

## 1. IDENTIFICATION OF THE SUBSTANCE PREPARATION AND COMPANY UNDERTAKING

### 1.1 PRODUCT IDENTIFIER

Product name: High Yield Yellow Toner Cartridge for Ricoh 406478  
Part number: RIC406478

### 1.2 IDENTIFIED USES AND USES ADVISED AGAINST

For use in: Laser Printers

### 1.3 SUPPLIER DETAILS

Supplier: Clover Imaging Group  
4200 Columbus Street  
Ottawa, IL 61350  
United States  
Phone number: 815-431-8100  
Fax: 815-461-8583  
Contact Hours: 08:00AM-05:00PM CST

### 1.4 EMERGENCY TELEPHONE NUMBERS

Supplier: 815-431-8100

\* This document provides safety-related information about ink/toner, in various forms, for use in copiers/printers etc.

## 2. HAZARDS IDENTIFICATION

### 2.1 INFORMATION and CLASSIFICATION

Overview: Hazard information: Dust explosion (like most finely grained organic powders)

### 2.2 LABEL ELEMENTS

Applicable Pictograms:



Danger Indications: N/A  
Risk Phrases: N/A  
Safety Phrases: N/A

### 2.3 OTHER HAZARDS

PBT or vPvB: N/A

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

Ingredients	CAS number	Weight %	OSHA PEL	ACGIH TLV	Other
Polyester Resin 1	TRADE SECRET	40-60			
Polyester Resin 2	TRADE SECRET	20-40			
Wax	TRADE SECRET	1-5			
Silica	TRADE SECRET	1-5			
Organic Salt	TRADE SECRET	1-5			
			TWA 5.0mg/m3 (Respirable fraction) 15.0mg/m3 (Total dust)	TWA 3.0mg/m3 (Respirable fraction) 10.0mg/m3 (Inhalable fraction)	DFG MAK: 4.0mg/m3 (Total dust) 1.5mg/m3 (Respirable fraction)

The Full Text for all R-Phrases are Displayed in Section 16

#### COMPOSITION COMMENTS

The Data Shown is in accordance with the latest Directives.

This section provides composition information for the specified substance/mixture.

### 4. FIRST-AID MEASURES

#### 4.1 FIRST AID MEASURES

##### 4.1.1 FIRST AID INSTRUCTIONS BY RELEVANT ROUTES OF EXPOSURE

Inhalation: Remove from exposure into fresh air and rinse mouth with water. Seek medical advice.  
 Eye contact: Flush with a large amount of water until particles are removed. Seek medical advice.  
 Skin contact: Wash thoroughly with soapy water.  
 Ingestion: Drink several glasses of water to dilute ingested toner. Seek medical advice.

##### 4.1.2 ADDITIONAL FIRST AID INFORMATION

Additional first aid information: N/A  
 Immediate Medical Attention Required: Immediate medical attention is not required.

#### 4.2 SYMPTOMS AND EFFECTS

Acute Symptoms from Exposure: N/A  
 Delayed Symptoms from Exposure: N/A

#### 4.3 IMMEDIATE SPECIAL TREATMENT OR EQUIPMENT REQUIRED

N/A

### 5. FIRE-FIGHTING MEASURES

#### 5.1 EXTINGUISHING MEDIA

Recommended Extinguishing Media: Sprinkling or fire extinguishers can be used.  
Extinguishing Media Not to be Used: N/A

#### 5.2 SPECIAL HAZARD

Unusual Fire/Explosion Hazards: Specific Hazards : Can form explosive dust-air mixtures when finely dispersed in air.  
Extinguishing Media Not to be Used: N/A

#### 5.3 ADVICE FOR FIRE FIGHTERS

Avoid inhalation of smoke. Wear protective clothing and wear self-contained breathing apparatus

### 6. ACCIDENTAL RELEASE MEASURES

#### 6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

##### 6.1.1 PRECAUTIONS FOR NON-EMERGENCY PERSONNEL

Do not breathe in dust.

##### 6.1.2 ADDITIONAL FIRST AID INFORMATION

N/A

##### 6.1.3 PERSONAL PROTECTION

Wear personal protective equipment as described in Section 8.

#### 6.2 ENVIRONMENTAL PRECAUTIONS

Regulatory Information: Keep product out of sewers and watercourses.

