

SAFETY DATA SHEET

618C/789C/814C/820C Toner

Section 1. Identification

GHS product identifier : 618C/789C/814C/820C Toner

Product type : Solid.

Product description: Part number:

Toner 618C SS	15S618C	
Toner 618C DR	15S617C	
Toner 789C SS	15S789C	
Toner 789C DR	15S788C	
Toner 814C SS	15S814C	
Toner 814C DR	15S813C	
Toner 820C SS	15S820C	
Toner 820C DR	15S819C	

For actual printer/cartridge compatibility please reference www.lexmark.com

Application

: Laser Printer C2240, C2325, C2326, C2335, C2425, C2535, C3224, C3326, C3426, C4150, C4342, C4352, C520, C522, C524, C530, C532, C534, C6160, C734, C736, C746, C748, CS331, CS339, CS421, CS431, CS439, CS521, CS531, CS622, CS632, CS639, CS720, CS725, CS727, CS728, CS730, CS735, CS736, CS737, CS748, CS820, CS827, CX331, CX421, CX431, CX522, CX532, CX622, CX625, CX635, CX725, CX727, CX730, CX735, CX737, CX820, CX825, CX827, CX860, MC2325, MC2425, MC2535, MC2640, MC3224, MC3326, MC3426, X734, X736, X738, X746, X748, XC2235, XC2240, XC2326, XC2335, XC331, XC4140, XC4143, XC4150, XC4153, XC4240, XC4342, XC4352, XC6152, XC6153, XC8155,

XC8160, XC8163, XS734, XS736, XS738, XS748

Supplier's details

: Lexmark International, Inc. 740 West New Circle Road Lexington, Ky 40550

e-mail address of person responsible for this SDS

: rcassidy@lexmark.com

Emergency telephone number (with hours of operation)

: Informations :1-859-232-2000 Emergency: 1-859-232-3333

VelocityEHS

Tel. # 312-881-2876

24/7

Section 2. Hazards identification

OSHA/HCS status

: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture

: COMBUSTIBLE DUSTS

GHS label elements

Signal word : Warning

Hazard statements: May form combustible dust concentrations in air.

Precautionary statements

Prevention : Not applicable.

Response : Not applicable.

Storage : Not applicable.

Disposal : Not applicable.

Supplemental label

elements

: Keep container tightly closed. Keep away from heat, hot surfaces, sparks, open flames

and other ignition sources. No smoking. Prevent dust accumulation.

Hazards not otherwise

classified

: None known.

Section 3. Composition/information on ingredients

Substance/mixture: Mixture

Ingredient name	%	CAS number
titanium dioxide	<1	13463-67-7

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower

eyelids. Check for and remove any contact lenses. Get medical attention if irritation

occurs.

Inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing.

Skin contact: Flush contaminated skin with plenty of water. Remove contaminated clothing and

shoes. Get medical attention if symptoms occur.

Ingestion: Wash out mouth with water. If material has been swallowed and the exposed person is

conscious, give small quantities of water to drink. Do not induce vomiting unless

directed to do so by medical personnel.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contactInhalationNo known significant effects or critical hazards.No known significant effects or critical hazards.

Date of issue/Date of revision : 1/19/2023 Date of previous issue : No previous validation Version : 1 2/11

Section 4. First aid measures

Skin contactIngestionNo known significant effects or critical hazards.No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact : No specific data.

Inhalation : No specific data.

Skin contact : No specific data.

Ingestion : No specific data.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large

quantities have been ingested or inhaled.

Specific treatments: No specific treatment.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing

media

: Use dry chemical powder.

Unsuitable extinguishing

media

: Do not use water jet.

Specific hazards arising from the chemical

Hazardous thermal decomposition products

: May form explosible dust-air mixture if dispersed.

 Decomposition products may include the following materials: carbon dioxide carbon monoxide

Special protective actions for fire-fighters

: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Special protective equipment for fire-fighters

: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Put on appropriate personal protective equipment.

For emergency responders:

If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Date of issue/Date of revision : 1/19/2023 Date of previous issue : No previous validation Version : 1 3/11

Section 6. Accidental release measures

Environmental precautions

: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Small spill

: Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.

Large spill

: Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Protective measures

Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame). Prevent dust accumulation. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Electrical equipment and lighting should be protected to appropriate standards to prevent dust coming into contact with hot surfaces, sparks or other ignition sources. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous. Do not reuse container.

Advice on general occupational hygiene

: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Date of issue/Date of revision : 1/19/2023 Date of previous issue : No previous validation Version : 1 4/11

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
titanium dioxide	OSHA PEL (United States, 5/2018). TWA: 15 mg/m³ 8 hours. Form: Total dust ACGIH TLV (United States, 1/2022). TWA: 2.5 mg/m³ 8 hours. Form: respirable fraction, finescale particles

Appropriate engineering controls

Environmental exposure controls

- : The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.
- Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period.

Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection

: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with sideshields.

Skin protection

Hand protection

: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Body protection

: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection

: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection

: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Date of issue/Date of revision: 1/19/2023Date of previous issue: No previous validationVersion: 1

Section 9. Physical and chemical properties

Appearance

Physical state : Solid. [Finely divided solid.]

Color : Cyan

Odor : Faint odor. (Plastic.)

Odor threshold : Not available.

pH : Not applicable.

Melting point : Not determined.

Boiling point : Not available.

Flash point : Closed cup: Not applicable.

Burning time : Not available.

Burning rate : Not available.

Evaporation rate : Not applicable.

Flammability (solid, gas) : Not available.

Lower and upper explosive : Not applicable.

(flammable) limits

Vapor pressure : Not available.
Vapor density : Not applicable.
Relative density : Not determined.

Solubility : Insoluble in the following materials: cold water and hot water.

Partition coefficient: n-

octanol/water

: Not applicable.

Auto-ignition temperature: Not applicable.Decomposition temperature: Not available.SADT: Not available.Viscosity: Not applicable.

