

# SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of:  
Hazardous Substances (Safety Data Sheets) Notice 2017 EPA Consolidation 30 September 2022

SDS # : A-10732

**234 Toner Black, Cyan, Magenta,  
yellow**

Issuing Date 11-Oct-2025

Revision date 14-Jan-2026

Revision Number 1

## Section 1: Identification

### Product identifier

**Product Name** 234 Toner for Lexmark C792, Lexmark CS796, Lexmark X792, Lexmark XS795, Lexmark XS796, Lexmark XS798

**Part no.** 24B5831, 24B5835, 24B6022, 3067343, 47B1089, 47B1234, C792A1KG, C792A4KG, C792X1KG, C792X2KG, C792X4KG, X792X1KG, X792X2KG, X792X4KG, 24B5828, 24B5832, 24B6018, 3067344, 47B1231, 47B1235, C792A1CG, C792A4CG, C792X1CG, C792X2CG, C792X4CG, X792X1CG, X792X2CG, X792X4CG, 24B5829, 24B5833, 24B6019, 3067346, 47B1232, 47B1236, C792A1MG, C792A4MG, C792X1MG, C792X2MG, C792X4MG, X792X1MG, X792X2MG, X792X4MG, 24B5830, 24B5834, 24B6021, 3067347, 47B1233, 47B1237, C792A1YG, C792A4YG, C792X1YG, C792X2YG, C792X4YG, X792X1YG, X792X2YG, X792X4YG

### Other means of identification

### Recommended use of the chemical and restrictions on use

**Recommended use** Printing

**Uses advised against** No information available

### Details of the supplier of the safety data sheet

#### Supplier

Dynamic Supplies New Zealand Limited  
C2, 27 Smales Road  
East Tamaki  
Auckland, New Zealand 2016

**Non-Emergency Telephone Number** +61 2 8401 3000

**E-mail address** sds@lexmark.com

austinfo@lexmark.com

**For the most current document** [https://www.lexmark.com/en\\_us/supplies-and-parts/printer-supplies-finder/material-safety-data-sheets.html](https://www.lexmark.com/en_us/supplies-and-parts/printer-supplies-finder/material-safety-data-sheets.html)

### Emergency telephone number

**Emergency Telephone** National Poisons Centre (NPC); 24-hour emergency phone number  
0800 764 766 (0800 POISON)

## Section 2: Hazard identification

### Classification of the substance or mixture

Not a hazardous substance or mixture according to the Globally Harmonised System (GHS). Not classified.

**Label elements****Hazard statements**

No hazard statements required.

**Other hazards which do not result in classification**

May form explosible dust-air mixture if dispersed.

**Section 3: Composition/information on ingredients**

| Chemical name             | CAS No.     | Weight-% | Classification according to Regulation (EC) No. 1272/2008 [CLP]           |
|---------------------------|-------------|----------|---------------------------------------------------------------------------|
| Styrene-acrylate polymer  | Proprietary | 75-85    | --                                                                        |
| Carbon black              | 1333-86-4   | 0-10     | --                                                                        |
| Yellow Pigment            | Proprietary | 0-10     | --                                                                        |
| Magenta pigment           | Proprietary | 0-10     | --                                                                        |
| Cyan Pigment              | 147-14-8    | 0-10     | --                                                                        |
| Charge Control Agent      | Proprietary | <1       | Acute Tox. 4 (H302)<br>Aquatic Acute 1 (H400)<br>Aquatic Chronic 1 (H410) |
| Titanium dioxide          | 13463-67-7  | <1       | --                                                                        |
| Non-hazardous ingredients | Proprietary | Balance  |                                                                           |

**Note**

Full text of H- statements: see section 16

"--" indicates no classification or hazard statements apply.

