## Material Safety Data Sheet # 58356601

Black Toner, Type 10: P/N 42102901, 42103001

For more information, contact Oki Data at: 2000 Bishops Gate Boulevard, Mount Laurel, NJ 08054-4620.

Emergency Information: call 1-800-654-3282; US and Canada only.

**Intended Use:** Dry powder colorant to form an image on sheet of paper or other substrate.

## COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT(S)	CAS No.	wt.%
Polymer	292629-36-8	70 - 90
Carbon black	1333-86-4	< 5
Wax		5 - 15
Additive		1 - 5
		TRADE SECRET

## **HAZARDS IDENTIFICATION**

**Emergency Overview:** If used as intended, the product does not present acute or chronic health hazard.

**Physical Hazards:** This product is not classified as flammable or combustible. It will burn in case of fire. Avoid contact with strong oxidizers such as chromate, bromate and nitrates. **Routes of Exposure:** Inhalation, dermal contact, incidental

ingestion

**Inhalation:** Excessive inhalation may cause irritation of the

nose, throat and respiratory tract. **Eye Contact :** Minimally irritating.

**Dermal Contact:** Mild irritant, non-sensitizer.

Ingestion: Not currently known.

Reproductive/Developmental: Not identified.

**Target Organs:** Prolonged breathing of high concentrations may cause adverse effects on the respiratory system.

Signs and Symptoms of Exposure: Prolonged exposure to dusts of this product may irritate the respiratory system.

Medical Conditions Aggravated by Exposure to This

**Product:** Respiratory disorders, such as asthma, may be aggravated by prolonged exposure to high concentrations of this product.

### **FIRST AID MEASURES**

**Eye Contact:** Immediately flush eyes with plenty of water for at least 15 minutes. If irritation persists, call a physician.

**Skin Contact:** Wash with soap and water. Wash clothing before reuse. If irritation occurs or is persistent, seek medical

attention.

Ingestion: Rinse mouth with water and afterwards drink

plenty of water or milk.

**Inhalation:** Remove from exposure area to fresh air immediately. Contact a physician if there is any difficulty in breathing or other signs of distress.

#### **FIRE FIGHTING MEASURES**

General Hazard: Product will burn in case of fire.

Flash Point: Not applicable Flammable Limits: Not applicable

Auto ignition Temperature: Not applicable Flammability classification: Not applicable

Extinguishing Media: Foam, water spray, or fog; do not use

straight streams.

**Unusual Fire & Explosion Hazard:** Dust of this product at sufficient concentrations can form explosive mixtures with air. **Fire Fighting Procedures:** Keep away from sources of ignition. Fight fire from upwind position if possible. Firefighters should wear self-contained breathing apparatus and full protective gear.

#### **ACCIDENTAL RELEASE MEASURES**

**Spills or Leaks:** Prevent dust cloud formation. Wipe up with damp cloth or vacuum using non-sparking and fine dust filtered vacuum. Collect in suitable container for disposal.

#### HANDLING AND STORAGE

**Handling:** Prevent dust cloud formation and keep away from ignition sources. Handle in accordance with good industrial hygiene and safety practice.

**Prevention of Fire and Explosion:** This material is capable of creating a dust explosion. Keep away from heat, sparks & flame.

Storage: Keep container in cool and dry area.

**Hygienic Practices:** Avoid inhalation and ingestion. Avoid getting in eyes, on skin or clothing. Wash hands thoroughly after handling, and before eating, drinking, or smoking.

# EXPOSURE CONTROLS/PERSONAL PROTECTION

**Exposure Limits** 

OSHA PELs (TWA) as the product: 15mg/m3 (Total dust) 5mg/

m3 (Respirable fraction)

Carbon black: 3.5 mg/m3

Other substances: Not listed

ACGIH TLVs (TWA) as the product: 10mg/m3 (Total dust) 3mg/

m3 (Respirable fraction)

Carbon black: 3.5 mg/m3

Other substances: Not listed

DFG-MAK (TWA) as the product: 4mg/m3 (Inhalable fraction)

1.5mg/m3 (Respirable fraction) *All substances:* Not listed

NOHSC (TWA)All substances: Not listed

Engineering Controls: Maintain adequate ventilation.

Eye Protection: Not required under intended use.

Skin Protection: Not required under intended use.

Respiratory Protection: Not required under intended use.

#### PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Fine solid powder

Color: Black Scent: Faint

Melting Point: Not Determined

Specific Gravity(H2O=1): Not Determined

Vapor Pressure: Not applicable

Vapor Density (Air=1): Not applicable Evaporation Rate: Not applicable Solubility in Water: Negligible

**pH Value:** Not a water-based product, therefore not applicable. **Explosive Properties:** little possibility if used as intended. According to Explosive Evaluation, can form explosive dust-air mixtures when finely dispersed in air, like most finely grained organic powders.

#### STABILITY AND REACTIVITY

Reactivity: Under normal use, no dangerous reactions are

known.

Stability: Stable

Incompatibility: None Known.