Section 10. Stability and reactivity

Reactivity: No specific test data related to reactivity available for this product or its ingredients.

Chemical stability: The product is stable.

Possibility of hazardous reactions

: Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid

: Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame). Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Prevent dust accumulation.

Incompatible materials: Reactive or incompatible with the following materials:

oxidizing materials

Date of issue/Date of revision : 1/19/2023 Date of previous issue : No previous validation Version : 1 6/11

618C/789C/814C/820C Toner

Section 10. Stability and reactivity

Hazardous decomposition products

: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
618C/789C/814C/820C Toner titanium dioxide	LD50 Oral LD50 Oral		>2000 mg/kg >5000 mg/kg	-

Irritation/Corrosion

No specific data.

Sensitization

No specific data.

Mutagenicity

No specific data.

Conclusion/Summary

: Not mutagenic in Ames test.

Carcinogenicity

No specific data.

Conclusion/Summary

: Low acute inhalation toxicity. As with exposure to high concentrations of any dust, minimal irritation of the respiratory tract may occur. Pure titanium dioxide, a minor component of this product, has been listed by IARC as a group 2B (possible carcinogen). This classification is based on rat "lung particulate overload" studies performed with airborne particulate. Toner is not listed by IARC, NTP, or OSHA.

Classification

Product/ingredient name	OSHA	IARC	NTP
titanium dioxide	-	2B	-

Reproductive toxicity

No specific data.

Teratogenicity

No specific data.

Specific target organ toxicity (single exposure)

No specific data.

Specific target organ toxicity (repeated exposure)

No specific data.

Aspiration hazard

No specific data.

Information on the likely routes of exposure

: Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.

Potential acute health effects

Date of issue/Date of revision Date of previous issue : 1/19/2023 : No previous validation Version: 1 7/11 618C/789C/814C/820C Toner

Section 11. Toxicological information

Eye contact
 Inhalation
 No known significant effects or critical hazards.
 Skin contact
 No known significant effects or critical hazards.
 Ingestion
 No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : No specific data.
Inhalation : No specific data.
Skin contact : No specific data.
Ingestion : No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate

: Not available.

effects

Potential delayed effects : Not available.

Long term exposure

Potential immediate : Not available.

effects

Potential delayed effects: Not available.

Potential chronic health effects

No specific data.

General : No known significant effects or critical hazards.Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity: No known significant effects or critical hazards. Toner is negative (nonmutagenic) in the

Ames assay.

Reproductive toxicity: No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
Oral	2500 mg/kg

Section 12. Ecological information

Toxicity

Section 12. Ecological information

Product/ingredient name	Result	Species	Exposure
618C/789C/814C/820C Toner	Acute EC50 >1000 mg/l	Daphnia	24 hours
	Acute EC50 >1000 mg/l	Daphnia	48 hours
titanium dioxide	Acute LC50 3 mg/l Fresh water	Crustaceans - Ceriodaphnia dubia - Neonate	48 hours
	Acute LC50 6.5 mg/l Fresh water	Daphnia - Daphnia pulex - Neonate	48 hours
	Acute LC50 >1000000 μg/l Marine water	Fish - Fundulus heteroclitus	96 hours

Persistence and degradability

Not available.

Bioaccumulative potential

No specific data.

Mobility in soil

Soil/water partition coefficient (Koc)

: Not available.

Other adverse effects

: No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods

: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	DOT Classification	TDG Classification	Mexico Classification	ADR/RID	IMDG	IATA
UN number	Not regulated.	Not regulated.	Not regulated.	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-	-	-	-
Transport hazard class(es)	-	-	-	-	-	-

Date of issue/Date of revision: 1/19/2023Date of previous issue: No previous validationVersion: 1

618C/789C/814C/820C Toner

Section 14. Transport information

Packing group	_	-	-	-	-	-
Environmental hazards	No.	No.	No.	No.	No.	No.
Additional information	-	-	-	-	-	-

Special precautions for user : Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according : Not available.

to IMO instruments

Section 15. Regulatory information

United States

TSCA (USA)

: All components are active or exempted.

SARA / EPCRA (USA)

None of the ingredients in this product has a final reportable quantity (RQ) under Emergency Planning and Community Right-to Know Act (EPCRA)- Section 302: Extremely Hazardous Substances (EHS) or notification requirements for EHS under Section 304.

California Prop. 65

This product does not require a Safe Harbor warning under California Prop. 65.

International regulations lists

Europe inventory (EINECS) : All ingredients are listed on the European Inventory of Existing Commercial Substances (EINECS) list, have been registered on the European List of New Chemical Substances (ELINCS), or are exempt.

REACH Status

: EU (REACH): All components of the toner formulation are registered or exempt under REACH.

Japan inventory (CSCL)

: All ingredients are listed on the Japanese Existing and New Chemical Substances (ENCS) list, have been registered, or are exempt.

Australia inventory (AIIC)

: All ingredients are listed in Australian Inventory of Chemical Substances (AICS), have been registered, or are exempt.

Philippines inventory

(PICCS)

: All ingredients are listed on the Philippines inventory (PICCS). No ingredients are listed under CCO, PCL, CCEI, and CPECS (quicklist of regulated substances).

Korea inventory (KECI)

: All ingredients are listed on the Korean Existing Chemicals List (ECL), have been registered, or are exempt.

China inventory (IECSC)

: All ingredients are listed on the Chinese inventory (IECSC) or are exempt.

Canada

WHMIS (Canada) COMBUSTIBLE DUSTS - Category 1

Date of issue/Date of revision : 1/19/2023 Date of previous issue : No previous validation Version: 1 10/11 618C/789C/814C/820C Toner

Section 15. Regulatory information

DSL/NDSL : All ingredients are listed on the Canadian Domestic Substances List (DSL), have been

registered on the Non-Domestic Substances List (NDSL), or are exempt.

Mexico Classification : Not classified.

