

SDS REPORT

Applicant :	
Manufacturer :	
Product Description :	Toner
Product Code :	TN3600/TN3610
Trade Mark :	



This report is limited to the above applicant company and the product model only.



Report No.: NTS2023412M

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Product Name: Toner TN3600/TN3610

Establishment / Revision: April 26, 2020

SAFETY DATA SHEET

(According to Regulations (EC) No 1907/2006 (REACH), 1272/2008 (CLP) and (EU) 2015/830 (amending REACH))

SECTION 1: Identification of Product and Supplier

1.1 Product identifiers

Product Name: Toner

Sample Model No.:

TN3600/TN3610 **Trade**

Mark:

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses: For electrostatic imaging printer, copier

1.3 Details of the supplier of the safety data sheet

Manufacturer:

Address:

Tel:

Email:

Fax:

1.4 Emergency telephone number:

SECTION 2: Hazards Identification

2.1 Classification of the substance or mixture

Regulation (EC) No. 1272/2008: Not classified as hazardous.

2.2 GHS Label elements, including precautionary statements

This substance is not classified as dangerous according to Directive 67/548/EEC.

Label elements

Hazard pictogram: Not required

Signal word: Not required

Hazard statement: Not required



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Precautionary statement:

Not required

Applicable Label Elements in accordance with Part 2 of Annex II to Regulation (EC) No 1272/2008:
Not required.

2.3 Other Hazards

Information on whether the substance or mixture meets the criteria for PBT or vPvB in accordance

with Annex XIII to Regulation (EC) No 1907/2006: No

Dust Explosion: May form explosible dust-air mixture if dispersed.

Irritation of respiratory tract: Slight irritation of respiratory tract may occur with exposure to large amount of toner dust.

Skin Irritation: Minimal skin irritation may occur.

Eye Irritation: Irritation may occur by mechanical abrasion.

SECTION 3: Composition / Information on Ingredients

3.1 Substance or preparation : Mixture

3.2 Information about the chemical nature of product :

Substances in the Mixture referred to in Points 3.2.2 of Annex II to Regulation (EC) No 1907/2006 or referred to Part 2 of Annex II to Regulation (EC) No 1272/2008:

Common chemical name / General name	CAS number	EINECS number	Concentration / Concentration range	Classification and hazard labeling
Styrene acrylic resin	25767-47-9	607-806-7	70-90%	Not classified Not a hazardous substance or mixture
Carbon black (C)	1333-86-4	215-609-9	3-10%	Not classified Not a hazardous substance or mixture
Polypropylene Wax	9003-07-0	618-352-4	5-15%	Not classified Not a hazardous substance or mixture



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Common chemical name / General name	CAS number	EINECS number	Concentration / Concentration range	Classification and hazard labeling
Silicon Dioxide (SiO ₂)	7631-86-9	231-545-4	< 1%	Not classified Not a hazardous substance or mixture

Refer to Section 8 for the exposure limits and Section 11 for toxicological information.

These substances are indicated solely to help the recipients understand this mixture better, and not subject to Points 3.2.3 or 3.2.4 of Annex II to Regulation (EC) No 1907/2006.

Substances in Annex XIV to Regulation (EC) No 1907/2006 (Authorization) or the Candidate List of SVHC: None

Substances in Annex XVII to Regulation (EC) No 1907/2006 (Restriction):None

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

Inhalation : If breathed in, move person into fresh air.
If not breathing, give artificial respiration.
Consult a physician.

Eye contact : Do not rub eyes.
Rinse thoroughly with plenty of water for at least 15 minutes .
Seek medical attention.

Skin contact : Wash off with soap and plenty of water.
Consult a physician.

Ingestion: Never give anything by mouth to an unconscious person.
Rinse mouth with water.
Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

Acute: Exposure to excessive amounts of dust may cause physical irritation to respiratory tract.

Delayed: Prolonged inhalation of excessive amounts of dust may damage lung.



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4.3 Indication of any immediate medical attention and special treatment needed

Immediate medical attention may be required in an unlikely event of extreme inhalation, eye contact or unusual reaction due to physical idiosyncrasy of the person.

SECTION 5: FIRE FIGHTING MEASURES

5.1 Extinguishing Media:

Suitable extinguishing media:

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable Extinguishing Media:

High pressure media which could cause the formation of a potentially explosible dust-air mixture.

5.2 Special hazards arising from the substance or mixture :

Dust Explosion: This mixture, like most organic powders, is capable of creating an explosive dust when particles are dispersed in air.