**Section 4: First-aid measures****Description of first aid measures**

|                       |                                                                                                                                              |
|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------|
| <b>General advice</b> | For external use only. Get medical attention if irritation or other symptoms occur. Show this safety data sheet to the doctor in attendance. |
| <b>Inhalation</b>     | Remove to fresh air.                                                                                                                         |
| <b>Eye contact</b>    | Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a doctor.                            |
| <b>Skin contact</b>   | Wash skin with soap and water.                                                                                                               |
| <b>Ingestion</b>      | Rinse mouth.                                                                                                                                 |

**Most important symptoms and effects, both acute and delayed**

|                            |                                       |
|----------------------------|---------------------------------------|
| <b>Symptoms</b>            | Dust irritates eyes and air passages. |
| <b>Effects of Exposure</b> | No information available.             |

**Indication of any immediate medical attention and special treatment needed**

Note to doctors Treat symptomatically.

## Section 5: Fire-fighting measures

### Suitable Extinguishing Media

**Suitable Extinguishing Media** Use water spray or fog; do not use straight streams.

**Unsuitable extinguishing media** Do not scatter spilled material with high pressure water streams.

### Specific hazards arising from the chemical

**Specific hazards arising from the chemical** Fine dust dispersed in air may ignite.

### Special protective actions for firefighters

**Special protective equipment and precautions for fire-fighters** In case of fire: Wear self-contained breathing apparatus. Use personal protective equipment.

## Section 6: Accidental release measures

### Personal precautions, protective equipment and emergency procedures

**Personal precautions** Avoid generation of dust. Ensure adequate ventilation.

**For emergency responders** Use personal protection recommended in Section 8.

### Environmental precautions

**Environmental precautions** See Section 12 for additional Ecological Information.

### Methods and material for containment and cleaning up

**Methods for containment** Prevent further leakage or spillage if safe to do so. Prevent dust cloud.

**Methods for cleaning up** Take up mechanically, placing in appropriate containers for disposal.

### Precautions to prevent secondary hazards

**Prevention of secondary hazards** Clean contaminated objects and areas thoroughly observing environmental regulations.

**Reference to other sections** See section 8 for more information. See section 13 for more information.

## Section 7: Handling and storage

### Precautions for safe handling

**Advice on safe handling** Avoid generation of dust. Ensure adequate ventilation.

**General hygiene considerations** Handle in accordance with good industrial hygiene and safety practice.

### Conditions for safe storage, including any incompatibilities

**Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place.

**Incompatible materials** None known based on information supplied.

## Section 8: Exposure controls/personal protection

### Control Parameters

#### Exposure Limits

| Chemical name    | New Zealand                                              | Australia                 | ACGIH TLV                                                                                                                                      | United Kingdom                                                                                                    |
|------------------|----------------------------------------------------------|---------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|
| Carbon black     | TWA: 3 mg/m <sup>3</sup>                                 | TWA: 3 mg/m <sup>3</sup>  | TWA: 3 mg/m <sup>3</sup><br>inhalable particulate matter                                                                                       | TWA: 3.5 mg/m <sup>3</sup><br>STEL: 7 mg/m <sup>3</sup>                                                           |
| Cyan Pigment     | -                                                        | -                         | TWA: 1 mg/m <sup>3</sup> Cu dust and mist                                                                                                      | TWA: 1 mg/m <sup>3</sup><br>STEL: 2 mg/m <sup>3</sup>                                                             |
| Titanium dioxide | TWA: 2.5 mg/m <sup>3</sup><br>TWA: 0.2 mg/m <sup>3</sup> | TWA: 10 mg/m <sup>3</sup> | TWA: 0.2 mg/m <sup>3</sup><br>nanoscale respirable particulate matter<br>TWA: 2.5 mg/m <sup>3</sup><br>finescale respirable particulate matter | TWA: 10 mg/m <sup>3</sup><br>TWA: 4 mg/m <sup>3</sup><br>STEL: 30 mg/m <sup>3</sup><br>STEL: 12 mg/m <sup>3</sup> |

**Note** See section 16 for terms and abbreviations.

**Biological occupational exposure limits** This product, as supplied, contains materials that do not have reportable biological exposure limits or are not subject to the reporting requirements of the local jurisdiction.