Health: 0 Flammability: 1 Reactivity: 0

Section 16. Other information

History

Date of issue/Date of

: 1/19/2023

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: No previous validation

Version

: 1

Key to abbreviations

: ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL = International Convention for the Prevention of Pollution From Ships, 1973

as modified by the Protocol of 1978. ("Marpol" = marine pollution)

UN = United Nations

References

: HCS (U.S.A.)- Hazard Communication Standard

International transport regulations

IATA Dangerous Goods Regulation (DGR) 64th Edition 2023

Indicates information that has changed from previously issued version.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

Date of issue/Date of revision : 1/19/2023 Date of previous issue : No previous validation Version : 1 11/11



SAFETY DATA SHEET

618M/789M/814M/820M Toner

Section 1. Identification

GHS product identifier : 618M/789M/814M/820M Toner

Product type : Solid.

Product description: Part number:

Toner 618M SS	15S618M	
Toner 618M DR	15S617M	
Toner 789M SS	15S789M	
Toner 789M DR	15S788M	
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Toner 820M DR	15S819M	
	1	

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Application

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Supplier's details

: Lexmark International, Inc. 740 West New Circle Road Lexington, Ky 40550

e-mail address of person responsible for this SDS

: rcassidy@lexmark.com

Emergency telephone number (with hours of operation)

: Informations :1-859-232-2000 Emergency: 1-859-232-3333

VelocityEHS

Tel. # 312-881-2876

24/7

Section 2. Hazards identification

OSHA/HCS status

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Classification of the substance or mixture

: COMBUSTIBLE DUSTS

GHS label elements

Signal word : Warning

Hazard statements: May form combustible dust concentrations in air.

Precautionary statements

Prevention : Not applicable.
Response : Not applicable.
Storage : Not applicable.
Disposal : Not applicable.

Supplemental label

elements

: Keep container tightly closed. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Prevent dust accumulation.

Hazards not otherwise

classified

: None known.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Ingredient name	%	CAS number
titanium dioxide	<1	13463-67-7

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower

eyelids. Check for and remove any contact lenses. Get medical attention if irritation

occurs.

Inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. In

case of inhalation of decomposition products in a fire, symptoms may be delayed. The

exposed person may need to be kept under medical surveillance for 48 hours.

Skin contact : Flush contaminated skin with plenty of water. Remove contaminated clothing and

shoes. Get medical attention if symptoms occur.

Ingestion: Wash out mouth with water. If material has been swallowed and the exposed person is

conscious, give small quantities of water to drink. Do not induce vomiting unless

directed to do so by medical personnel.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Date of issue/Date of revision : 1/19/2023 Date of previous issue : No previous validation Version : 1 2/11

Section 4. First aid measures

Eye contact
 Inhalation
 Skin contact
 Ingestion
 No known significant effects or critical hazards.
 No known significant effects or critical hazards.
 No known significant effects or critical hazards.
 No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact : No specific data.
Inhalation : No specific data.
Skin contact : No specific data.
Ingestion : No specific data.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician : In case of inhalation of decomposition products in a fire, symptoms may be delayed.

The exposed person may need to be kept under medical surveillance for 48 hours.

Specific treatments: No specific treatment.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing

media

: Use dry chemical powder.

Unsuitable extinguishing

media

: Do not use water jet.

Specific hazards arising from the chemical

Hazardous thermal decomposition products

: May form explosible dust-air mixture if dispersed.

: Decomposition products may include the following materials:

carbon dioxide carbon monoxide nitrogen oxides

halogenated compounds

Special protective actions for fire-fighters

: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Special protective equipment for fire-fighters

: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Date of issue/Date of revision : 1/19/2023 Date of previous issue : No previous validation Version : 1 3/11

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Put on appropriate personal protective equipment.

For emergency responders:

If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions

: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Small spill

: Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.

Large spill

: Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Protective measures

: Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame). Prevent dust accumulation. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Electrical equipment and lighting should be protected to appropriate standards to prevent dust coming into contact with hot surfaces, sparks or other ignition sources. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous. Do not reuse container.

Advice on general occupational hygiene

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Date of issue/Date of revision: 1/19/2023Date of previous issue: No previous validationVersion: 1

Section 7. Handling and storage

including any incompatibilities

Conditions for safe storage, : Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
titanium dioxide	OSHA PEL (United States, 5/2018). TWA: 15 mg/m³ 8 hours. Form: Total dust ACGIH TLV (United States, 1/2022). TWA: 2.5 mg/m³ 8 hours. Form: respirable fraction, finescale particles

Appropriate engineering controls

Environmental exposure controls

- : The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.
- Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with sideshields.

Skin protection Hand protection

: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Body protection

Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Date of issue/Date of revision Date of previous issue : No previous validation : 1/19/2023 Version: 1 5/11

Section 8. Exposure controls/personal protection

Other skin protection

: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection

: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9. Physical and chemical properties

Appearance

Physical state : Solid. [Finely divided solid.]

Color : Magenta

Odor : Faint odor. (Plastic.)

Odor threshold: Not available.

PH: Not applicable.

Melting point: Not determined.

Boiling point: Not available.

Flash point : Closed cup: Not applicable.

Burning time : Not available.

Burning rate : Not available.

Evaporation rate : Not applicable.

Flammability (solid, gas) : Not available.

Lower and upper explosive : Not applicable.

(flammable) limits

Vapor pressure : Not available.
Vapor density : Not applicable.
Relative density : Not determined.

Solubility : Insoluble in the following materials: cold water and hot water.

Partition coefficient: n-

octanol/water

: Not applicable.

Auto-ignition temperature: Not applicable.Decomposition temperature: Not available.SADT: Not available.Viscosity: Not applicable.

Section 10. Stability and reactivity

Reactivity: No specific test data related to reactivity available for this product or its ingredients.

Chemical stability: The product is stable.

Possibility of hazardous

reactions

: Under normal conditions of storage and use, hazardous reactions will not occur.

Date of issue/Date of revision : 1/19/2023 Date of previous issue : No previous validation Version : 1 6/11

Section 10. Stability and reactivity

Conditions to avoid

: Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame). Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Prevent dust accumulation.

