MATERIAL SAFETY DATA SHEET

MSDS 824699-001 Date:

SECTION 1 – PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME:	HP3600 Toner - Magenta
PART NUMBER:	DPC3600M, CTG3600M & DPC3600M-S
COMPANY:	Clover Technologies Group
ADDRESS:	4200 Columbus St, Ottawa, IL 61350
TELEPHONE:	

SECTION 2 – COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient: Pigment **CAS No.:** Proprietary **% in Mixture:** 1 - 20

	OSHA	ACGIH	NIOSH	UNIT OF MEASURE
TWA	NE	NE	NE	mg/cu.meter
STEL	NE	NE	NE	mg/cu.meter
IDLH	NA	NA	NE	mg/cu.meter

Ingredient: Silica, amorphous **CAS No.:** Proprietary **% in Mixture:** < 5

	OSHA	ACGIH	NIOSH	UNIT OF MEASURE
TWA	80 / % SiO2	10	6	mg/cu.meter
STEL	NE	NE	NE	mg/cu.meter
IDLH	NA	NA	NE	Mg/cu.meter

Ingredient: Styrene Acrylate Copolymer **CAS No.:** Proprietary **% in Mixture:** 70 - 95

	OSHA	ACGIH	NIOSH	UNIT OF MEASURE
TWA	NE	NE	NE	mg/cu.meter
STEL	NE	NE	NE	mg/cu.meter
IDLH	NA	NA	NE	mg/cu.meter

SECTION 3 – HAZARDS IDENTIFICATION

PRIMARY ENTRY ROUTES:	Absorbtion, Ingestion, Inhalation
TARGET ORGANS:	N/A
INHALATION EFFECTS:	Slight irritation of respiratory tract
EYE EFFECTS:	Dust may cause irritation by mechanical abrasion
SKIN EFFECTS:	May cause skin irritation.
INGESTION EFFECTS:	N/A
CARCINOGENICITY:	N/A
MEDICAL CONDITIONS AGGRAVATED BY LONG-TERM EXPOSURE:	Accumulations of dust in the respiratory system may cause congestion.
CHRONIC EFFECTS AND/OR RECOMMENDATIONS::	If use generates airborne particles, treat as a NUISANCE PARTICULATE (ACGIH TLV=10mg/cu. Meter)

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SECTION 4 – FIRST AID MEASURES

INHALATION:	Protect yourself with appropriate PPE, remove the person to fresh air. Decontaminate and begin resue breathing if breathing has stopped and CPR if heart action has stopped. Seek prompt medical attention.
EYE:	DO NOT allow victim to rub or keep eyes tightly shut. Gently lift eyelids and immediately flush eyes with large amounts of water. Remove any contacts lenses. Continue to flush for at least 30 minutes, occasionally lifting the upper and lower lids. Seek prompt medical attention.
SKIN:	Quickly remove contaminated clothing. Immediately wash area with large amounts of water. Seek prompt medical attention for any reddened skin other than from washing.
INGESTION:	Never give anything by mouth to an unconscious or convulsing person. Contact a Poison Control Center (PPC). Unless the PCC advises otherwise, have the conscious and alert person drink 1 to 2 glasses of water to dilute. Induce vomiting only after recent ingestions due to the possibility of seizures. Seek prompt medical attention.
ADDITIONAL FIRST AID INFORMATION:	N/A

SECTION 5 – FIRE FIGHTING MEASURES

FLASH POINT	N/A
FLASH POINT METHOD:	N/A
FLAMMABILITY CLASSIFICATION:	1 Slight (HMIS, NFPA)
AUTO IGNITION TEMPERATURE:	ND
LEL:	N/A
UEL:	N/A
BURNING RATE:	N/A
EXTINGUISHING MEDIA:	Water spray, dry chemical, foam, carbon dioxide, or halon-type extinguishers.
UNUSUAL FIRE/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

CONTAINMENT METHOD:	When cleaning up spilled material, keep unnecessary away, isolate area, and deny entry unitl the spilled material has been removed. Scoop up material and place in a chemical waste container. Suction up remaining material using a high efficiency vacuum cleaner. Avoid suspending particles in the air. Extreme caution should be used as material presentsa slip hazard.
REPORTING REQUIREMENTS:	Follow applicable OSHA regualtions (29 CFR 1910.120).