### Appropriate engineering controls

**Engineering controls** None under normal use conditions.

### Individual protection measures, such as personal protective equipment

**Eye/face protection** No special protective equipment required.

**Hand protection** No special protective equipment required.

**Skin and body protection** No special protective equipment required.

**Respiratory protection** No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

**Environmental exposure controls** Do not allow into any sewer, on the ground or into any body of water.

## Section 9: Physical and chemical properties

### Information on basic physical and chemical properties

|                 |                              |
|-----------------|------------------------------|
| Appearance      | Solid                        |
| Physical state  | Powder                       |
| Colour          | Black, Cyan, Magenta, yellow |
| Odour           | Faint                        |
| Odour threshold | No information available     |

| <u>Property</u>                         | <u>Values</u>     | <u>Remarks • Method</u> |
|-----------------------------------------|-------------------|-------------------------|
| pH                                      | No data available | None known              |
| pH (as aqueous solution)                | No data available | None known              |
| Melting point / freezing point          | No data available | None known              |
| Initial boiling point and boiling range | No data available | None known              |

|                                         |                           |            |
|-----------------------------------------|---------------------------|------------|
| Flash point                             | No data available         | None known |
| Flammability                            | Not ignitable             | None known |
| Flammability Limit in Air               |                           | None known |
| Upper flammability or explosive limits  | No data available         |            |
| Lower flammability or explosive limits  | No data available         |            |
| Vapour pressure                         | No data available         | None known |
| Relative vapour density                 | No data available         | None known |
| Relative density                        | No data available         | None known |
| Bulk density                            | No data available         |            |
| Liquid Density                          | No data available         |            |
| Solubility(ies)                         | No data available         | None known |
| Water solubility                        | No data available         | None known |
| Partition Coefficient (n-octanol/water) | No data available         | None known |
| Auto-ignition temperature               | No data available         | None known |
| Decomposition temperature               | No data available         | None known |
| SADT (°C)                               | No data available         | None known |
| Kinematic viscosity                     | No data available         | None known |
| Dynamic viscosity                       | No data available         | None known |
| Particle characteristics                |                           | None known |
| Particle Size                           | No data available         |            |
| Particle Size Distribution              | 4 - 9 micron              |            |
| <b>Other information</b>                |                           |            |
| VOC content                             | None                      |            |
| Softening point                         | 49 - 60 °C / 120 - 140 °F |            |

**Information with regard to physical hazard classes**

|                      |                                                                                                                                           |
|----------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| Explosive properties | Fine dust dispersed in air, in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard. |
|----------------------|-------------------------------------------------------------------------------------------------------------------------------------------|

**Section 10: Stability and reactivity****Reactivity**

|            |                                                             |
|------------|-------------------------------------------------------------|
| Reactivity | No dangerous reaction known under conditions of normal use. |
|------------|-------------------------------------------------------------|

**Chemical stability**

|           |                                 |
|-----------|---------------------------------|
| Stability | Stable under normal conditions. |
|-----------|---------------------------------|

**Explosion data**

|                                  |       |
|----------------------------------|-------|
| Sensitivity to mechanical impact | None. |
|----------------------------------|-------|

|                                 |       |
|---------------------------------|-------|
| Sensitivity to static discharge | None. |
|---------------------------------|-------|

**Possibility of hazardous reactions**

|                                    |                               |
|------------------------------------|-------------------------------|
| Possibility of hazardous reactions | None under normal processing. |
|------------------------------------|-------------------------------|

**Conditions to avoid**

|                     |                               |
|---------------------|-------------------------------|
| Conditions to avoid | Generation/formation of dust. |
|---------------------|-------------------------------|

**Incompatible materials**

|                        |                                           |
|------------------------|-------------------------------------------|
| Incompatible materials | None known based on information supplied. |
|------------------------|-------------------------------------------|