Incompatible materials

: Reactive or incompatible with the following materials: oxidizing materials

Hazardous decomposition products

: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
618M/789M/814M/820M Toner	LD50 Oral	Rat	>2000 mg/kg	-
	LD50 Oral	Rat	>5000 mg/kg	-

Irritation/Corrosion

No specific data.

Sensitization

No specific data.

Mutagenicity

No specific data.

Conclusion/Summary

: Not mutagenic in Ames test.

Carcinogenicity

No specific data.

Conclusion/Summary

: Low acute inhalation toxicity. As with exposure to high concentrations of any dust, minimal irritation of the respiratory tract may occur. Pure titanium dioxide, a minor component of this product, has been listed by IARC as a group 2B (possible carcinogen). This classification is based on rat "lung particulate overload" studies performed with airborne particulate. Toner is not listed by IARC, NTP, or OSHA.

Classification

Product/ingredient name	OSHA	IARC	NTP
titanium dioxide	-	2B	-

Reproductive toxicity

No specific data.

Teratogenicity

No specific data.

Specific target organ toxicity (single exposure)

No specific data.

Date of issue/Date of revision : 1/19/2023 Date of previous issue : No previous validation Version : 1 7/11

Section 11. Toxicological information

Specific target organ toxicity (repeated exposure)

No specific data.

Aspiration hazard

No specific data.

Information on the likely

routes of exposure

: Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.

Potential acute health effects

Eye contact
 Inhalation
 No known significant effects or critical hazards.
 Skin contact
 No known significant effects or critical hazards.
 Ingestion
 No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : No specific data.

Inhalation : No specific data.

Skin contact : No specific data.

Ingestion : No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate

: Not available.

effects

Potential delayed effects : Not available.

Long term exposure

Potential immediate : Not available.

effects

Potential delayed effects : Not available.

Potential chronic health effects

No specific data.

General : No known significant effects or critical hazards.Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity: No known significant effects or critical hazards. Toner is negative (nonmutagenic) in the

Ames assay.

Reproductive toxicity: No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
Oral	2500 mg/kg

Section 11. Toxicological information

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
618M/789M/814M/820M Toner	Acute EC50 >1000 mg/l	Daphnia	24 hours
	Acute EC50 >1000 mg/l	Daphnia	48 hours
titanium dioxide	Acute LC50 3 mg/l Fresh water	Crustaceans - Ceriodaphnia dubia - Neonate	48 hours
	Acute LC50 6.5 mg/l Fresh water	Daphnia - Daphnia pulex - Neonate	48 hours
	Acute LC50 >1000000 μg/l Marine water	Fish - Fundulus heteroclitus	96 hours

Persistence and degradability

Not available.

Bioaccumulative potential

No specific data.

Mobility in soil

Soil/water partition coefficient (Koc)

: Not available.

Other adverse effects

: No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods

: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Date of issue/Date of revision : 1/19/2023 Date of previous issue : No previous validation Version : 1 9/11

Section 14. Transport information

	DOT Classification	TDG Classification	Mexico Classification	ADR/RID	IMDG	IATA
UN number	N number Not regulated. Not regulated.		Not regulated.	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name			-	-	-	-
Transport - hazard class(es)		-	-	-	-	-
Packing group	-	-	-	-	-	-
Environmental hazards	No.	No.	No.	No.	No.	No.
Additional information	-	-	-	-	-	-

Special precautions for user : Transport within user's premises: always transport in closed containers that are

upright and secure. Ensure that persons transporting the product know what to do in the

event of an accident or spillage.

Transport in bulk according : Not available.

to IMO instruments

Section 15. Regulatory information

United States

TSCA (USA) SARA / EPCRA (USA) : All components are active or exempted.

: None of the ingredients in this product has a final reportable quantity (RQ) under Emergency Planning and Community Right-to Know Act (EPCRA)- Section 302: Extremely Hazardous Substances (EHS) or notification requirements for EHS under

Section 304.

California Prop. 65

This product does not require a Safe Harbor warning under California Prop. 65.

International regulations lists

Europe inventory (EINECS): All ingredients are listed on the European Inventory of Existing Commercial Substances (EINECS) list, have been registered on the European List of New Chemical Substances

(ELINCS), or are exempt.

REACH Status : EU (REACH): All components of the toner formulation are registered or exempt under

REACH.

Japan inventory (CSCL) : All ingredients are listed on the Japanese Existing and New Chemical Substances

(ENCS) list, have been registered, or are exempt.

Date of issue/Date of revision : 1/19/2023 Version: 1 Date of previous issue : No previous validation 10/11 618M/789M/814M/820M Toner

Section 15. Regulatory information

Australia inventory (AIIC)

: All ingredients are listed in Australian Inventory of Chemical Substances (AICS), have

been registered, or are exempt.

Philippines inventory

(PICCS)

: All ingredients are listed on the Philippines inventory (PICCS). No ingredients are listed

under CCO, PCL, CCEI, and CPECS (quicklist of regulated substances).

Korea inventory (KECI) : All ingredients are listed on the Korean Existing Chemicals List (ECL), have been

registered, or are exempt.

China inventory (IECSC) : All ingredients are listed on the Chinese inventory (IECSC) or are exempt.

Canada

WHMIS (Canada) **COMBUSTIBLE DUSTS - Category 1**

DSL/NDSL : All ingredients are listed on the Canadian Domestic Substances List (DSL), have been

registered on the Non-Domestic Substances List (NDSL), or are exempt.

Mexico Classification : Not classified.

> 0 Flammability: Health: 1 Reactivity:

Section 16. Other information

History

Date of issue/Date of

revision

: 1/19/2023

Date of previous issue

: No previous validation

Version

: 1

Key to abbreviations

: ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL = International Convention for the Prevention of Pollution From Ships, 1973

as modified by the Protocol of 1978. ("Marpol" = marine pollution)

UN = United Nations

: HCS (U.S.A.)- Hazard Communication Standard References

International transport regulations

IATA Dangerous Goods Regulation (DGR) 64th Edition 2023

Indicates information that has changed from previously issued version.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot quarantee that these are the only hazards that exist.

