

DATE REVISED:  
DATE PREPARED: JUNE 1, 2015

SAFETY DATA SHEET (1/6)  
According to EC No.1907/2006 - No. 453/2010  
PRODUCT NAME: T4184AXG (47684)

SDS No. 5188AC

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## 1 . IDENTIFICATION OF THE SUBSTANCE / PREPERATION AND THE COMPANY / UNDERTAKING

PRODUCT NAME: T4184AXG (47684)  
USE OF THE SUBSTANCE / PREPARATION : Toner for electro photographic apparatus

Katun Corporation  
10951 Bush Lake Rd, Minneapolis, MN 55438  
952-941-9505  
Emergency Contact: (Chemtrec) (800) 424-9300

## 2. HAZARD IDENTIFICATION

### 2.1 Classification of mixture

Classification according to Regulation (EC) No 1272/2008 [CLP]

### 2.2: Label elements

Labelling according to Regulation (EC) No 1272/2008 [CLP]

Hazard pictograms: None

Signal word: None

Hazard statements: None

Precautionary statements: None

Supplemental Hazard information (EU): Not applicable.

### 2.3 Other hazards : No data.

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3. COMPOSITION / INFORMATION ON INGREDIENTS

Ingredients	CAS No.	Proportion EC No.	(% by wt.)	EU Classification according to (EC) No 1272/2008	
				Hazard Class/ Category Code	Hazard Statement
Polyester	Trade Secret	Polymer Exception	80 - 90	None	None
Paraffin Wax*	8002-74-2	232-315-6	1 - 7	None	None
Carbon black	1333-86-4	215-609-9	5 - 15	None	None
Titanium dioxide	13463-67-7	236-675-5	0.1 - 3	None	None
Amorphous silica	7631-86-9	231-545-4	1 - 5	None	None

\* : 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: CO<sub>2</sub>, dry chemical, water.

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

HAZARDOUS COMBUSTION PRODUCTS : CO<sub>2</sub>, 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.

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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 CONTROLS / PERSONAL PROTECTION

Exposure limit values :

The table below is a summary. Please see the specific legislation for complete information.

Control parameters ( as inhalant dust )

Austria:	10mg/m <sup>3</sup> , TWA	20mg/m <sup>3</sup> , STEL
Belgium:	10mg/m <sup>3</sup> , TWA	
Denmark:	10mg/m <sup>3</sup> , TWA	20mg/m <sup>3</sup> , STEL
France:	10mg/m <sup>3</sup> , TWA	
Germany (AGS*):	10mg/m <sup>3</sup> , TWA	20mg/m <sup>3</sup> , STEL
Hungary :	10mg/m <sup>3</sup> , TWA	
Ireland :	10mg/m <sup>3</sup> , TWA	
Spain:	10mg/m <sup>3</sup> , TWA	
Sweden:	10mg/m <sup>3</sup> , TWA	
Switzerland :	10mg/m <sup>3</sup> , TWA	

\*Note- Germany (AGS): 15minutes average values, insoluble particulates

TWA: Time Weighted Average

STEL: Short Term Exposure Limit

Control Parameters (Ingredients)

Ingredient Name	ACGIH	OSHA-PEL
	TLV-TWA (mg/m3)	TWA (mg/m3)
Amorphous silica	-	20mppcf
Titanium dioxide	10	15
Carbon black	3	3.5

Paraffin is not hazardous except for its flammable properties, but "Paraffin wax fume" is one of hazardous chemicals. Its ACGIH TLVs (TWA) and NIOSH RELs (TWA) is the same value (2mg/m3)

Engineering Controls : Ensure adequate ventilation to maintain below occupational limits.

Personal Protection Equipment

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.

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## 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: Negative in the Ames test.

(Estimated from the data of other products or information of constituent components from raw material manufacturer.)

- 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

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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/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 changes was reported in the lowest (1mg/m<sup>3</sup>) 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.

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<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

### 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.*