**Hazardous decomposition products**

**Hazardous decomposition products** None known based on information supplied.

**Section 11: Toxicological information****Acute toxicity****Information on likely routes of exposure****Product Information**

|                     |                                               |
|---------------------|-----------------------------------------------|
| <b>Inhalation</b>   | No known effects under normal use conditions. |
| <b>Eye contact</b>  | No hazard from product as supplied.           |
| <b>Skin contact</b> | No hazard from product as supplied.           |
| <b>Ingestion</b>    | No hazard from product as supplied.           |

**Symptoms related to the physical, chemical and toxicological characteristics**

**Symptoms** None known.

**Acute toxicity** Based on available data, the classification criteria are not met.

**Numerical measures of toxicity**

The following ATE values have been calculated for the mixture

|                            |                |
|----------------------------|----------------|
| ATEmix (oral)              | 4,565.50 mg/kg |
| ATEmix (inhalation-gas)    | 99,999.00 ppm  |
| ATEmix (inhalation-vapour) | 99,999.00 mg/l |

**Component Information**

| Chemical name    | Oral LD50             | Dermal LD50             | Inhalation LC50                     |
|------------------|-----------------------|-------------------------|-------------------------------------|
| Carbon black     | > 10000 mg/kg ( Rat ) | > 2000 mg/kg ( Rabbit ) | > 4.6 mg/m <sup>3</sup> ( Rat ) 4 h |
| Magenta pigment  | > 23 g/kg ( Rat )     | > 3000 mg/kg ( Rabbit ) | > 3.055 mg/L ( Rat ) 4 h            |
| Cyan Pigment     | > 6400 mg/kg ( Rat )  | > 5000 mg/kg ( Rat )    | -                                   |
| Titanium dioxide | > 2000 mg/kg ( Rat )  | -                       | > 5.09 mg/L ( Rat ) 4 h             |

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Skin corrosion/irritation** Based on available data, the classification criteria are not met.

**Serious eye damage/eye irritation** Based on available data, the classification criteria are not met.

**Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.

**Germ cell mutagenicity** Not mutagenic in AMES Test.

**Carcinogenicity** The IARC (International Agency for Research on Cancer) has listed carbon black as "possibly carcinogenic to humans". However, We have concluded that the presence of carbon black in this mixture does not present a health hazard. The IARC classification is based on studies evaluating pure, "free" carbon black. In contrast, toner is a formulation composed of specially prepared polymer and a small amount of carbon black (or other pigment). In the process of making toner, the small amount of carbon black becomes

encapsulated within a matrix. We have performed extensive testing of toner, including a chronic bioassay (test for potential carcinogenicity). Exposure to toner did not produce evidence of cancer in exposed animals. The results were submitted to regulatory agencies and published extensively.

The IARC (International Agency for Research on Cancer) has listed titanium dioxide as "possibly carcinogenic to humans". However, we have concluded that the presence of titanium dioxide in this mixture does not present a health hazard. The IARC classification is based on studies in rats using high concentrations of pure, unbound  $\text{TiO}_2$  particles of respirable size. Epidemiological studies do not suggest a carcinogenic effect in humans. In addition, the titanium dioxide in this mixture is encapsulated in a matrix or bound to the surface of the toner. Based on available data, the classification criteria are not met.

The table below indicates whether each agency has listed any ingredient as a carcinogen.

| Chemical name    | New Zealand          | IARC                                       |
|------------------|----------------------|--------------------------------------------|
| Carbon black     | Suspected carcinogen | Group 2B - Possibly carcinogenic to humans |
| Titanium dioxide | -                    | Group 2B - Possibly carcinogenic to humans |

|                                                 |                                                                                                 |
|-------------------------------------------------|-------------------------------------------------------------------------------------------------|
| <b>Reproductive toxicity</b>                    | This product does not contain any known or suspected reproductive hazards.                      |
| <b>STOT - single exposure</b>                   | Based on available data, the classification criteria are not met.                               |
| <b>STOT - repeated exposure</b>                 | Based on available data, the classification criteria are not met.                               |
| <b>Neurological effects</b>                     | None known.                                                                                     |
| <b>Aspiration hazard</b>                        | Based on available data, the classification criteria are not met.                               |
| <b>Data used to identify the health effects</b> | Refer to Section 16 for Key literature references and sources for data used to compile the SDS. |

