

REVISION DATE:
DATE OF ISSUE: September 7, 2016

Safety Data Sheet

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: T9653
 Use: Toner for Printers and / or Electrostatic Photocopying Systems
 Supplier's Name: Katun Corporation
 10951 Bush Lake Rd, Minneapolis, MN 55438
 952-941-9505
 Emergency Telephone Number : (Chemtrec)
 (800) 424-9300

2. HAZARD IDENTIFICATION

GHS Classification

Physically chemical Hazardous

Not applicable

Health Hazard

Not applicable

Environmental Hazard

Not applicable

GHS Label element

Symbol: None

Signal word: None

Hazard statement: None

Precautionary statements

Prevention: None

Response: None

Storage: None

Disposal: None

3. COMPOSITION/INFOMATION ON INGREDIENTS

<u>Ingredients*</u>	<u>CAS No.</u>	<u>Proportion (% by wt.)</u>	<u>OSHA PEL</u>	<u>ACGIHTLV</u>
Polyester resin	Trade Secret	80 - 90	Not listed	Not listed
Carbon black	1333-86-4	5 - 15	3.5mg/m ³	3.0mg/m ³
Polypropylene	9010-79-1	1 - 5	Not listed	Not listed
Iron oxide	1317-61-9	1 - 5	Not listed	Not listed
Amorphous silica	7631-86-9	1 - 5	20mppcf	Not listed
Titanium dioxide	13463-67-7	0.1 - 3	15mg/m ³	10mg/m ³

Substance for which Occupational Exposure Limit(s) is (are) established (See SECTION 8)

4. FIRST AID MEASURES

EYES: Flush eyes immediately with plenty of water within 15 minutes. If irritation persists, obtain medical advice.

SKIN: Wash with plenty of water and soap.

INGESTION: Rinse mouth and give several glasses of water. If irritation persists, obtain medical advice.

INHALATION: Move to fresh air. If irritation persists, obtain medical advice.

NOTE TO PHYSICIAN: None.

5. FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES

FLASH POINT: No data available

FLAMMABLE LIMITS

LEL: No data available

UEL: No data available

EXTINGUISHING MEDIA: CO₂, dry chemical, water.

UNSUITABLE EXTINGUISHING MEDIA : Do not use a solid water stream as it may scatter and spread fire.

HAZARDOUS COMBUSTION PRODUCTS : CO₂, CO, Organic products of decomposition.

FIRE-FIGHTING EQUIPMENT: Wear full bunker gear including a positive pressure self-contained breathing apparatus in case of burning in large quantities.

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS : Minimize the release of particulates. Wear personal protective equipment. Garments may be washed or dry cleaned, after removal of loose toner.

ENVIRONMENT PRECAUTION : Do not allow this preparation to contaminate ground water system.

METHOD FOR CLEANING UP : After spraying with water to prevent development of dusts, spills Should be swept up or wiped up. Residuals can be removed with soap and water. Or sweep slowly spilled powder to paper and transfer into a suitable container for disposal. If sweep them with vacuum cleaner, must use a dust explosion-proof type.

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. You should use or handle at the suitable place without

smudges.

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

8. EXPOSURE CONTROL/PERSONAL PROTECTION

Control parameters

OSHA PEL: TWA 5.0mg/m³ (Inert of Nuisance Dust: Respirable fraction)
15.0mg/m³ (Inert of Nuisance Dust: Total dust)

ACGIH TLV: TWA (2013)

3.0mg/m³ (Particulates Not Otherwise Specified: Respirable Particle Mass)
10.0mg/m³ (Particulates Not Otherwise Specified: Inhalable Particle Mass)

Respiratory protection: In dusty atmospheres, use an approved dust respirator.

Skin protection: No precautions should be needed under normal use.

Eye protection: No precautions should be needed under normal use.

Control Parameters (Ingredients)

Ingredient Name	ACGIH	OSHA-PEL
	TLV-TWA (mg/m ³)	TWA (mg/m ³)
Carbon Black	3	3.5
Titanium dioxide	10	15
Amorphous silica	-	20mppcf

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Black fine powder

Odor: Slight plastic odor

pH: No data

Melting point / freezing point: No data

Initial boiling point and boiling range : Not applicable

Flash point : No data.

Evaporation rate : Not applicable

Flammability (solid, gas) : No data.

Upper/lower flammability or explosive limits : No data.

Vapour pressure : Not applicable

Vapour density : Not applicable

Relative density : ca. 1.2

Solubility in water : Negligible.

Solubility(ies) : No data.

Partition coefficient: n-octanol/water : No data.

Auto-ignition temperature : No data.

Decomposition temperature : No data.

Viscosity : No data.

Explosive properties : Can form explosive dust-air mixtures when finely dispersed in air.

Oxidising properties : No data.

10. STABILITY AND REACTIVITY

Stability and reactivity

Reactivity : None

Chemical stability : This is a stable product.

Possibility of hazardous reactions : None

Conditions to avoid : None

Incompatible materials : Oxidizing materials

Hazardous decomposition products : Carbon oxides, hydrocarbons(by high heat and fire)

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

- Acute toxicity: Not available
- Skin corrosion/irritation: Not available
- Eye corrosion/irritation: Not available
- Skin sensitization: Not available
- Mutagenicity: Not available
- Carcinogenicity:

In 1996, the IARC reevaluated carbon black as a GROUP 2B carcinogen (possible human carcinogen). This evaluation is given to carbon black for which there is inadequate human evidence, but sufficient animal evidence. The latter is based upon the developer 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 IARC Group 2B. However, in lung inhalation exposure testing on rats, mice and

hamsters, tumor incidence was only observed with high-dose administration to rats.

Furthermore, a similar trend is seen in rats with inert poorly soluble particles and carcinogenicity is thought to be influenced by the action of the rat-specific immune system. A causal relationship between titanium dioxide and carcinogenicity has not been displayed in human epidemiological population studies conducted in Europe and North America.

- Reproductive toxicity: Not available
- Repeated Dose Toxicity:

In a 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

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 changes was reported in the lowest (1mg/m³) exposure group, the most relevant level to potential human exposures.

12. ECOLOGICAL INFORMATION

Toxicity

Acute (short-term) toxicity: Not available

Chronic (long-term) toxicity: Not available

Persistence and degradability: Not available

Bioaccumulative potential: Not available

Mobility in soil: Not available

Results of PBT and vPvB assessment : No results that the components of this toner meet the PBT or vPvB criteria under Regulation (EC) No 1907/2006.

Other adverse effects: Not available

13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: (Review Section 6,7) Waste must be disposed of in accordance with country and local environmental control regulations.

14. TRANSPORT INFORMATION

TRANSPORT INFORMATION: This is not a hazardous product

UN No. : None allocated

UN Shipping Name : None allocated

UN Classification : None allocated

UN Packing Group : None allocated

IATA : Not regulated

DOT : Not regulated

15. REGULATORY INFORMATION

<USA Information>

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

<EU Information>

(EC) No 1907/2006

Authorisations on use : Not regulated

Restrictions on use : Not regulated

(EC) No 1272/2008
Classification : None
Hazard Class and Category Code(S) : None
Hazard statement Code(s) : None

16. OTHER INFORMATION

REVISION DATE: -
DATE OF ISSUE: June 1, 2015

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, pp280-299.

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. It does not represent a guarantee for the properties of the product described in terms of the legal warranty.