

# Panasonic System Networks Co., Ltd.

## Business Systems Business Unit Communication Products Business Unit

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# Material Safety Data Sheet

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MSDS No.: 021-001319

Date : 13 June, 2012

### SECTION 1 PRODUCT IDENTIFICATION

PRODUCT NAME : Yellow Toner for Panasonic Color Laser Printer / Multi-Function Printer

PRODUCT NUMBER : Toner Cartridge / KX-FATY503A, KX-FATY503E, KX-FATY508, KX-FATY508A, KX-FATY508A7, KX-FATY508E, KX-FATY508H, KX-FATY508X, KX-FATY463CN, KX-FATY468CN, DQ-TUA04Y, DQ-UR1Y, DQ-UR3Y, DQ-UR4Y, KX-CLTY1, KX-CLTY1B, KX-CLTY3, KX-CLTY4  
Print Cartridge / KX-FACY483CN, KX-FACY488CN, DQ-UP1C, DQ-UP3C, KX-CLPC1, KX-CLPC3

### SECTION 2 COMPOSITION/INFORMATION ON INGREDIENTS

SUBSTANCE or PREPARATION : Preparation

INGREDIENTS	CAS #	PROPORTION (% by wt.)	OSHA PEL	ACGIH TLV	OTHER LIMITS
· Polyester resin		70 - 85	None established	None established	None
· Yellow pigment		5 - 10	None established	None established	None
· Wax		4 - 8	None established	None established	None
· Amorphous silica	68909-20-6	< 3	80 mg/m3	10 mg/m3	None
· Charge control agent		< 3	None established	None established	None
· Charge control agent	72869-85-3	< 3	0.5 mg/m3	0.5 mg/m3	None

### SECTION 3 HAZARDOUS IDENTIFICATION

POTENTIAL HEALTH EFFECTS :

EYES : Solid or dusts may cause irritation or corneal injury due to mechanical action.

SKIN CONTACT : Essentially nonirritating to skin.

SKIN ABSORPTION : Skin absorption is unlikely due to physical properties.

INGESTION : Oral toxicity is believed to be low. Considered to be physiologically inert.

INHALATION : Minimal irritation to respiratory track may occur.

CHRONIC EFFECTS : Not aware of any health effects associated with toner under its intended use.

CARCINOGENICITY : Not aware of any health effects associated with toner under its intended use.

### SECTION 4 FIRST AID MEASURES

EYES : Flush eyes immediately with plenty of water for at least 15 minutes.

SKIN : Flush with plenty of water. Use soap.

INGESTION : If irritation or discomfort occurs, consult medical personnel.

INHALATION : Remove to fresh air. If effects occur, consult medical personnel.

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**SECTION 5 FIRE FIGHTING MEASURES**

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FLAMMABLE PROPERTIES :  
FLASH POINT : No data available  
EXTINGUISHING MEDIA : Water fog, foam, CO<sub>2</sub>, dry chemical.  
FIRE-FIGHTING EQUIPMENT : Wear full bunker gear including a positive pressure self-contained breathing apparatus in case of burning in large quantities.

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**SECTION 6 ACCIDENTIAL RELEASE MEASURES**

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PERSONAL PRECAUTIONS : None  
ENVIRONMENT PRECAUTIONS : None  
METHODS FOR CLEANING UP : Wipe off with paper or cloth.

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**SECTION 7 HANDLING AND STORAGE**

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HANDLING :  
TECHNICAL MEASURES : None  
PRECAUTIONS : None  
SAFE HANDLING ADVICE : Try not to disperse the particles.  
STORAGE :  
TECHNICAL MEASURES : None  
STORAGE CONDITIONS : Keep container closed. Store in a cool and dry place.