## Section 12: Ecological information

**Ecotoxicity** Not considered to be harmful to aquatic life.

### Aquatic ecotoxicity

#### Product Information

|              |                                                                                    |
|--------------|------------------------------------------------------------------------------------|
| 96-hour LC50 | > 1000000 µg/l (marine water) <i>Fundulus heteroclitus</i>                         |
| 48-hour EC50 | > 1000 mg/L <i>Daphnia magna</i>                                                   |
| 72-hour EC50 | EC50: = 370, ErC50: >625, EyC50: = 368 mg/L <i>Pseudokirchneriella subcapitata</i> |

#### Component Information

**Terrestrial ecotoxicity** Based on available data, the classification criteria are not met.

**Persistence and degradability** No information available.

### Bioaccumulative potential

| Chemical name   | Partition coefficient | Bioconcentration factor (BCF) | Trophic magnification factor (TMF) |
|-----------------|-----------------------|-------------------------------|------------------------------------|
| Magenta pigment | 2.2                   | -                             | -                                  |
| Cyan Pigment    | 6.6                   | 11                            | -                                  |

|                                        |                                                                            |
|----------------------------------------|----------------------------------------------------------------------------|
| <b><u>Mobility in soil</u></b>         | The product is insoluble and floats on water.                              |
| <b><u>Other adverse effects</u></b>    | No information available.                                                  |
| <b>Endocrine disrupting properties</b> | This product does not contain any known or suspected endocrine disruptors. |

### Section 13: Disposal considerations

#### **Disposal methods**

|                                            |                                                                                                                                                                                                                                                 |
|--------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Waste from residues/unused products</b> | Not applicable.<br>Not Hazardous.                                                                                                                                                                                                               |
| <b>Contaminated packaging</b>              | Not applicable.<br>Not Hazardous.                                                                                                                                                                                                               |
| <b>Other information</b>                   | Although toner is not an aquatic toxin, microplastics may be a physical hazard to aquatic life and should not be allowed to enter drains, sewers, or waterways. Do Not Pour Product Down the Drain; Do Not Rinse the Container Before Disposal. |

### Section 14: Transport information

|                                                                                       |               |
|---------------------------------------------------------------------------------------|---------------|
| <b><u>IATA</u></b>                                                                    | Not regulated |
| <b><u>IMDG</u></b>                                                                    | Not regulated |
| <b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b>        |               |
| No information available                                                              |               |
| <b>Special precautions for user</b>                                                   |               |
| Please refer to the applicable dangerous goods regulations for additional information |               |

### Section 15: Regulatory information

#### **Safety, health and environmental regulations/legislation specific for the substance or mixture**

##### **National regulations**

|                                                             |                  |
|-------------------------------------------------------------|------------------|
| <b>EPA New Zealand HSNO approval code or group standard</b> | To be determined |
|-------------------------------------------------------------|------------------|

|                             |                                                                                                                                           |
|-----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| <b>National regulations</b> | There are no applicable tolerable exposure limits or environmental exposure limits according to the EPA Controls for Hazardous Substances |
|-----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|

|                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Certified handlers, tracking and controlled substance license requirements</b> | <p>Certified handlers are required for some substances. This includes substances requiring a controlled substance license, and most explosives, vertebrates toxic agents, and certain fumigants. Acutely toxic substances which are a Category 1 or 2, such as pesticides also require Certified handlers. Please check the Health and Safety at Work Act 2015 for further information.</p> <p>Tracking is required for some highly hazardous substances. These substances need to be under the control of an appropriately trained person or appropriately secured. Please check the Health and Safety at Work Act 2015 for further information.</p> <p>Controlled substance licenses are required to possess certain explosives, vertebrate toxic agents and fumigants. See Part 7 of the Health and Safety at Work Regulation 2017 for more information.</p> |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

