



# SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of:  
Regulation (EC) No. 1907/2006 as amended, and Regulation (EC) No. 1272/2008

Revision date 07-Nov-2025

Revision Number 2

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1. Product identifier

Product Code(s) IMFG  
Product Name Fir Green

### Other means of identification

Pure substance/mixture Mixture

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

Recommended use FOR PROFESSIONAL USE ONLY  
Uses advised against No information available

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

Supplier Ink Projects LLC  
120 Northpoint Ct  
Blythewood, SC 29016  
Telephone: +1-803-578-9700

For further information, please contact

### 1.4. Emergency telephone number

Emergency Telephone No information available

Emergency Telephone - §45 - (EC)1272/2008

Europe 112

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

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

This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [CLP]

### 2.2. Label elements

- Mixture for use in tattoos or permanent make-up
- Contains nickel. Can cause allergic reactions. Contains chromium (VI). Can cause allergic reactions.

- The application of this product can cause an allergic reaction depending on the sensitivity of the individual to the pigment or ink, it is recommended that this product is tested for an allergic reaction.

### 2.3. Other hazards

|                                 |                                                                                       |
|---------------------------------|---------------------------------------------------------------------------------------|
| Other hazards                   | No information available.                                                             |
| PBT or vPvB properties          | This product does not contain any substances that are assessed to be a PBT or a vPvB. |
| Endocrine Disruptor Information | This product does not contain any known or suspected endocrine disruptors.            |

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

The product contains no substances which at their given concentration, are considered to be hazardous to health

Full text of H- and EUH-phrases: see section 16

#### Acute Toxicity Estimate

No information available

This product does not contain candidate substances of very high concern at a concentration  $\geq 0.1\%$  (Regulation (EC) No. 1907/2006 (REACH), Article 59)

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

|                                    |                                                                                                                                                                                                                                     |
|------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Inhalation                         | Remove to fresh air.                                                                                                                                                                                                                |
| Eye contact                        | Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.                                                                                                                |
| Skin contact                       | Wash skin with soap and water. In the case of skin irritation or allergic reactions see a physician.                                                                                                                                |
| Ingestion                          | Rinse mouth.                                                                                                                                                                                                                        |
| Self-protection of the first aider | Remove all sources of ignition. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Wear personal protective clothing (see section 8). |

### 4.2. Most important symptoms and effects, both acute and delayed

|                     |                           |
|---------------------|---------------------------|
| Symptoms            | No information available. |
| Effects of Exposure | No information available. |

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

Note to physicians                      Treat symptomatically.

**SECTION 5: Firefighting measures****5.1. Extinguishing media**

Suitable Extinguishing Media              Dry chemical. Carbon dioxide (CO<sub>2</sub>). Water spray. Alcohol resistant foam.

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

**5.2. Special hazards arising from the substance or mixture**

Specific hazards arising from the chemical              Keep product and empty container away from heat and sources of ignition. In the event of fire, cool tanks with water spray.

**5.3. Advice for firefighters**

Special protective equipment and precautions for fire-fighters              Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

**SECTION 6: Accidental release measures****6.1. Personal precautions, protective equipment and emergency procedures**

Personal precautions                      Evacuate personnel to safe areas. Use personal protective equipment as required. See section 8 for more information. Take precautionary measures against static discharges. Do not touch or walk through spilled material.

For emergency responders                      Use personal protection recommended in Section 8.

**6.2. Environmental precautions**

Environmental precautions                      Refer to protective measures listed in Sections 7 and 8. Prevent further leakage or spillage if safe to do so.

**6.3. Methods and material for containment and cleaning up**

Methods for containment                      Stop leak if you can do it without risk. Do not touch or walk through spilled material. Dike far ahead of liquid spill for later disposal.

Methods for cleaning up                      Take precautionary measures against static discharges. Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.

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

**6.4. Reference to other sections**

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

**SECTION 7: Handling and storage**

**7.1. Precautions for safe handling**

|                                       |                                                                        |
|---------------------------------------|------------------------------------------------------------------------|
| <b>Advice on safe handling</b>        | Ensure adequate ventilation.                                           |
| <b>General hygiene considerations</b> | Handle in accordance with good industrial hygiene and safety practice. |

**7.2. Conditions for safe storage, including any incompatibilities**

|                                 |                                                                   |
|---------------------------------|-------------------------------------------------------------------|
| <b>Storage Conditions</b>       | Keep container tightly closed in a dry and well-ventilated place. |
| <b>Storage class (TRGS 510)</b> | Storage class 10.                                                 |

**7.3. Specific end use(s)**

|                                      |                                                                  |
|--------------------------------------|------------------------------------------------------------------|
| <b>Risk Management Methods (RMM)</b> | The information required is contained in this Safety Data Sheet. |
|--------------------------------------|------------------------------------------------------------------|

**SECTION 8: Exposure controls/personal protection****8.1. Control parameters**

|                                                |                                                                                                                                                             |
|------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Exposure Limits</b>                         | This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies. |
| <b>Biological occupational exposure limits</b> | This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.            |

**Derived No Effect Level (DNEL) - Workers** No information available

**Derived No Effect Level (DNEL) - General Public** No information available.

**Predicted No Effect Concentration (PNEC)** No information available.

**8.2. Exposure controls**

|                                      |                                                                                                                                                                                                                                                                                     |
|--------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Engineering controls</b>          | No information available.                                                                                                                                                                                                                                                           |
| <b>Personal protective equipment</b> |                                                                                                                                                                                                                                                                                     |
| <b>Eye/face protection</b>           | Appropriate eye/face protection should be selected and used according to the chemical nature, hazards and use of this product and safety requirements of the local jurisdiction.                                                                                                    |
| <b>Hand protection</b>               | Appropriate hand protection should be selected and used according to the chemical nature, hazards and use of this product and safety requirements of the local jurisdiction.                                                                                                        |
| <b>Skin and body protection</b>      | Appropriate skin and body protection should be selected and used according to the chemical nature, hazards and use of this product and safety requirements of the local jurisdiction.                                                                                               |
| <b>Respiratory protection</b>        | Appropriate respiratory protection should be selected and used according to the chemical nature, hazards and use of this product and safety requirements of the local jurisdiction. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be |

required.

