

# **MATERIAL SAFETY DATA SHEET**

**MSDS 825244-001**

**Date: April 22, 2008**

## **SECTION 1 – PRODUCT AND COMPANY IDENTIFICATION**

**PRODUCT NAME:** HP4730 Toner - Yellow  
**PART NUMBER:** DPC4730Y, CTG4730Y & DPC4730Y-S  
**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**

<b><u>Ingredient:</u></b> Pigment	<b><u>CAS No.:</u></b> Proprietary	<b><u>% in Mixture:</u></b> 1 - 20
	<b>ACGIH</b>	<b>UNIT OF MEASURE</b>
<b>TWA</b>	NE	mg/cu.meter
<b>STEL</b>	NE	mg/cu.meter
<b>IDLH</b>	NA	Mg/cu.meter

<b><u>Ingredient:</u></b> Silica, amorphous	<b><u>CAS No.:</u></b> Proprietary	<b><u>% in Mixture:</u></b> < 5
	<b>ACGIH</b>	<b>UNIT OF MEASURE</b>
<b>TWA</b>	10	mg/cu.meter
<b>STEL</b>	NE	mg/cu.meter
<b>IDLH</b>	NA	Mg/cu.meter

<b><u>Ingredient:</u></b> Styrene Acrylate Copolymer	<b><u>CAS No.:</u></b> Proprietary	<b><u>% in Mixture:</u></b> 70 - 95
	<b>ACGIH</b>	<b>UNIT OF MEASURE</b>
<b>TWA</b>	NE	mg/cu.meter
<b>STEL</b>	NE	mg/cu.meter
<b>IDLH</b>	NA	mg/cu.meter

## **SECTION 3 – HAZARDS IDENTIFICATION**

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

# **MATERIAL SAFETY DATA SHEET**

## **SECTION 4 – FIRST AID MEASURES**

<b>INHALATION:</b>	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.
<b>EYE:</b>	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.
<b>SKIN:</b>	Quickly remove contaminated clothing. Immediately wash area with large amounts of water. Seek prompt medical attention for any reddened skin other than from washing.
<b>INGESTION:</b>	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.
<b>ADDITIONAL FIRST AID INFORMATION:</b>	N/A

## **SECTION 5 – FIRE FIGHTING MEASURES**

<b>FLASH POINT</b>	N/A
<b>FLASH POINT METHOD:</b>	N/A
<b>FLAMMABILITY CLASSIFICATION:</b>	1 Slight (HMIS, NFPA)
<b>AUTO IGNITION TEMPERATURE:</b>	ND
<b>LEL:</b>	N/A
<b>UEL:</b>	N/A
<b>BURNING RATE:</b>	N/A
<b>EXTINGUISHING MEDIA:</b>	Water spray, dry chemical, foam, carbon dioxide, or halon-type extinguishers.
<b>UNUSUAL FIRE/EXPLOSION HAZARDS:</b>	May form flammable dust-air mixture.
<b>HAZARDOUS COMBUSTION PRODUCTS:</b>	Carbon monoxide, carbon dioxide, and smoke. Under certain conditions some aliphatic aldehydes and carboxylic acids may form.
<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.

## **SECTION 6 – ACCIDENTAL RELEASE MEASURES**

<b>CONTAINMENT METHOD:</b>	When cleaning up spilled material, keep unnecessary away, isolate area, and deny entry until 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 presents a slip hazard.
<b>REPORTING REQUIREMENTS:</b>	Follow applicable OSHA regulations (29 CFR 1910.120).

# MATERIAL SAFETY DATA SHEET

## 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 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:

IMPROPER USE OF RESPIRATORS IS DANGEROUS. 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.