Date of issue/Date of revision : 1/19/2023 Date of previous issue : No previous validation Version: 1 11/11



SAFETY DATA SHEET

618Y/789Y/814Y/820Y Toner

Section 1. Identification

GHS product identifier : 618Y/789Y/814Y/820Y Toner

Product type : Solid.

Product description: Part number:

Toner 618Y SS	15S618Y	
Toner 618Y DR	15S617Y	
Toner 789Y SS	15S789Y	
Toner 789Y DR	15S788Y	
Toner 814Y SS	15S814Y	
Toner 814Y DR	15S813Y	
Toner 820Y SS	15S820Y	
Toner 820Y DR	15S819Y	

For actual printer/cartridge compatibility please reference www.lexmark.com

Application

: Laser Printer C2240, C2325, C2326, C2335, C2425, C2535, C3224, C3326, C3426, C4150, C4342, C4352, C520, C522, C524, C530, C532, C534, C6160, C734, C736, C746, C748, CS331, CS339, CS421, CS431, CS439, CS521, CS531, CS622, CS632, CS639, CS720, CS725, CS727, CS728, CS730, CS735, CS736, CS737, CS748, CS820, CS827, CX331, CX421, CX431, CX522, CX532, CX622, CX625, CX635, CX725, CX727, CX730, CX735, CX737, CX820, CX825, CX827, CX860, MC2325, MC2425, MC2535, MC2640, MC3224, MC3326, MC3426, X734, X736, X738, X746, X748, XC2235, XC2240, XC2326, XC2335, XC331, XC4140, XC4143, XC4150, XC4153, XC4240, XC4342, XC4352, XC6152, XC6153, XC8155, XC8160, XC8163, XS734, XS736, XS738, XS748

Supplier's details

: Lexmark International, Inc. 740 West New Circle Road Lexington, Ky 40550

e-mail address of person responsible for this SDS

: rcassidy@lexmark.com

Emergency telephone number (with hours of operation)

: Informations :1-859-232-2000 Emergency: 1-859-232-3333

VelocityEHS

Tel. # 312-881-2876

24/7

Section 2. Hazards identification

OSHA/HCS status

: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture

: COMBUSTIBLE DUSTS

GHS label elements

Signal word : Warning

Hazard statements: May form combustible dust concentrations in air.

Precautionary statements

Prevention : Not applicable.
Response : Not applicable.
Storage : Not applicable.
Disposal : Not applicable.

Supplemental label

elements

: Keep container tightly closed. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Prevent dust accumulation.

Hazards not otherwise

classified

: None known.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Ingredient name	%	CAS number
titanium dioxide	<1	13463-67-7

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower

eyelids. Check for and remove any contact lenses. Get medical attention if irritation

occurs.

Inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. In

case of inhalation of decomposition products in a fire, symptoms may be delayed. The

exposed person may need to be kept under medical surveillance for 48 hours.

Skin contact : Flush contaminated skin with plenty of water. Remove contaminated clothing and

shoes. Get medical attention if symptoms occur.

Ingestion: Wash out mouth with water. If material has been swallowed and the exposed person is

conscious, give small quantities of water to drink. Do not induce vomiting unless

directed to do so by medical personnel.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Date of issue/Date of revision : 1/19/2023 Date of previous issue : No previous validation Version : 1 2/11

Section 4. First aid measures

Eye contact
 Inhalation
 Skin contact
 Ingestion
 No known significant effects or critical hazards.
 No known significant effects or critical hazards.
 No known significant effects or critical hazards.
 No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact: No specific data.Inhalation: No specific data.Skin contact: No specific data.Ingestion: No specific data.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician : In case of inhalation of decomposition products in a fire, symptoms may be delayed.

The exposed person may need to be kept under medical surveillance for 48 hours.

Specific treatments: No specific treatment.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing

media

: Use dry chemical powder.

Unsuitable extinguishing

media

: Do not use water jet.

Specific hazards arising from the chemical

Hazardous thermal decomposition products

: May form explosible dust-air mixture if dispersed.

: Decomposition products may include the following materials:

carbon dioxide carbon monoxide nitrogen oxides

Special protective actions for fire-fighters

: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Special protective equipment for fire-fighters

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Date of issue/Date of revision: 1/19/2023Date of previous issue: No previous validationVersion: 1

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Put on appropriate personal protective equipment.

For emergency responders:

If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions

: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Small spill

: Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.

Large spill

: Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Protective measures

: Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame). Prevent dust accumulation. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Electrical equipment and lighting should be protected to appropriate standards to prevent dust coming into contact with hot surfaces, sparks or other ignition sources. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous. Do not reuse container.

Advice on general occupational hygiene

: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Date of issue/Date of revision: 1/19/2023Date of previous issue: No previous validationVersion: 1

Section 7. Handling and storage

including any incompatibilities

Conditions for safe storage, : Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
titanium dioxide	OSHA PEL (United States, 5/2018). TWA: 15 mg/m³ 8 hours. Form: Total dust ACGIH TLV (United States, 1/2022). TWA: 2.5 mg/m³ 8 hours. Form: respirable fraction, finescale particles

Appropriate engineering controls

Environmental exposure controls

- : The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.
- Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with sideshields.

Skin protection **Hand protection**

: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Body protection

Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Date of issue/Date of revision : No previous validation : 1/19/2023 Date of previous issue Version: 1 5/11

Section 8. Exposure controls/personal protection

Other skin protection

: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection

: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9. Physical and chemical properties

Appearance

Physical state : Solid. [Finely divided solid.]

Color : Yellow.

Odor : Faint odor. (Plastic.)

Odor threshold: Not available.

PH: Not applicable.

Melting point: Not determined.

Boiling point: Not available.

Flash point : Closed cup: Not applicable.