Hazardous Combustion Products: Carbon monoxide and carbon dioxide

5.3 Advice for firefighters :

Firefighters should wear protective equipment such as gloves, glasses, boots and respiratory mask as needed.

Avoid generating dust which could form explosible mixture with air.

Do not breathe fumes.

Keep containers cool with water spray if exposed to fire.

5.4 Further information :

No data available.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions:

For Non-emergency Personnel:

Avoid dust formation.

Remove ignition sources.

Do not breathe dust.



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Wear personal protective equipment as described in Section 8.

For Emergency Responders:

Fabric for personal protective clothing should block particles of the product as small as 3 μm .

6.2 Environmental precautions:

Do not allow material to be released to the environment without proper governmental permits.

Do not allow product to reach sewage system or water bodies.

Do not allow to enter the ground/soil.

6.3 Methods for cleaning up and disposal:

Eliminate sources of ignition including sparks and flammables.

Shelter the released material (powder) from wind to avoid dust formation and scattering.

Sweep slowly spilled powder on to paper, and carefully transfer into a waste container. Clean remainder with wet paper, wet cloth or a vacuum cleaner.

If a vacuum cleaner is used, it must rate as a dust explosion-proof type. Fine powder can form explosive dust-air mixtures.

Dispose of the materials in accordance with EU/national/regional/local requirements.

6.4 Reference to other sections:

For disposal see section 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling:

Use with adequate ventilation.

Avoid creating dusty conditions and prevent wind dispersal.

Provide appropriate exhaust ventilation at places where dust is formed.

Normal measures for preventive fire protection.

Keep away from excessive heat and sources of ignition such as sparks and open flames.

Keep out of reach of children.

7.2 Conditions for safe storage, including any incompatibilities

Store in cool place.

Keep container tightly closed in a dry and well-ventilated place.

Keep away from excessive heat and sources of ignition.

Do not store with strong oxidizers.



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7.3 7.3 Specific End Use(s)

This product is a toner used in electrophotographic printers and copiers.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

Occupational Exposure Limits:

Product:

General dust or particulate not otherwise classified.

EU OEL: Not established.

Germany DFG MAK (8hr TWA): Inhalable fraction 4mg/m³

UK HSE WEL (8hr TWA): Inhalable dust 10mg/m³, Respirable dust 4mg/m³

Sweden SWEA OEL (LLV): Dust and mist, organic total dust 5mg/m³

ACGIH TLV (TWA): Inhalable particulate 10mg/m³, Respirable particulate 3mg/m³

USA OSHA PEL (TWA): Total dust 15mg/m³, Respirable fraction 5mg/m³

Ingredients:

Silicon Dioxide (SiO₂)

EU OEL: Not established.

Germany: Inhalable fraction 4mg/m³

UK: Inhalable dust 6mg/m³; Respirable dust 2.4mg/m³

Sweden: Not established

ACGIH: Not established

Note:

EU: **OEL** (Occupational Exposure Limits at Community level under Directive 2004/37/EC Annex, 98/24/EC Annex, 91/322/EEC Annex, 2000/39/EC Annex, 2006/15/EC Annex and 2009/161/EU)

Germany: **DFG** (The Deutsche Forschungsgemeinschaft, German Research Foundation)

MAK (Maximale Arbeitsplatz-Konzentration, Maximum Workplace Concentration)

UK: **HSE** (Health and Safety Executive)

WEL (Workplace Exposure Limits)

Sweden: **SWA** (Swedish Work Environment Authority)

OEL (Occupational Exposure Limits)

LLV (Level Limit Values)

TLV (Threshold Limit Value)

ACGIH (American Conference of Government Industrial Hygienists):

USA: **OSHA** (Occupational Safety and Health Administration)

PEL (Permissible Exposure Limits)

Biological Limit Value: Not established



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PNECs and DNELs: Not established

8.2 Exposure controls:

Appropriate Engineering Controls:

Handle in accordance with good industrial hygiene and safety practice.

Wash hands before breaks and at the end of workday.

Handle in an adequately ventilated area.

Personal protective equipment:

Eye/face protection: Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Full contact

Material: Fluorinated rubber

Minimum layer thickness: 0.7 mm

Break through time: 480 min

Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0.4 mm

Break through time: 32 min

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Body Protection

Working clothes. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection:

Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Environmental exposure controls:

Avoid release to the environment.