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**SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION**

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ENGINEERING MEASURES :  
VENTILATION : None required with intended use.  
CONTROL PARAMETERS (As total dust):  
ACGIH-TLV(USA): 10mg/m<sup>3</sup>  
(ACGIH : American Conference of Government Industrial Hygienists)  
PERSONAL PROTECTIVE EQUIPMENT :  
RESPIRATORY PROTECTION : No precautions should be needed under normal use.  
HAND PROTECTION : No precautions should be needed under normal use.  
EYE PROTECTION : No precautions should be needed under normal use.  
SKIN PROTECTION : No precautions should be needed under normal use.  
OTHER : For use other than normal customer-operating procedures (such as in bulk toner processing facilities), goggles and respirators may be required.  
HYGIENE MEASURES : Wash hands after handling.

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**SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES**

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APPEARANCE : Yellow fine powder  
ODOR : None  
PARTICLE SIZE (µm): 5 - 15  
MELTING POINT (°C): No data available  
SOFTENING POINT (°C): 100 - 150  
BOILING POINT (°C): Not applicable  
FREEZING POINT (°C): Not applicable  
SP. GRAVITY (g/cm<sup>3</sup>): 1.2  
BULK DENSITY (g/cm<sup>3</sup>): 0.4  
VAPOR PRESSURE (mm Hg.): Not applicable  
VAPOR DENSITY (AIR = 1): Not applicable  
SOL IN WATER : Negligible  
pH : Not applicable  
EXPLOSION PROPERTIES: No data available  
FLAMMABILITY : No data available

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**SECTION 10 STABILITY AND REACTIVITY**

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STABILITY : This is a stable product.  
INCOMPATIBILITY : (SPECIAL MATERIALS TO AVOID) None  
HAZARDOUS DECOMPOSITION PRODUCTS : CO, CO2 or NOx (by high heat and fire)  
HAZARDOUS POLYMERIZATION : Will not occur.

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**SECTION 11 TOXICOLOGICAL INFORMATION**

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HEALTH EFFECTS FROM EXPOSURE : No symptoms expected with intended use.

**TOXICOLOGICAL DATA :**

ACUTE ORAL TOXICITY : LD50(Rat): >2000 mg/kg <sup>1)</sup>  
EYE IRRITATION : No Data  
SKIN IRRITATION : Non-irritant(Rabbit) <sup>1)</sup>  
SKIN SENSITISATION : Non-sensitive(Guinea Pig) <sup>1)</sup>  
INHALATION TOXICITY : No Data  
MUTAGENICITY : Ames test : Negative

**CHRONIC EFFECTS :**

In study in rats (H. Muhle) by chronic inhalation exposure to a typical toner, a mild to moderate degree of lung fibrosis was observed in 92% of the rats in the high concentration (16mg/m<sup>3</sup>) exposure group, and a minimal to mild degree of fibrosis was noted in 22% of the animals in the middle (4mg/m<sup>3</sup>) exposure group.

But no pulmonary change was reported in the lowest (1mg/m<sup>3</sup>) exposure group, the most relevant level to potential human exposure.

**CARCINOGENICITY :**

No carcinogen or potential carcinogen, according to IARC Monographs, NTP, OSHA(USA) regulation and EU Directive.

*1) This information is based on toxicity data for similar materials and ingredients.*

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**SECTION 12 ECOLOGICAL INFORMATION**

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MOBILITY : No data are available on the adverse effects of this material on the environment.  
BIOACCUMULATION : No data are available on the adverse effects of this material on the environment.  
ECOTOXICITY : No data are available on the adverse effects of this material on the environment.

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**SECTION 13 DISPOSAL CONSIDERATION**

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**WASTE DISPOSAL METHOD :**

Waste must be disposed of in accordance with country and local environmental control regulations. Incineration is preferred method.

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**SECTION 14 TRANSPORT INFORMATION**

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TRANSPORT INFORMATION : This is not a hazardous product.  
UN No. : None allocated.

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**SECTION 15 REGULATORY INFORMATION**

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TSCA : All chemical substances in this product comply with all applicable rules or orders under TSCA.

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**SECTION 16 OTHER INFORMATION**

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NFPA Rating : Health = 1 Flammability = 1 Reactivity = 0  
(NFPA: The National Fire Protection Agency (USA))

**USER'S RESPONSIBILITY :**

This bulletin cannot cover all possible situations which the user may experience during processing. Each aspect of your operation must be examined 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.

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