Burning time : Not available.
Burning rate : Not available.
Evaporation rate : Not applicable.
Flammability (solid, gas) : Not available.
Lower and upper explosive : Not applicable.

(flammable) limits

Vapor pressure : Not available.
Vapor density : Not applicable.
Relative density : Not determined.

Solubility : Insoluble in the following materials: cold water and hot water.

Partition coefficient: n-

octanol/water

: Not applicable.

Auto-ignition temperature: Not applicable.Decomposition temperature: Not available.SADT: Not available.Viscosity: Not applicable.

Section 10. Stability and reactivity

Reactivity: No specific test data related to reactivity available for this product or its ingredients.

Chemical stability: The product is stable.

Possibility of hazardous

reactions

: Under normal conditions of storage and use, hazardous reactions will not occur.

Date of issue/Date of revision : 1/19/2023 Date of previous issue : No previous validation Version : 1 6/11

Section 10. Stability and reactivity

Conditions to avoid

: Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame). Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Prevent dust accumulation.

Incompatible materials

: Reactive or incompatible with the following materials: oxidizing materials

Hazardous decomposition products

: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
618Y/789Y/814Y/820Y Toner	LD50 Oral	Rat	>2000 mg/kg	-
titanium dioxide	LD50 Oral	Rat	>5000 mg/kg	-

Irritation/Corrosion

No specific data.

Sensitization

No specific data.

Mutagenicity

No specific data.

Conclusion/Summary

: Not mutagenic in Ames test.

Carcinogenicity

No specific data.

Conclusion/Summary

: Low acute inhalation toxicity. As with exposure to high concentrations of any dust, minimal irritation of the respiratory tract may occur. Pure titanium dioxide, a minor component of this product, has been listed by IARC as a group 2B (possible carcinogen). This classification is based on rat "lung particulate overload" studies performed with airborne particulate. Toner is not listed by IARC, NTP, or OSHA.

Classification

Product/ingredient name	OSHA	IARC	NTP
titanium dioxide	-	2B	-

Reproductive toxicity

No specific data.

Teratogenicity

No specific data.

Specific target organ toxicity (single exposure)

No specific data.

Date of issue/Date of revision : 1/19/2023 Date of previous issue : No previous validation Version : 1 7/11

Section 11. Toxicological information

Specific target organ toxicity (repeated exposure)

No specific data.

Aspiration hazard

No specific data.

Information on the likely

routes of exposure

: Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.

Potential acute health effects

Eye contact
 Inhalation
 No known significant effects or critical hazards.
 Skin contact
 No known significant effects or critical hazards.
 Ingestion
 No known significant effects or critical hazards.
 No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : No specific data.
Inhalation : No specific data.
Skin contact : No specific data.
Ingestion : No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate

effects

: Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate

: Not available.

effects

Potential delayed effects: Not available.

Potential chronic health effects

No specific data.

General : No known significant effects or critical hazards.Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity: No known significant effects or critical hazards. Toner is negative (nonmutagenic) in the

Ames assay.

Reproductive toxicity: No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
Oral	2500 mg/kg

Section 11. Toxicological information

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
618Y/789Y/814Y/820Y Toner	Acute EC50 >1000 mg/l	Daphnia	24 hours
	Acute EC50 >1000 mg/l	Daphnia	48 hours
titanium dioxide		Crustaceans - Ceriodaphnia dubia - Neonate	48 hours
	Acute LC50 6.5 mg/l Fresh water	Daphnia - Daphnia pulex - Neonate	48 hours
	Acute LC50 >1000000 μg/l Marine water	Fish - Fundulus heteroclitus	96 hours

Persistence and degradability

Not available.

Bioaccumulative potential

No specific data.

Mobility in soil

Soil/water partition coefficient (Koc)

: Not available.

Other adverse effects

: No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods

: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

Date of issue/Date of revision : 1/19/2023 Date of previous issue : No previous validation Version : 1 9/11

Section 14. Transport information

	DOT Classification	TDG Classification	Mexico Classification	ADR/RID	IMDG	IATA
UN number	Not regulated.	Not regulated.	Not regulated.	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-	-	-	-
Transport hazard class(es)	-	-	-	-	-	-
Packing group	-	-	-	-	-	-
Environmental hazards	No.	No.	No.	No.	No.	No.
Additional information	-	-	-	-	-	-

Special precautions for user : Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according : Not available.

to IMO instruments

Section 15. Regulatory information

United States

TSCA (USA)

: All components are active or exempted.

SARA / EPCRA (USA)

: None of the ingredients in this product has a final reportable quantity (RQ) under Emergency Planning and Community Right-to Know Act (EPCRA)- Section 302: Extremely Hazardous Substances (EHS) or notification requirements for EHS under Section 304.

California Prop. 65

This product does not require a Safe Harbor warning under California Prop. 65.

International regulations lists

Europe inventory (EINECS): All ingredients are listed on the European Inventory of Existing Commercial Substances (EINECS) list, have been registered on the European List of New Chemical Substances

(ELINCS), or are exempt.

REACH Status

: EU (REACH): All components of the toner formulation are registered or exempt under REACH.

Japan inventory (CSCL)

: All ingredients are listed on the Japanese Existing and New Chemical Substances

(ENCS) list, have been registered, or are exempt.

Date of issue/Date of revision Version: 1 : 1/19/2023 Date of previous issue : No previous validation 10/11

Section 15. Regulatory information

Australia inventory (AIIC) : All ingredients are listed in Australian Inventory of Chemical Substances (AICS), have

been registered, or are exempt.

Philippines inventory

(PICCS)

: All ingredients are listed on the Philippines inventory (PICCS). No ingredients are listed

under CCO, PCL, CCEI, and CPECS (quicklist of regulated substances).

Korea inventory (KECI) : All ingredients are listed on the Korean Existing Chemicals List (ECL), have been

registered, or are exempt.

China inventory (IECSC) : All ingredients are listed on the Chinese inventory (IECSC) or are exempt.