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SECTION 7 – HANDLING AND STORAGE

HANDLING PRECAUTIONS:	Keep containers closed at all times. Avoid creating dust. Keep away from ignition sources.
STORAGE REQUIREMENTS:	Product is prone to gradual oxidation which may reduce quality over time.
REGULATORY REQUIREMENTS:	Follow all applicable local, state, and Federal regulations.

SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS:	
VENTILATION:	The best protection is to enclose operations and or provide local exhaust ventilation systems to maintain airbourne concentrations belowOSHA PELs (sec.2). Local exhaust ventillation is preffered because it prevents contaminent dispersion into the work area by conrolling it at its source.
ADMINISTRATIVE CONTROLS:	
RESPIRATORY PROTECTION:	IMPOPER USE OF RESPIRATORS IS DANGEROUS. Seek professional advise prior to respirator selection and use. Follow OSHA respirator regualations (29 CFR 1910.134) and, if necessary, wear a MSHA/NIOSH-approved repirator. Select Respiratorbased on its suitability to provide adequate worker protection for given working conditions, level of airbourne contamination, and presence of sufficient oxygen. For emergency or nonroutine operation (cleaning spills, reactor vessels, or starage 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 protectiv devises. Appropriate protection must be worn instead of, or in conjuction with contact lenses.
SAFETY STATIONS:	Make emergency eyewash stations and washing facilities available in work area.
CONTAMINATED EQUIPEMENT:	Separate contaiminated 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. Pratice good personal hygiene after using this material, especially before eating, drinking using the toilet, or applying cosmetics.

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SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

BOILING POINT:	N/A
FREEZING/MELTING POINT:	100-150°C
ODOR THRESHOLD:	ND
PHYSICAL STATE:	Solid
VISCOSITY:	N/A
REFRACTIVE INDEX:	N/A
Vapor density (Air=1):	Heavier than air
APPEARANCE AND ODOR:	Magenta fine powder, faint odor
%VOLATILE:	N/A
SURFACE TENSION:	N/A
VAPOR PRESSURE:	N/A
WATER SOLUBILITY:	Negligible
DENSITY:	1.0 – 2.0
EVAPORATION RATE:	N/A
FORMULA WEIGHT:	N/A
OTHER SOLUBILITY:	Partial soluble in Toluene & Xylene
Ph:	N/A
SPECIFIC GRAVITY where Water = 1 at 4°C:	N/A
ADDITIONAL COMMENTS:	N/A

SECTION 10 – STABILITY AND REACTIVITY

STABILITY:	Stable under conditions of normal use.
POLYMERIZATION:	Hazardous polymerization cannot occur.
HAZARDOUS DECOMPOSITION PRODUCTS:	Combustion will produce carbon dioxide and possibly chemicals such as carbon monoxide.
CHEMICAL INCOMPATIBLITIES	N/A
CONDITIONS TO AVOID:	N/A
OTHER COMMENTS:	N/A

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SECTION 11 – TOXICOLOGICAL INFORMATION

EYE EFFECTS:	N/A	**ACUTE ORAL EFFECTS:**	N/A
ACUTE INHALATION EFFECTS:	N/A	**MUTAGENICITY:**	N/A
SKIN EFFECTS:	N/A	**CHRONIC EFFECTS:**	N/A
CARCINOGENICITY:	N/A	**TERATOGENCITY:**	N/A

EXPLANATION of TOXICOLOGICAL CRITERIA

CHEMICAL COMPONENT: Pigment

May cross react with similar compounds. Some azo dyes may cause irritation, allergic contact dermatitis, nausea, vomiting, abdominal pain, diarrhea, fever, general malaise, and hypotension.