# **MATERIAL SAFETY DATA SHEET**

## **SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES**

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

## **SECTION 10 – STABILITY AND REACTIVITY**

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

# MATERIAL SAFETY DATA SHEET

## SECTION 11 – TOXICOLOGICAL INFORMATION

<b>EYE EFFECTS:</b>	N/A	<b>ACUTE ORAL EFFECTS:</b>	N/A
<b>ACUTE INHALATION EFFECTS:</b>	N/A	<b>MUTAGENICITY:</b>	N/A
<b>SKIN EFFECTS:</b>	N/A	<b>CHRONIC EFFECTS:</b>	N/A
<b>CARCINOGENICITY:</b>	N/A	<b>TERATOGENICITY:</b>	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**

##### **MEDICAL CONDITIONS**

##### **AGGRAVATED BY EXPOSURE:**

##### **HEALTH EFFECTS:**

##### **INHALATION:**

##### **ACUTE EXPOSURE: SILICON**

##### **DIOXIDE:**

##### **CHRONIC EXPOSURE:**

##### **SILICON DIOXIDE:**

Human Inadequate Evidence, Animal Inadequate Evidence, Group 3, (Amorphous silica)  
Respiratory disorders

Dusts may cause irritation of the respiratory tract and coughing.

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:**

##### **CHRONIC EXPOSURE:**

##### **SILICON DIOXIDE:**

##### **EYE CONTACT:**

##### **ACUTE EXPOSURE: SILICON**

##### **DIOXIDE:**

##### **CHRONIC EXPOSURE:**

##### **SILICON DIOXIDE:**

##### **INGESTION:**

##### **ACUTE EXPOSURE: SILICON**

##### **DIOXIDE:**

##### **CHRONIC EXPOSURE:**

##### **SILICON DIOXIDE**

#### **CHEMICAL COMPONENT: Silica, amorphous**

Data not Available

Prolonged skin contact with dry particulate may cause drying of the skin.

No data available

Dusts may cause irritation with redness and pain.

No data available

The effects of ingestion are purely mechanical as the substance is inert chemically and biologically.

No data available

# MATERIAL SAFETY DATA SHEET

## SECTION 12 – ECOLOGICAL INFORMATION

<b>ECOTOXICITY:</b>	N/A
<b>ENVIRONMENTAL FATE:</b>	N/A
<b>ENVIRONMENTAL DEGRADITION:</b>	N/A
<b>SOIL ABSORPTION/MOBILITY</b>	N/A

## SECTION 13 – DISPOSAL CONSIDERATIONS

<b>DISPOSAL:</b>	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.
<b>DISPOSAL REGULATORY REQUIREMENTS:</b>	N/A
<b>CONTAINER CLEANING AND DISPOSAL:</b>	N/A

## SECTION 14 – TRANSPORT INFORMATION

DOT TRANSPORTATION DATA (49 CFR 172.101)			
<b>SHIPPING NAME:</b>	N/A	<b>LABEL:</b>	N/A
<b>SHIPPING SYMBOL:</b>	N/A	<b>SPECIAL PROVISIONS:</b>	N/A
<b>HAZARD CLASS:</b>	N/A	<b>EXCEPTIONS:</b>	N/A
<b>ID NUMBER:</b>	N/A	<b>NON-BULK PACKAGING:</b>	N/A
<b>PACKING GROUP:</b>	N/A	<b>BULK PACKAGING:</b>	N/A
<b>LABEL:</b>	N/A	<b>PASSENGER AIR RAILCAR:</b>	N/A
		<b>CARGO AIRCRAFT:</b>	N/A
		<b>OCEANGOING VESSEL STOWAGE:</b>	N/A
		<b>OTHER:</b>	N/A

### EXPLANATION OF APPLICATION TRANSPORTATION CRITERIA:

N/A

## SECTION 15 – REGULATORY INFORMATION

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

## **MATERIAL SAFETY DATA SHEET**

---

### **SECTION 16 – OTHER INFORMATION**

<b>PREPARED BY:</b>	N/A
<b>REVISION NOTES:</b>	N/A
<b>ADDITIONAL HAZARD RATING SYSTEM:</b>	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.