Canada

WHMIS (Canada) : COMBUSTIBLE DUSTS - Category 1

DSL/NDSL : All ingredients are listed on the Canadian Domestic Substances List (DSL), have been

registered on the Non-Domestic Substances List (NDSL), or are exempt.

Mexico Classification : Not classified.

Health: 0 Flammability: 1 Reactivity: 0

Section 16. Other information

History

Date of issue/Date of

revision

: 1/19/2023

Date of previous issue

: No previous validation

Version

: 1

Key to abbreviations

: ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL = International Convention for the Prevention of Pollution From Ships, 1973

as modified by the Protocol of 1978. ("Marpol" = marine pollution)

UN = United Nations

References : HCS (U.S.A.)- Hazard Communication Standard

International transport regulations

IATA Dangerous Goods Regulation (DGR) 64th Edition 2023

Indicates information that has changed from previously issued version.

Notice to reader

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Date of issue/Date of revision : 1/19/2023 Date of previous issue : No previous validation Version : 1 11/11



SAFETY DATA SHEET

618K/789K/814K/820K Toner

Section 1. Identification

GHS product identifier : 618K/789K/814K/820K Toner

Product type : Solid.

Product description: Part number:

Toner 618K SS	15S618K
Toner 618K DR	15S617K
Toner 628K SS	15S628K
Toner 789K SS	15S789K
Toner 789K DR	15S788K
Toner 814K SS	15S814K
Toner 814K DR	15S813K
Toner 820K SS	15S820K
Toner 820K DR	15S819K
Toner 830K SS	15S830K

For actual printer/cartridge compatibility please reference www.lexmark.com

Application

: Laser Printer C2240, C2325, C2326, C2335, C2425, C2535, C3224, C3326, C3426, C4150, C4342, C4352, C520, C522, C524, C530, C532, C534, C6160, C734, C736, C746, C748, CS331, CS339, CS421, CS431, CS439, CS521, CS531, CS622, CS632, CS639, CS720, CS725, CS727, CS728, CS730, CS735, CS736, CS737, CS748, CS820, CS827, CX331, CX421, CX431, CX522, CX532, CX622, CX625, CX635, CX725, CX727, CX730, CX735, CX737, CX820, CX825, CX827, CX860, MC2325, MC2425, MC2535, MC2640, MC3224, MC3326, MC3426, X734, X736, X738, X746, X748, XC2235, XC2240, XC2326, XC2335, XC331, XC4140, XC4143, XC4150, XC4153, XC4240, XC4342, XC4352, XC6152, XC6153, XC8155, XC8160, XC8163, XS734, XS736, XS738, XS748

Supplier's details

: Lexmark International, Inc. 740 West New Circle Road Lexington, Ky 40550

e-mail address of person responsible for this SDS

: rcassidy@lexmark.com

Emergency telephone number (with hours of operation)

: Informations :1-859-232-2000 Emergency: 1-859-232-3333

VelocityEHS

Tel. # 312-881-2876

24/7

Section 2. Hazards identification

OSHA/HCS status

: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture

: COMBUSTIBLE DUSTS

GHS label elements

Signal word : Warning

Hazard statements: May form combustible dust concentrations in air.

Precautionary statements

Prevention : Not applicable.
Response : Not applicable.
Storage : Not applicable.
Disposal : Not applicable.

Supplemental label

elements

: Keep container tightly closed. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Prevent dust accumulation.

Hazards not otherwise

classified

: None known.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Ingredient name	%	CAS number
carbon black (Bound) titanium dioxide	≤10 <1	1333-86-4 13463-67-7

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower

eyelids. Check for and remove any contact lenses. Get medical attention if irritation

occurs.

Inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing.

Skin contact: Flush contaminated skin with plenty of water. Remove contaminated clothing and

shoes. Get medical attention if symptoms occur.

Ingestion : Wash out mouth with water. If material has been swallowed and the exposed person is

conscious, give small quantities of water to drink. Do not induce vomiting unless

directed to do so by medical personnel.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact: No known significant effects or critical hazards.

Date of issue/Date of revision : 1/19/2023 Date of previous issue : No previous validation Version : 1 2/11

Section 4. First aid measures

Inhalation : No known significant effects or critical hazards.
 Skin contact : No known significant effects or critical hazards.
 Ingestion : No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact : No specific data.

Inhalation : No specific data.

Skin contact : No specific data.

Ingestion : No specific data.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large

quantities have been ingested or inhaled.

Specific treatments: No specific treatment.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing

media

Unsuitable extinguishing

media

: Use dry chemical powder.

: Do not use water jet.

Specific hazards arising from the chemical

Hazardous thermal decomposition products

: May form explosible dust-air mixture if dispersed.

: Decomposition products may include the following materials: carbon dioxide

carbon monoxide

Special protective actions for fire-fighters

: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Special protective equipment for fire-fighters

: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Put on appropriate personal protective equipment.

Section 6. Accidental release measures

For emergency responders: If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For nonemergency personnel".

Environmental precautions

: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Small spill

: Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.

Large spill

: Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Protective measures

Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame). Prevent dust accumulation. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Electrical equipment and lighting should be protected to appropriate standards to prevent dust coming into contact with hot surfaces, sparks or other ignition sources. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous. Do not reuse container.

Advice on general occupational hygiene

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating. drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

: No previous validation Date of issue/Date of revision : 1/19/2023 Date of previous issue Version: 1 4/11

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits		
carbon black (Bound)	NIOSH REL (United States, 10/2020). TWA: 3.5 mg/m³ 10 hours. TWA: 0.1 mg of PAHs/cm³ 10 hours. ACGIH TLV (United States, 1/2021). TWA: 3 mg/m³ 8 hours. Form: Inhalable fraction OSHA PEL (United States, 5/2018). TWA: 3.5 mg/m³ 8 hours.		
titanium dioxide	OSHA PEL (United States, 5/2018). TWA: 15 mg/m³ 8 hours. Form: Total dust ACGIH TLV (United States, 1/2022). TWA: 2.5 mg/m³ 8 hours. Form: respirable fraction, finescale particles		

Appropriate engineering controls

Environmental exposure controls

- : The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.
- : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period.

Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection

: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with sideshields.

Skin protection

Hand protection

: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Body protection

: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection

: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Date of issue/Date of revision

: 1/19/2023

Date of previous issue

: No previous validation

Version : 1

5/11

Section 8. Exposure controls/personal protection

Respiratory protection

: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9. Physical and chemical properties

Appearance

Physical state : Solid. [Finely divided solid.]

Color : Black.

Odor : Faint odor. (Plastic.)

Odor threshold : Not available.

PH : Not applicable.

Melting point : Not determined.

Boiling point : Not available.

Flash point : Closed cup: Not applicable.

Burning time : Not available.

Burning rate : Not available.

Evaporation rate : Not applicable.

Flammability (solid, gas) : Not available.

Lower and upper explosive : Not applicable.

(flammable) limits

Vapor pressure : Not available.
Vapor density : Not applicable.
Relative density : Not determined.

Solubility : Insoluble in the following materials: cold water and hot water.

Partition coefficient: n-

octanol/water

: Not applicable.

Auto-ignition temperature : Not applicable.

Decomposition temperature : Not available.

SADT : Not available.

Viscosity : Not applicable.

Section 10. Stability and reactivity

Reactivity: No specific test data related to reactivity available for this product or its ingredients.

Chemical stability: The product is stable.

Possibility of hazardous

reactions

: Under normal conditions of storage and use, hazardous reactions will not occur.

Date of issue/Date of revision : 1/19/2023 Date of previous issue : No previous validation Version : 1 6/11

Section 10. Stability and reactivity

Conditions to avoid

: Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame). Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Prevent dust accumulation.

Incompatible materials

: Reactive or incompatible with the following materials: oxidizing materials

Hazardous decomposition products

: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
618K/789K/814K/820K Toner	LD50 Oral	Rat	>2000 mg/kg	-
carbon black (Bound)	LD50 Oral	Rat	>15400 mg/kg	-
titanium dioxide	LD50 Oral	Rat	>5000 mg/kg	-

Irritation/Corrosion

No specific data.

Sensitization

No specific data.

Mutagenicity

No specific data.

Conclusion/Summary

: Not mutagenic in Ames test.

Carcinogenicity

No specific data.

Conclusion/Summary

: Low acute inhalation toxicity. As with exposure to high concentrations of any dust, minimal irritation of the respiratory tract may occur. Pure carbon black and titanium dioxide, minor components of this product, has been listed by IARC as a group 2B (possible carcinogen). This classification is based on rat "lung particulate overload" studies performed with airborne particulate. Toner is not listed by IARC, NTP, or OSHA.

Classification

Product/ingredient name	OSHA	IARC	NTP
carbon black (Bound)	-	2B	-
titanium dioxide		2B	-

Reproductive toxicity

No specific data.

Teratogenicity

No specific data.

Specific target organ toxicity (single exposure)

Date of issue/Date of revision : 1/19/2023 Date of previous issue : No previous validation Version : 1 7/11

Section 11. Toxicological information

No specific data.

Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
carbon black (Bound)	Category 1	-	lungs

Aspiration hazard

No specific data.

Information on the likely routes of exposure

: Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.

Potential acute health effects

Eye contact
 Inhalation
 No known significant effects or critical hazards.
 Skin contact
 No known significant effects or critical hazards.
 Ingestion
 No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact: No specific data.Inhalation: No specific data.Skin contact: No specific data.Ingestion: No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate : Not available.

effects

Potential delayed effects : Not available.

Long term exposure

Potential immediate : Not available.

effects

Potential delayed effects : Not available.

Potential chronic health effects

No specific data.

General: No known significant effects or critical hazards.Carcinogenicity: No known significant effects or critical hazards.

Mutagenicity: No known significant effects or critical hazards. Toner is negative (nonmutagenic) in the

Ames assay.

Reproductive toxicity: No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Date of issue/Date of revision : 1/19/2023 Date of previous issue : No previous validation Version : 1 8/11

618K/789K/814K/820K Toner

Section 11. Toxicological information

Route	ATE value
Oral	2500 mg/kg

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
618K/789K/814K/820K Toner	Acute EC50 >1000 mg/l	Daphnia	24 hours
	Acute EC50 >1000 mg/l	Daphnia	48 hours
carbon black (Bound)	Acute EC50 37.563 mg/l Fresh water	Daphnia - Daphnia magna -	48 hours
		Neonate	
titanium dioxide	Acute LC50 3 mg/l Fresh water	Crustaceans - Ceriodaphnia	48 hours
		dubia - Neonate	
	Acute LC50 6.5 mg/l Fresh water	Daphnia - Daphnia pulex -	48 hours
		Neonate	
	Acute LC50 >1000000 μg/l Marine water	Fish - Fundulus heteroclitus	96 hours

Persistence and degradability

Not available.

Bioaccumulative potential

No specific data.

Mobility in soil

Soil/water partition coefficient (Koc)

: Not available.

Other adverse effects

: No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods

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UN proper shipping name	-	-	-	-	-	-
Transport hazard class(es)	-	-	-	-	-	-
Packing group	-	-	-	-	-	-
Environmental hazards	No.	No.	No.	No.	No.	No.
Additional information	-	-	-	-	-	-

Special precautions for user : Transport within user's premises: always transport in closed containers that are

upright and secure. Ensure that persons transporting the product know what to do in the

event of an accident or spillage.

Transport in bulk according : Not available.

to IMO instruments

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China inventory (IECSC) : All ingredients are listed on the Chinese inventory (IECSC) or are exempt.

Canada

WHMIS (Canada) : COMBUSTIBLE DUSTS - Category 1

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registered on the Non-Domestic Substances List (NDSL), or are exempt.

Mexico Classification : Not classified.

Health: 0 Flammability: 1 Reactivity: 0

Section 16. Other information

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