**Hazardous Decomposition Products:** None if used as intended.

#### SUPPLEMENTAL HEALTH INFORMATION

**Acute oral toxicity:** LD50 is greater than 5g/kg. **Acute inhalation:** LC50(4H) is in excess of 5g/L.

Eye Contact : Mild irritant.
Skin irritation: Mild irritant

Mutagenicity: Negative in the Ames test.

Carcinogenicity: The IARC has listed carbon black as "possibly carcinogenic to humans". The classification is based on studies evaluating pure, "free" carbon black. In contrast, toner is a formulation composed of specially prepared polymer and a small amount of carbon black (or other pigment). In the process of making toner, the small amount of carbon black becomes encapsulated within a matrix. Extensive testing of toner, including a chronic bioassay (test for potential carcinogenicity). Exposure to toner did not produce evidence of cancer in exposed animals. The results were submitted to regulatory agencies and published extensively.

Chronic Effects: The results obtained from Chronic Toner Inhalation Study demonstrated no lung changes in rats for the lowest (1mg/m3) exposure level (the level most relevant to potential human exposure). A very slight degree of fibrosis was noted in 25% of animals at the middle (4mg/m3) exposure level, while a slight degree of fibrosis was noted in all the animals at the highest (16mg/m3) exposure level. These findings are attributed to "lung overloading", a generic response to excessive amounts of any dust retained in the lungs for a prolonged period. This study was conducted using a special test toner to comply with an EPA testing protocol.

#### **ECOLOGICAL INFORMATION**

The environmental impact of this product has not been fully investigated. However, this preparation is not expected to present significant adverse environmental effects.

#### **DISPOSAL CONSIDERATION**

Dispose of in accordance with local, state and federal regulation.

#### TRANSPORTATION INFORMATION

Special Precautions: None

**International Transport Information** 

UN Classification Number: Not applicable

Land DOT 49 CFR, ADR: Not classified as Dangerous Goods Sea IMDG Code: Not classified as Dangerous Goods Air ICAO-TI: Not classified as Dangerous Goods

### **REGULATORY INFORMATION**

IARC: Carbon Black is listed as a Group 2B Carcinogen

**US/Canada Information** 

OSHA Hazard Communication Standard, 29CFR 1910.1200: Not regulated.

Toxic Substance Control Act (TSCA): All chemical substances in this product comply with all applicable rules or orders under TSCA.

RCRA (40 CFR 261): Product or components not listed.

CERCLA/SARA Information: Not regulated. NTP Annual Report on Carcinogens: Not listed California Proposition 65: Not Regulated

Controlled Products Regulations (Canada): This product has been classified in accordance with the hazard criteria of the CPR.

Workplace Hazardous Materials Information System (Canada) Classification; Not applicable by definition of manufactured

article.

Other State Regulations: Carbon Black is a substance listed on New Jersey's, Massachusetts's, Pennsylvania's, Illinois's, and Rhode Island's Right to Know list.

*U.S./Canada Label Statements:* Minimize dust generation and accumulation. Use with adequate ventilation.

#### OTHER INFORMATION

**Notice:** Judgments as to the suitability of information herein for purchaser's purposes are necessarily purchaser's responsibility. Therefore, although reasonable care has been taken in the preparation of such information, Oki Data Corporation extends no warranties, makes no representations, and assumes no responsibility as to the accuracy or suitability of such information for application to purchaser's intended purposes or for consequences of its use.

**References:** IARC (1996) IARC Monographs on the Evaluation of the Carcinogenic Risks of Chemicals to Humans, Vol. 65, Printing Processes and Printing Inks, Carbon Black and Some Nitro Compounds, Lyon, pp. 149-261.H. Muhle, B. Bellmann, O. Creutzenberg, C. Dasenbrock, H.Ernst, R. Kilpper, J. C. MacKenzie, P. Morrow, U. Mohr, S. Takenaka, and R. Mermelstein (1991).Pulmonary Response to Toner upon Chronic Inhalation Exposure in Rats, Fundamental and Applied Toxicology 17, pp. 280-299.

#### Abbreviation:

- (1) OSHA PEL stands for Permissible Exposure Limit under Occupational Safety and Health Administration (USA).
- (2) ACGIH TLV stands for Threshold Limit Value under American Conference of Governmental Industrial Hygienists (USA).
- (3) DFG-MAK stands for Maximale Arbeitsplatzkonzentrationen under Deutsche Forschungsgemeinschaft.
- (4) TWA stands for Time Weighted Average.
- (5) IARC stands for International Agency for Research on Cancer.
- (6) NTP stands for National Toxicology Program (USA).
- (7) NIOSH stands for National Institute for Occupational Safety and Health (USA).
- (8) DOT stands for Department of Transportation (USA).
- (9) NOHSC stands for National Occupational Health and Safety Commission (Australia).

## User's Responsibility \_

This bulletin cannot cover all possible situations which the user may experience when using this product. Each aspect of your operation must be examined in regard to if, or where, additional precautions may be necessary. All health and safety information contained in this bulletin must be provided to your employees or customers. It is your responsibility to use this information to develop appropriate work practice guidelines and employee instructional programs for your operation.

### **Preparation Date of MSDS**

Date: February 28, 2014.

Prepared by:

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