CHEMICAL COMPONENT: Silica, amorphous

SILICON DIOXIDE:	
CARCINOGEN STATUS: IARC	Human Inadequate Evidence, Animal InadequateEvidence, Group 3, (Amorphous silica)
MEDICAL CONDITIONS AGRRAVATED BY EXPOSURE:	Respiratory disorders
HEALTH EFFECTS:	
INHALATION:	
ACUTE EXPOSURE: SILICON DIOXIDE:	Dusts may cause irritation of the respiratory tract and coughing.
CHRONIC EXPOSURE: SILICON DIXIDE:	Exposure to dusts of amorphous silica for 6 months to 0 years may result in silicosis with symptoms of cough, chest pain, dyspnea, tachypnea, marked weakness, and weight loss. This pulmonary insufficiency may be characterized by diffuse nodular fibrosis, distortion of bronchi, bullous emphysema. Although pulmonary fibrosis has been reported from the workers exposed to amorphous silica, the crystalline form is the established cause of fibrotic response in the lung. However, the amorphous form has been reported as fibrogenic to a lesser extent. As the disease progresses, cor pulmonale, Cardiorespiratory failure, and death may occur.
SKIN CONTACT:	
ACUTE EXPOSURE: SILICON DIOXIDE:	Prolonged skin contact with dry particulate may cause drying of the skin.
CHRONIC EXPOSURE: SILICON DIXIDE:	No data available
EYE CONTACT:	
ACUTE EXPOSURE: SILICON DIOXIDE:	Dusts may cause irritation with redness and pain.
CHRONIC EXPOSURE: SILICON DIXIDE:	No data available
INGESTION:	
ACUTE EXPOSURE: SILICON DIOXIDE:	The effects of ingestion are purely mechanical as the substance is inert chemically and biologically.
CHRONIC EXPOSURE: SILICON DIXIDE	No data available

CHEMICAL COMPONENT: Silica, amorphous

Data not Availiable

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SECTION 12 – ECOLOGICAL INFORMATION

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

SECTION 13 – DISPOSAL CONSIDERATIONS

DISPOSAL:	Waste material may be disposed of, incinerated, or recycled for its iron oxide under conditions that meet all Federal, state and local regulations. Contact your supplier or a licensed contractor for detailed recommendations.
DISPOSAL REGULATORY REQUIREMENTS:	N/A
CONTAINER CLEANING AND DISPOSAL:	N/A

SECTION 14 – TRANSPORT INFORMATION

DOT TRANSPORTATION DATA (49 CFR 172.101)

SHIPPING NAME:	N/A	**LABEL:**	N/A	**PASSENGER AIR RAILCAR:**	N/A
SHIPPING SYMBOL:	N/A	**SPECIAL PROVISIONS:**	N/A	**CARGO AIRCRAFT:**	N/A
HAZARD CLASS:	N/A	**EXCEPTIONS:**	N/A	**OCEANGOING VESSEL STOWAGE:**	N/A
ID NUMBER:	N/A	**NON-BULK PACKAGING:**	N/A	**OTHER:**	N/A
PACKING GROUP:	N/A	BULK PACKAGING:	N/A		
LABEL:	N/A				

EXPLANATION OF APPLICATION TRANSPORTATION CRITERIA:

N/A

SECTION 15 – REGULATORY INFORMATION

CHEMICAL COMPONENT: Carbon Black	**CAS#:** Proprietary
TSCA inventory (US)	*
AICS inventory (Australia)	*
EINECS inventory (Europe)	*
DSL inventory (Canada)	*
ECL inventory (Korea)	*
ENCS inventory (Japan)	*
PICCS inventory (Phillipines)	*
CHINA inventory	
CHEMICAL COMPONENT: Silica, amorphous	**CAS#:** Proprietary
TSCA inventory (US)	*
AICS inventory (Australia)	*
EINECS inventory (Europe)	*
DSL inventory (Canada)	*
ECL inventory (Korea)	*
ENCS inventory (Japan)	*
PICCS inventory (Phillipines)	*
CHINA inventory	*
CHEMICAL COMPONENT: Styrene Acrylate Copolymer	**CAS#:** Proprietary
TSCA inventory (US)	
AICS inventory (Australia)	*
EINECS inventory (Europe)	*
DSL inventory (Canada)	*
ECL inventory (Korea)	*
ENCS inventory (Japan)	*
PICCS inventory (Phillipines)	*
CHINA inventory	*

* Subject to the associated regulatory requirements and/or appears on the associated chemical inventory list.

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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.