#### 6.3 METHODS AND MATERIAL FOR CONTAINMENT AND CLEANUP

Spill or Leak Cleanup Procedures: Fine powder may form explosive dust-air mixture. Confirm there is no source of fire and if there is a source, remove it. Sweep up spilled powder slowly and clean remainder with wet cloth. If a vacuum cleaner is used, a dust explosion-proof type must be chosen.

## 7. HANDLING AND STORAGE

### 7.1 PRECAUTIONS FOR SAFE HANDLING

Recommendations for Handling: No special precautions when used as intended. Keep containers closed. If toner, avoid creating dust. Keep away from ignition sources.

Advice on General Hygiene: Never eat, drink or smoke in work areas. Practice good personal hygiene after using this material, especially before eating, drinking, smoking, using the restroom, or applying cosmetics.

### 7.2 CONDITIONS FOR SAFE STORAGE

Avoid high temperatures, >100°F/32°C

### 7.3 SPECIFIC END USES

Printing devices

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 CONTROL PARAMETERS

The best protection is to enclose operations and/or provide local exhaust ventilation at the site of chemical release in order to maintain airborne concentrations of the product below OSHA PELs (See Section 3). Local exhaust ventilation is preferred because it prevents contaminant dispersion into the work area by controlling it at its source.

### 8.2 EXPOSURE 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 1910.137) and, if necessary, wear a NIOSH approved respirator. Select respirator based on its suitability to provide adequate worker protection for given work conditions, levels of airborne contamination, and sufficient levels of oxygen.

#### Eye/Face Protection:

Contact lenses are not eye protective devices. Appropriate eye protection must be worn instead of, or in conjunction with contact lenses.

#### Hand/Skin Protection:

For emergency or non-routine operations (cleaning spills, reactor vessels, or storage tanks), wear an SCBA. WARNING! Air purifying respirators do not protect worker in oxygen deficient atmospheres.

#### Additional Protection:

N/A

#### Protective Clothing and Equipment:

Wear chemically protective gloves, boots, aprons, and gauntlets to prevent prolonged or repeated skin contact. Wear splash-proof chemical goggles and face shield when working with liquid, unless full face piece respiratory protection is worn.

#### Safety Stations:

Make emergency eyewash stations, safety/quick-drench showers, and washing facilities available in work area.

#### Contaminated Equipment:

Separate contaminated work clothes from street clothes. Launder before reuse. Remove material from your shoes and clean personal protective equipment. Never take home contaminated clothing.

#### Comments:

Never eat, drink or smoke in work areas. Practice good personal hygiene after using this material, especially before eating, drinking, smoking, using the restroom, or applying cosmetics.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 **DETAIL INFORMATION**

Physical state:	APPEARANCE: Form: Powder, Color: Yellow
Color:	Yellow
Odor:	Slightly plastic odor
Odor threshold:	N/A
Boiling point:	N/A
Melting point:	(Softening point) Approx.110 (degrees centigrade)
Flash point:	N/A
Explosion limits:	N/A
Relative density:	Approx.1.2
Auto-ignition temperature:	N/A

### 9.2 **OTHER INFORMATION**

SOLUBILITY: Insoluble in water. Slightly soluble in Chloroform

## 10. CHEMICAL STABILITY AND REACTIVITY

### 10.1 **Reactivity:**

**Reactivity Hazards:** None

**Data on Mixture Substances:** None

10.2 **Chemical Stability:** The product is stable. Under normal conditions of storage and use, hazardous polymerization will not occur.

10.3 **Hazardous Polymerization:** Stable under conditions of normal use.

10.4 **Conditions to Avoid:** Keep away from heat, flame, sparks and other ignition sources.

10.5 **Incompatible Materials:** Strong oxidizing materials

10.6 **Hazardous Decomposition:** Will not occur.

