

Material Safety Data Sheet

Page : 1 of 4
MSDS No. : 021-001111

Date of issue : 20 August, 2008 Revised : 29 January, 2010

SECTION 1 IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND OF THE COMPANY / UNDERTAKING

PRODUCT NAME : Toner for DP-8032, DP-8025, DP-3030, DP-2330, DP-3010 and DP-2310

PRODUCT NUMBER : DQ-TU15E

MANUFACTURER : Panasonic System Networks Co., Ltd.
Communication Network Company
4-1-62 Minoshima, Hakata-ku, Fukuoka City, 812-8531 Japan
Tel : +81-(0)92-477-1821 Fax : +81-(0)92-477-1487
E-mail : msdsinfo_ut@ml.jp.panasonic.com

CONTACT POINT : Panasonic Testing Center
Panasonic Marketing Europe GmbH
Winsbergring 15, D-22525 Hamburg, Germany
Tel: +49 (0)40 8549- 0

SECTION 2 HAZARDOUS IDENTIFICATION

EMERGENCY OVERVIEW : Odorless black fine powder.

EU CLASSIFICATION : Not classified as dangerous.

POTENTIAL HEALTH EFFECTS :

EYE EFFECTS : Mild irritant.

SKIN EFFECTS : None currently known.

INGESTION EFFECTS : May be harmful if swallowed.

INHALATION EFFECTS : Minimal respiratory tract irritation may occur as with exposure to large amounts of any non-toxic dust.
May cause cough and raise phlegm.

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

CARCINOGENICITY :

Carbon black is reclassified as a group 2B by IARC, but inhalation test using a typical toner showed no association between toner exposure and animal tumors. Titanium dioxide is reclassified as a group 2B by IARC. Epidemiological study to date have not revealed any evidence of the relation between exposure to titanium dioxide and diseases of the respiratory tract beyond general effects of dust.

SPECIFIC HAZARDS : Dust explosion (like most finely divided organic powders)

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

INGREDIENTS	CAS #	PROPORTION (% by wt.)	EC #	SYMBOLS	R PHRASE
• Polyester		80 - 90		None	None
• Carbon Black	1333-86-4	1 - 10	215-609-9	None	None
• Vegetable wax		1 - 10		None	None
• Acrylic resin		1 - 10		None	None
• Amorphous silica		1 - 10		None	None
• Titanium dioxide	13463-67-7	< 1	236-675-5	None	None

SECTION 4 FIRST AID MEASURES

EYE CONTACT : Any material that contacts the eye should be washed out immediately with water.
Get medical attention if symptoms is occur.

SKIN CONTACT : Wash after each contact.
Get medical attention if symptoms is occur.

INHALATION : If symptomatic, remove to fresh air.
Get medical attention if symptoms persist.

INGESTION : If swallowed, drink 1-2 glasses of water and immediately induce vomiting. Get medical attention.

SECTION 5 FIRE FIGHTING MEASURES

FLASH POINT : Not applicable.

FLAMMABLE LIMITS : Not applicable.

EXTINGUISHING MEDIA : Water fog, dry chemical, foam or CO₂.

HAZARDOUS COMBUSTION PRODUCTS : Carbon monoxide, Carbon dioxide and Smoke.

FIRE AND EXPLOSION HAZARDS : If dispersed in air, like most finely divided organic powders, may form an explosive mixture.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Minimize the release of particulates. Wear personal protective equipment. Sweep up or vacuum spilled toner and carefully transfer into sealed waste container. Sweep slowly to minimize generation of dust during cleanup. If a vacuum is used, the motor must be rated as dust tight. Residue can be removed with soap and water. Garments may be washed or dry cleaned, after removal of loose toner.

SECTION 7 HANDLING AND STORAGE

HANDLING : Avoid creating dust. Clean up all spills promptly.
Inhalation and contact with skin or eyes should be avoided.
Provide general ventilation. Good general ventilation should be sufficient of most conditions.

STORAGE : Store in a cool, well ventilated place away from flames and spark-producing equipment.

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE GUIDELINES : ACGIH TLV= 10mg/m³(Total dust), 3mg/m³(Respirable dust)
OSHA PEL= 15mg/m³(Total dust), 5mg/m³(Respirable dust)

ENGINEERING CONTROLS : Good general ventilation is recommended.