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SECTION 9: Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

- | | |
|---|---|
| a). Appearance: | Black fine powder |
| b). Color: | Black |
| c). Odour: | Slight plastic odor |
| d). pH: | no data available |
| e). Melting Point/Freezing Point (°C): | Softening temperature (DIN EN ISO 306): 100-150°C |
| f). Boiling point/ range: | 333°C |
| g). Flash point: | 100°C |
| h). Flammability: | No data available. |
| i). Upper/Lower Flammable or
Explosive Limits: | No data available. |
| j). Vapor Pressure: | Not applicable |
| k). Vapor Density: | Not applicable |
| l). Density (at 20°C): | 1.0 to 1.6 g/cm ³ at 25 °C |
| m). Water solubility: | Negligible |
| n). Fat Solubility: | Partially soluble in toluene and xylene. |
| o). Partition Coefficient
(n-Octanol/Water): | Not applicable |
| p). Auto-ignition Temperature (°C): | Not applicable |
| q). Decomposition Temperature (°C): | > 200°C |
| r). Viscosity (mPa s): | Not applicable |
| s). Explosive properties: | Finely dispersed particles form explosive mixture with air. |
| t). Oxidizing properties: | Not applicable |

9.2 Other safety information

No data available

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity: No data available



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10.2 Chemical Stability: Stable under recommended storage and handling conditions

10.3 Possibility of hazardous reactions: None except dust explosion when finely dispersed. Keep away from sources of ignition such as sparks and open flames.

10.4 Conditions to avoid:

Temperatures over 200°C will lead to resin degradation and decomposition.

Keep away from heat, sparks and flame and exposure to (sun) light.

Prevent formation of dust clouds.

Take measures against static discharge.

Avoid storage or contact with strong oxidizing agents

10.5 Incompatible materials: Strong Oxidizing agents, which could vigorously oxidize organic materials in this mixture and cause a fire in an extreme case.

10.6 Hazardous decomposition products:

Products: Carbon monoxide and carbon dioxide

Other decomposition products - No data available.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

Ingestion: LD50 rat > 5 000 mg/kg (OECD 425)

Inhalation: No test data available.

Skin Contact: No test data available.

Skin corrosion/irritation:

Skin - Rabbit

Result: No skin irritation

Serious Eye Damage/Irritation: no data available

Skin Sensitization: no data available

Respiratory or skin sensitization: no data available

Germ cell mutagenicity:

Ames test (Salmonella typhimurium, Escherichia coli) : negative.

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as



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probable, possible or confirmed human carcinogen by IARC.

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ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Repeated Dose Toxicity: no data available

Specific target organ toxicity - single exposure: no data available

Specific target organ toxicity - repeated exposure: no data available

Aspiration hazard: no data available

Additional Information: RTECS: No data available

Potential health effects

Inhalation May be harmful if inhaled. May cause respiratory tract irritation.

Ingestion May be harmful if swallowed.

Skin May causes skin irritation.

Eyes Causes eye irritation.

Signs and Symptoms of Exposure:

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

SECTION 12: Ecological Information

12.1 Toxicity: No data available

12.2 Persistence and degradability: No data available

12.3 Bioaccumulative potential: No data available

12.4 Mobility in soil: no data available

12.5 Results of PBT and vPvB assessment:

No results that the component(s) of this toner meet(s) the PBT or vPvB criteria under Regulation (EC) No 1907/2006.

12.6 Other adverse effects : no data available



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SECTION 13: Waste handling

Disposal of product:

DO NOT put toner or toner container into fire; heated toner may cause severe burns.

DO NOT shred a toner container, unless dust-explosion preventing measures are taken.

Finely dispersed particles form explosive mixtures in air.

Waste must be disposed of in accordance with national and local environmental regulations.

Contaminated packaging

Polyethylene bags should be reused in the working area, products transportation or recycled by specialized companies.

SECTION 14: Transport Information

14.1 UN number

ADR/RID: --

IMDG: --

IATA: --

14.2 UN proper shipping name

ADR/RID: Not dangerous goods

IMDG: Not dangerous goods

IATA: Not dangerous goods

14.3 Transport hazard class(es)

ADR/RID: --

IMDG: --

IATA: --

14.4 Packaging group

ADR/RID: -

IMDG: -

IATA: -

14.5 Environmental hazards

ADR/RID: no

IMDG Marine Pollutant: no

IATA: no

14.6 Special precautions for user

no data available

SECTION 15: Regulation Information



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15.1 Safety, health and environmental regulations/legislations specific for the substance or mixture

EU Information:

EU Directive 1907/2006/EC

Regulation (EC) No 850/2004: Not subject to the regulation.

Regulation (EC) No 1005/2009: Not subject to the regulation.

Regulation (EC) No 649/2012: Not subject to the regulation.