### 11. INFORMATION ON TOXICOLOGICAL EFFECT

<b>Mixtures:</b>	N/A
<b>Acute Toxicity:</b>	Acute toxicity oral rat LD50 (mg/kg): >5000.
<b>Skin Corrosion/Irritation:</b>	Acute Skin Irritation rabbit PII (mg/kg): <1.0.
<b>Serious Eye Damage:</b>	Ingredients are not classified as dangerous according to the Regulation (EC) No 1272/2008.
<b>Inhalation:</b>	N/A
<b>Sensitization:</b>	Acute Allergenic Effects: 0 % (Marmot)
<b>Mutagenicity:</b>	Negative in the Ames test
<b>Carcinogenicity:</b>	N/A
<b>Reproductive Toxicity:</b>	Does not contain substances listed as hazardous to reproductive health.
<b>STOT - Single Exposure:</b>	N/A
<b>STOT - Multiple Exposure:</b>	N/A
<b>Ingestion:</b>	N/A
<b>Hazard Class Information:</b>	N/A
<b>Mixture on Market Data:</b>	N/A
<b>Symptoms:</b>	N/A
<b>Delayed/Immediate Effects:</b>	N/A
<b>Test Data on Mixture:</b>	N/A
<b>Not Meeting Classification:</b>	N/A
<b>Routes of Exposure:</b>	N/A
<b>Interactive Effects:</b>	N/A
<b>Absence of Specific Data:</b>	N/A
<b>Mixture vs Substance Data:</b>	N/A

### 12. ECOLOGICAL INFORMATION

12.1 <b>Eco toxicity:</b>	Acute Toxicity for Fish (LC50): Not classified as toxic (Regulation (EC) No 1272/2008).mg/l/96hr. Acute Toxicity for Daphnia (EC50): Not classified as toxic (Regulation (EC) No 1272/2008).mg/l/48hr. Algae Inhibition Test (IC50): Not classified as toxic (Regulation (EC) No 1272/2008).mg/l/72hr.
12.2 <b>Degradability:</b>	N/A
12.3 <b>Bioaccumulation Potential:</b>	N/A
12.4 <b>Mobility in Soil:</b>	N/A
12.5 <b>PBT &amp; vPvB Assessment:</b>	N/A
12.6 <b>Other Adverse Effects:</b>	N/A

### 13. DISPOSAL CONSIDERATIONS

**Disposal Information:**

Dispose of product in accordance with local authority regulations.  
Empty container retains product residue.

**Physical/Chemical Properties that affect Treatment:**

Symbol: This product is not classified as dangerous  
Risk Phrases: This product is not classified according to the federal, state and local environmental regulations.

**Waste Treatment Information:**

If toner, do not shred toner cartridge, unless dust-explosion prevention measures are taken. Finely dispersed particles may form explosive mixtures in air. Dispose of in compliance with federal, state, and local regulations.

**Personal Protection Required:**

N/A

### 14. TRANSPORT INFORMATION

- 14.1 **ID Number:** N/A
- 14.2 **Shipping Name:** N/A
- 14.3 **Hazard Class:** N/A
- 14.4 **Packing Group:** N/A
- 14.5 **Environmental Hazards:** N/A
- 14.6 **User Precautions:** Avoid direct sunlight in quality.
- 14.7 **Bulk Transport:** N/A

### 15. REGULATORY INFORMATION

- 15.1 **Regulatory Information:** TSCA (Toxic Substances Control Act) : This toner complies with all applicable rules and regulations under TSCA.

**EPA Regulatory Information:** N/A

**CERCLA Reportable Quantity:** N/A

- 15.2 **Superfund Information:**

**Hazard Categories:**

**Immediate:** N/A

**Delayed:** N/A

**Fire:** N/A

**Pressure:** N/A

**Reactivity:** Dust explosion, like most finely grained organic powders.

**Section 302 - Extremely Hazardous:** N/A

**Section 311 - Hazardous:** N/A

- 15.3 **State Regulations:** N/A

- 15.4 **Other Regulatory Information:** N/A

### 16. OTHER INFORMATION

**General Comments:** This information is based on our current knowledge. It should not therefore be construed as guaranteeing specific properties of the products as described or their suitability for a particular application

**Creation Date of this SDS:** 09/15/2020



**Key to Abbreviations and Acronyms used in this sheet:**

ACGIH = American Conference of Governmental Industrial Hygienists	NIOSH = National Institute for Occupational Safety and Health
CERCLA = Comprehensive Environmental Response Compensation and Liability Act	OSHA = Occupational Health and Safety Administration
CLP = Classification, Labeling, and Packaging	PEL = Permissible Exposure Limit
DSD = Dangerous Substances Directive	SCBA = Self Contained Breathing Apparatus
EPA = Environmental Protection Agency	STOT = Specific Target Organ Toxicity
GHS = Globally Harmonized System	TLV = Threshold Limit Value
N/A = Not Applicable	UK = United Kingdom
NFPA = National Fire Protection Association	UN = United Nations

**Ref:**

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