#### **International Regulations**

**The Montreal Protocol on Substances that Deplete the Ozone Layer** Not applicable

**The Stockholm Convention on Persistent Organic Pollutants** Not applicable

**The Rotterdam Convention** Not applicable

#### International Inventories

|               |                                                   |
|---------------|---------------------------------------------------|
| NZIoC         | Complies.                                         |
| TSCA          | Complies.                                         |
| DSL/NDL       | Complies.                                         |
| EINECS/ELINCS | Complies.                                         |
| ENCS          | Contact supplier for inventory compliance status. |
| IECSC         | Contact supplier for inventory compliance status. |
| KECL          | Contact supplier for inventory compliance status. |
| PICCS         | Contact supplier for inventory compliance status. |
| AIIC          | Contact supplier for inventory compliance status. |
| TCSI          | Contact supplier for inventory compliance status. |

#### **Legend:**

- NZIoC** - New Zealand Inventory of Chemicals  
**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory  
**DSL/NDL** - Canadian Domestic Substances List/Non-Domestic Substances List  
**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances  
**ENCS** - Japan Existing and New Chemical Substances  
**IECSC** - China Inventory of Existing Chemical Substances  
**KECL** - Korean Existing Chemicals Inventory  
**PICCS** - Philippines Inventory of Chemicals and Chemical Substances  
**AIIC** - Australian Inventory of Industrial Chemicals  
**TCSI** - Taiwan Chemical Substance Inventory

### **Section 16: Other information**

**Revision date** 14-Jan-2026  
**Revision Note** Update to Format

#### **Full text of H-Statements referred to under section 3**

H302 - Harmful if swallowed  
 H400 - Very toxic to aquatic life  
 H410 - Very toxic to aquatic life with long lasting effects

#### **Key or legend to abbreviations and acronyms used in the safety data sheet**

*List may include phrases which are not applicable to this product*

|         |                                                                                                 |
|---------|-------------------------------------------------------------------------------------------------|
| ACGIH   | American Conference of Governmental Industrial Hygienists                                       |
| ADN     | Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (Europe) |
| ADR     | Agreement concerning the International Carriage of Dangerous Goods by Road (Europe)             |
| AIIC    | Australian Inventory of Industrial Chemicals                                                    |
| ATE     | Acute Toxicity Estimate                                                                         |
| ASTM    | American Society for the Testing of Materials                                                   |
| bar     | Biological Reference Values for Chemical Compounds in the Work Area                             |
| BAT     | Biological tolerance values for occupational exposure                                           |
| BEL     | Biological exposure limits                                                                      |
| bw      | Body weight                                                                                     |
| Ceiling | Maximum limit value                                                                             |
| CMR     | Carcinogen, Mutagen or Reproductive Toxicant                                                    |
| DOT     | Department of Transportation (United States)                                                    |
| DSL     | Domestic Substances List (Canada)                                                               |
| EmS     | Emergency Schedule                                                                              |
| ENCS    | Existing and New Chemical Substances (Japan)                                                    |
| EPA     | U.S. Environmental Protection Agency                                                            |

