

MATERIAL SAFETY DATA SHEET

MSDS 824740-001

Date: July 23, 2010

SECTION 1 – PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: HP4700 Toner - Yellow
PART NUMBER: 4700YR
COMPANY: Clover Technologies Group Australia
ADDRESS: 14 Westside Drive Laverton North, VIC, 3025
TELEPHONE: (03) 8340 4444

SECTION 2 – COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient: Pigment	OSHA	CAS No.: Proprietary	ACGIH	NIOSH	% in Mixture: 1 - 20
					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	OSHA	CAS No.: Proprietary	ACGIH	NIOSH	% in Mixture: < 5
					UNIT OF MEASURE
TWA	80 / % SiO ₂		10	6	mg/cu.meter
STEL	NE		NE	NE	mg/cu.meter
IDLH	NA		NA	NE	Mg/cu.meter

Ingredient: Styrene Acrylate Copolymer	OSHA	CAS No.: Proprietary	ACGIH	NIOSH	% in Mixture: 70 - 95
					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 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.
REPORTING REQUIREMENTS:	Follow applicable OSHA regulations (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 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:	IMPOPER USE OF RESPIRATORS IS DANGEROUS. Seek professional advise 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 airbourne contamination, and presence of sufficient oxygen. For emergency or nonroutine operation (cleaning spills, reactor vessels, or storage tanks), wear an SCBA. <i>Warning! Air-purified respirators do not protect workers in oxygen-deficient atmospheres.</i>
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 conjunction with contact lenses.
SAFETY STATIONS:	Make emergency eyewash stations and washing facilities available in work area.
CONTAMINATED EQUIPEMENT:	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. Praticice 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:	Yellow 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 INCOMPATIBILITIES	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	TERATOGENICITY:	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 Inadequate Evidence, Group 3, (Amorphous silica)
Respiratory disorders

MEDICAL CONDITIONS

AGGRAVATED BY EXPOSURE:

HEALTH EFFECTS:

INHALATION:

ACUTE EXPOSURE: SILICON

Dusts may cause irritation of the respiratory tract and coughing.

DIOXIDE:

CHRONIC EXPOSURE:

SILICON DIOXIDE:

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

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

DIOXIDE:

CHRONIC EXPOSURE:

No data available

SILICON DIOXIDE:

EYE CONTACT:

ACUTE EXPOSURE: SILICON

Dusts may cause irritation with redness and pain.

DIOXIDE:

CHRONIC EXPOSURE:

No data available

SILICON DIOXIDE:

INGESTION:

ACUTE EXPOSURE: SILICON

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

DIOXIDE:

CHRONIC EXPOSURE:

No data available

SILICON DIOXIDE

CHEMICAL COMPONENT: Silica, amorphous

Data not Available

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SECTION 12 – ECOLOGICAL INFORMATION

ECOTOXICITY: N/A
ENVIRONMENTAL FATE: N/A
ENVIRONMENTAL DEGRADATION: N/A
SOIL ABSORPTION/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. 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.