(EC) No 850/2004: Regulation (EC) No 850/2004 of the European Parliament and of the Council of 29 April 2004 on persistent organic pollutants and amending Directive 79/117/EEC

(EC) No 1005/2009: Regulation (EC) No 1005/2009 of the European Parliament and of the Council of 16 September 2009 on substances that deplete the ozone layer

(EC) No 649/2012: Regulation (EC) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals

US Information:

Toxic Substances Control Act (TSCA) Status: All the substances in this mixture are listed or exempted in accordance with TSCA.

CERCLA Reportable Quantity (40 CFR 117, 302): Not applicable

SARA Title III (EPCRA)

Section 302 (40 CFR 355): Not applicable

Section 311/312 (40 CFR 370): Immediate health hazard: No

(All the ingredients of this product are bound within the mixture.)

Chronic health hazard: No

(All the ingredients of this product are bound within the mixture.)

Sudden release of pressure hazard: No

Reactive hazard: No

Section 313 (40 CFR 372): Not applicable to this mixture.

California prop. 65: This product not contains the following ingredients for which the State of California has found to cause cancer, birth defects or other reproductive harm.

People's Republic of China Information

National Standard GB 13690-2009 (China GHS): No label element is required.

Republic of Korea Information

Industrial Safety and Health Act, Standard for Classification and Labeling of Chemical Substances and Material Safety Data Sheets (MoL Public Notice 2013-37), Toxic Chemicals Control Act, and Regulation for Classification and Labeling of Toxic Chemicals (NIER Public Notice 2008-26): No label element is required.

15.2 Chemical Safety Assessment



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No Chemical Safety Assessment has been carried out for this mixture by the supplier.

SECTION 16: Other Information

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006
For total product, can be classified as below:

<u>NFPA</u>	Health hazards 0	Flammability 0	Instability 0	Physical & Chemical Properties 0
<u>HMIS</u>	Health hazards 0	Flammability 0	Physical hazards 0	Personal protection X

Legend to Abbreviations:

ADN	Accord Europeen Relatif Au Transport International Des Marchandises Dangereuses Par Voies De Navigation Interieures (European Agreement Concerning the International Carriage of Dangerous Goods by Inland Waterways)
ADR	Accord europeen relatif au transport international des marchandises Dangereuses par Route (The European agreement on cross-border transportation of dangerous goods by road)
CAS	Chemical Abstracts Service
CERCLA	Comprehensive Environmental Response Compensation and Liability Act
CFR	Code of Federal Regulations
CLP	Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.
DNEL	Derived No-Effect Level
DOT	Department Of Transportation
EC	European Community
EEC	European Economic Community
EPCRA	Emergency Planning and Community Right-to-know Act
EU	European Union
EC50	half maximal (50%) Effective Concentration
ErC50	EC50 in terms of reduction of growth rate
GHS	Globally Harmonized System of Classification and Labelling of Chemicals
IARC	International Agency for Research on Cancer



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IATA	International Air Transport Association
ICAO	International Civil Aviation Organization
IMDG	International Medical Guide for Ships
IC50	half maximal (50%) Inhibitory Concentration
LD50	Lethal Dose, 50 % kill
OECD	Organisation for Economic Co-operation and Development
OSHA	Occupational Safety and Health Administration
PELs	Permissible Exposure Limits
PBT	Persistent, Bioaccumulative and Toxic
PNEC	Predicted No-Effect Concentration
REACH	Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC
RoHS	Directive 2011/65/EU of the European Parliament and of the Council of 8 June 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment
RID	Règlement International concernant le transport des marchandises Dangereuses par chemin de fer (the international regulations covering transportation of dangerous goods by rail)
SARA	Superfund Amendments and Reauthorization Act of 1986
SDS	Safety Data Sheet
SVHC	Substances of Very High Concern
TSCA	Toxic Substances Control Act
TLV	Threshold Limit Value
TWA	Time Weighted Average
UN	United Nations
vPvB	very Persistent and very Bioaccumulative

The information contained in this Safety data sheet is based on the present state of knowledge and current legislation.

Since this information may be applied under conditions beyond our control and with which may be unfamiliar and since data made available subsequent to the data hereof may suggest modifications of the information, we do not assume any responsibility for the results of its use.



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This information is furnished upon condition that the person receiving it shall make his own determination of the suitability of the material for his particular purpose.

This safety data sheet provides guidance on health, safety and environmental aspects of the product and should not be construed as any guarantee of technical performance or suitability for particular applications.

SDS Creation Date: April 26, 2020