|         |                                                                                                     |
|---------|-----------------------------------------------------------------------------------------------------|
| GHS     | Globally Harmonized System                                                                          |
| IARC    | International Agency for Research on Cancer                                                         |
| IATA    | International Air Transport Association                                                             |
| IBC     | International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk |
| ICAO    | International Civil Aviation Organisation                                                           |
| IECSC   | Inventory of Existing Chemical Substances in China                                                  |
| IMDG    | International Maritime Dangerous Goods                                                              |
| IMO     | International Maritime Organization                                                                 |
| ISO     | International Organisation for Standardisation                                                      |
| KECI    | Korean Existing Chemicals Inventory                                                                 |
| LC50    | Lethal Concentration to 50% of a test population                                                    |
| LD50    | Lethal Dose to 50% of a test population (Median Lethal Dose)                                        |
| MARPOL  | International Convention for the Prevention of Pollution from Ships                                 |
| n.o.s.  | Not Otherwise Specified                                                                             |
| NOAEC   | No Observed Adverse Effect Concentration                                                            |
| NOAEL   | No Observed Adverse Effect Level                                                                    |
| NOELR   | No Observable Effect Loading Rate                                                                   |
| NZIoC   | New Zealand Inventory of Chemicals                                                                  |
| OECD    | Organisation for Economic Cooperation and Development                                               |
| OEL     | Occupational exposure limits                                                                        |
| PBT     | Persistent, Bioaccumulative and Toxic substance                                                     |
| PICCS   | Philippines Inventory of Chemicals and Chemical Substances                                          |
| PMT     | Persistent, Mobile and Toxic                                                                        |
| PPE     | Personal protective equipment                                                                       |
| QSAR    | Quantitative Structure Activity Relationship                                                        |
| RID     | Agreement concerning the International Carriage of Dangerous Goods by Rail (Europe)                 |
| SADT    | Self-Accelerating Decomposition Temperature                                                         |
| SAR     | Structure-activity relationship                                                                     |
| SDS     | Safety Data Sheet                                                                                   |
| SL      | Surface Limit                                                                                       |
| STEL    | Short Term Exposure Limit                                                                           |
| STOT RE | Specific target organ toxicity - Repeated exposure                                                  |
| STOT SE | Specific target organ toxicity - Single exposure                                                    |
| TCSI    | Taiwan Chemical Substance Inventory                                                                 |
| TDG     | Transport of Dangerous Goods (Canada)                                                               |
| TSCA    | Toxic Substances Control Act (United States)                                                        |
| TWA     | Time-Weighted Average                                                                               |
| UN      | United Nations                                                                                      |
| VOC     | Volatile organic compounds                                                                          |
| vPvB    | Very Persistent and Very Bioaccumulative                                                            |
| vPvM    | Very Persistent and Very Mobile                                                                     |
| As      | Allergenic substance                                                                                |
| DS      | Dermal Sensitiser                                                                                   |
| Ot      | Ototoxicant                                                                                         |
| pOt     | Ototoxicant - potential to cause hearing disorders                                                  |
| PS      | Photosensitiser                                                                                     |
| RS      | Respiratory Sensitiser                                                                              |
| S       | Sensitiser                                                                                          |
| poS     | Sensitiser - capable of causing occupational asthma                                                 |
| Sa      | Simple asphyxiant                                                                                   |
| Sd      | Skin designation                                                                                    |
| pSd     | Skin designation - potential for cutaneous absorption                                               |
| Sdv     | Skin designation - vacated                                                                          |
| Sk      | Skin notation                                                                                       |
| dSk     | Skin notation - danger of cutaneous absorption                                                      |
| pSk     | Skin notation - potential for cutaneous absorption                                                  |

**Key literature references and sources for data used to compile the SDS**

U.S. Agency for Toxic Substances and Disease Registry (ATSDR)  
U.S. Environmental Protection Agency ChemView Database  
European Food Safety Authority (EFSA)  
U.S. Environmental Protection Agency  
Acute Exposure Guideline Level(s) (AEGL(s))  
U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act  
U.S. Environmental Protection Agency High Production Volume Chemicals  
Food Research Journal  
Hazardous Substance Database  
International Uniform Chemical Information Database (IUCLID)  
Japan National Institute of Technology and Evaluation (NITE)  
Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)  
NIOSH (National Institute for Occupational Safety and Health)  
National Library of Medicine's ChemID Plus (NLM CIP)  
National Library of Medicine's PubMed database (NLM PUBMED)  
U.S. National Toxicology Program (NTP)  
New Zealand's Chemical Classification and Information Database (CCID)  
International Organization for Economic Co-operation and Development (OECD) Environment, Health, and Safety Publications  
International Organization for Economic Co-operation and Development (OECD) High Production Volume Chemicals Program  
International Organization for Economic Co-operation and Development (OECD) Screening Information Data Set  
United Nations World Health Organization (WHO)

**Disclaimer**

**The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.**

**End of Safety Data Sheet**