RESPIRATORY PROTECTION : Not required under normal conditions. For use other than in normal operating procedures (such as in the event of large spill), goggles and respirators may be required.

SKIN PROTECTION : Not required under normal conditions.

EYE PROTECTION : Not required under normal conditions.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE : Black fine powder
ODOR : None
pH : Not applicable
VAPOR PRESSURE (mg Hg.): Not applicable
VAPOR DENSITY (AIR = 1): Not applicable
EVAPORATION RATE : Not applicable
BOILING POINT (°C): Not applicable
MELTING POINT (°C): 140°C
SOLUBILITY IN WATER : Insoluble in water
BULK DENSITY : 0.36

SECTION 10 STABILITY AND REACTIVITY

STABILITY : Stable
INCOMPATIBILITY : Strong oxidizers.
HAZARDOUS DECOMPOSITION PRODUCTS : Carbon monoxide, Carbon dioxide and Smoke.
HAZARDOUS POLYMERIZATION : Will not occur.

SECTION 11 TOXICOLOGICAL INFORMATION

INHALATION : Finely divided solid. Avoid exposure to dust.
EYE : No specific hazard known. May cause temporary irritation.
SKIN : Low hazard for recommended handling.
INGESTION : Expected to be a low ingestion hazard.
MUTAGENICITY : Ames test : Negative

CARCINOGENICITY :

In 1996, the IARC reevaluated carbon black as a GROUP 2B carcinogen (possibly carcinogenic to humans). This evaluation is given to carbon black for which there is inadequate human evidence, but sufficient animal evidence. The latter is based upon the development of lung tumors in rat receiving chronic inhalation exposures to free carbon black at level that induce particle overload of the lung. Studies performed in animal models other than rats have not demonstrated an association between carbon black and lung tumors. Moreover, a two-year cancer bioassay using a typical toner preparation containing carbon black demonstrated no association between toner exposure and tumor development in rats.

Titanium dioxide is classified as "possibly carcinogenic to humans" (Group 2B). In animal chronic inhalation studies, the tumor formulation observed in only rats with animal chronic inhalation study are attributed to "lung overloading", a generic response to excessive amounts of any dust retained in the lungs for a prolonged interval. Use of this product, as intended, dose not result in inhalation of excessive dust. Epidemiological study to date have not revealed any evidence of the relation between exposure to titanium dioxide and diseases of the respiratory tract beyond general effects of dust.

CHRONIC EFFECTS :

In study in rats (H. Muhle) by chronic inhalation exposure to a typical toner, that contains the carbon black, a mild to moderate degree of lung fibrosis was observed in 92% of the rats in the high concentration (16mg/m³) exposure group, and a minimal to mild degree of fibrosis was noted in 22% of the animals in the middle (4mg/m³) exposure group.

But no pulmonary change was reported in the lowest (1mg/m³) exposure group, the most relevant level to potential human exposure.

Epidemiological study to date have not revealed any evidence of the relation between exposure to titanium dioxide and diseases of the respiratory tract beyond general effects of dust.

SECTION 12 ECOLOGICAL INFORMATION

No data available.

SECTION 13 DISPOSAL CONSIDERATIONS

METHOD OF DISPOSAL : When disposing of the waste or recovered material, consult federal, state and/or local regulations for the proper disposal method.

SECTION 14 TRANSPORT INFORMATION

UN CLASS : None allocated.

DOT CLASS : None allocated.

TDG CLASS : None allocated.

SECTION 15 REGULATORY INFORMATION

INFORMATION ON THE LABEL :

SYMBOL & INDICATION : Not required.

Risk Phrases : Not required.

SPECIAL PROVISIONS OF ANNEX V TO DIRECTIVE 1999/45/EC : Not required.

SECTION 16 OTHER INFORMATION

NFPA Rating : Health = 1 Flammability = 1 Reactivity = 0

REFERENCES :

IARC(1996) IARC Monographs on the Evaluation of the Carcinogenic Risk of Chemicals to Humans, Vol. 65, Printing Process 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.

NIOSH CURRENT INTELLIGENCE BULLETIN : Evaluation of Health Hazard and Recommendation for Occupational Exposure to Titanium Dioxide : DRAFT

Information on this data sheet represents our current data and best opinion as to the proper use in handling of this product under normal conditions.