTHER SOLUBILITY:

Partial soluble in Toluene & Xylene

BOILING POINT:

N/A

FREEZING/MELTING POINT:

100-150°C

VISCOSITY:

N/A

REFRACTIVE INDEX:

N/A

SURFACE TENSION:

N/A

%VOLATILE:

N/A

EVAPORATION RATE:

N/A

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SECTION 10 – STABILITY AND REACTIVITY

STABILITY:	This is a stable product.
POLYMERIZATION:	Will not occur
CHEMICAL INCOMPATIBILITIES	None
CONDITIONS TO AVOID:	N/A
HAZARDOUS DECOMPOSITION PRODUCTS:	Combustion will produce carbon dioxide and possibly chemicals such as carbon monoxide.

SECTION 11 – TOXICOLOGICAL INFORMATION

EYE EFFECTS:	N/A	TOXICITY DATA:*	No acute toxicity
SKIN EFFECTS:	N/A	ACUTE INHALATION EFFECTS:	N/A
		ACUTE ORAL EFFECTS:	N/A
		CHRONIC EFFECTS:	N/A
		CARCINOGENICITY:	N/A
		MUTAGENICITY:	AMES Test - Negative
		TERATOGENICITY:	N/A

* See NIOSH, RTECS for additional toxicity data.

SECTION 12 – ECOLOGICAL INFORMATION

ECOTOXICITY:	N/A
ENVIRONMENTAL FATE:	N/A
ENVIRONMENTAL DEGRADITION:	N/A
SOIL ABSORPTION/MOBILITY	N/A

SECTION 13 – DISPOSAL CONSIDERATIONS

DISPOSAL:	Waste material may be disposed of in accordance with applicable federal, state and local environmental regulations.
DISPOSAL REGULATORY 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	PACKAGING AUTHORIZATIONS	QUANTITY LIMITATIONS
SHIPPING SYMBOL:	N/A	a) Exceptions: N/A	a) Passenger, Aircraft, or Railcar: N/A
HAZARD CLASS:	N/A	b) Non-bulk Packaging: N/A	
ID NO.:	N/A	c) Bulk Packaging: N/A	VESSEL STOWAGE REQUIREMENTS
PACKING GROUP:	N/A		a) vessel stowage: N/A
LABEL:	N/A		b) Other: N/A
SPECIAL PROVISIONS:	N/A		

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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 specified 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) (40 CFR 355): Not Listed, Threshold Planning Quantity (TPQ)

TSCA:

All chemical substances in this product comply with all applicable rules and orders under TSCA

OSHA REGULATIONS:

Air Contaminant (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

The above information is believed to be accurate and represents the best information currently available to Clover Technologies Group. No warranty or representations with respect to such information is made, and no liability is assumed resulting from its use. Users should make their own investigation to determine the suitability of the information for their particular purposes.