**Thermal hazards** No information available.

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

**Environmental exposure controls** No information available.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

|                |                          |
|----------------|--------------------------|
| Physical state | Liquid                   |
| Color          | No information available |
| Odor           | No information available |
| Odor threshold | No information available |

| Property                                | Values                   | Remarks • Method |
|-----------------------------------------|--------------------------|------------------|
| Melting point / freezing point          | No data available        | None known       |
| Initial boiling point and boiling range | > 100 °C                 | None known       |
| Flammability                            | No data available        | None known       |
| Flammability Limit in Air               |                          | None known       |
| Upper flammability or explosive limits  | No data available        |                  |
| Lower flammability or explosive limits  | No data available        |                  |
| Flash point                             | > 92 °C                  | None known       |
| Autoignition temperature                | No data available        | None known       |
| Decomposition temperature               |                          | None known       |
| pH                                      | 7.5 - 8.5                | None known       |
| pH (as aqueous solution)                | No data available        | None known       |
| Kinematic viscosity                     | No data available        | None known       |
| Dynamic viscosity                       | No data available        | None known       |
| Water solubility                        | No data available        | None known       |
| Solubility(ies)                         | No data available        | None known       |
| Partition coefficient                   | No data available        | None known       |
| Vapor pressure                          | No data available        | None known       |
| Relative density                        | No data available        | None known       |
| Bulk density                            | No data available        |                  |
| Liquid Density                          | No data available        |                  |
| Relative vapor density                  | No data available        | None known       |
| Particle characteristics                |                          |                  |
| Particle Size                           | No information available |                  |
| Particle Size Distribution              | No information available |                  |

### 9.2. Other information

#### 9.2.1. Information with regard to physical hazard classes

Not applicable

#### 9.2.2. Other safety characteristics

No information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

**Reactivity** No information available.

**10.2. Chemical stability**

Stability Stable under normal conditions.

**Explosion data**

Sensitivity to mechanical impact None.

Sensitivity to static discharge None.

**10.3. Possibility of hazardous reactions**

Possibility of hazardous reactions None under normal processing.

**10.4. Conditions to avoid**

Conditions to avoid None known based on information supplied.

**10.5. Incompatible materials**

Incompatible materials None known based on information supplied.

**10.6. Hazardous decomposition products**

Hazardous decomposition products None known based on information supplied.

**SECTION 11: Toxicological information****11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008****Information on likely routes of exposure****Product Information**

Inhalation Specific test data for the substance or mixture is not available.

Eye contact Specific test data for the substance or mixture is not available.

Skin contact Specific test data for the substance or mixture is not available.

Ingestion Specific test data for the substance or mixture is not available.

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

Symptoms No information available.

**Acute toxicity****Numerical measures of toxicity**

The following ATE values have been calculated for the mixture

ATEmix (oral) 99,999.00 mg/kg

ATEmix (dermal) 99,999.00 mg/kg

ATEmix (inhalation-gas) 99,999.00 ppm

ATEmix (inhalation-vapor) 99,999.00 mg/L

ATEmix (inhalation-dust/mist) 99,999.00 mg/L

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

|                                          |                                                                   |
|------------------------------------------|-------------------------------------------------------------------|
| <b>Skin corrosion/irritation</b>         | Based on available data, the classification criteria are not met. |
| <b>Serious eye damage/eye irritation</b> | Based on available data, the classification criteria are not met. |
| <b>Respiratory or skin sensitization</b> | Based on available data, the classification criteria are not met. |
| <b>Germ cell mutagenicity</b>            | Based on available data, the classification criteria are not met. |
| <b>Carcinogenicity</b>                   | Based on available data, the classification criteria are not met. |
| <b>Reproductive toxicity</b>             | Based on available data, the classification criteria are not met. |
| <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>Aspiration hazard</b>                 | Based on available data, the classification criteria are not met. |

**11.2. Information on other hazards****11.2.1. Endocrine disrupting properties**

|                                        |                                                                   |
|----------------------------------------|-------------------------------------------------------------------|
| <b>Endocrine disrupting properties</b> | Based on available data, the classification criteria are not met. |
|----------------------------------------|-------------------------------------------------------------------|

**11.2.2. Other information**

|                              |                           |
|------------------------------|---------------------------|
| <b>Other adverse effects</b> | No information available. |
|------------------------------|---------------------------|

**SECTION 12: Ecological information**

|                              |                           |
|------------------------------|---------------------------|
| <b><u>12.1. Toxicity</u></b> | No information available. |
|------------------------------|---------------------------|

|                                                   |                           |
|---------------------------------------------------|---------------------------|
| <b><u>12.2. Persistence and degradability</u></b> | No information available. |
|---------------------------------------------------|---------------------------|

|                                               |                           |
|-----------------------------------------------|---------------------------|
| <b><u>12.3. Bioaccumulative potential</u></b> | No information available. |
|-----------------------------------------------|---------------------------|

|                                      |                           |
|--------------------------------------|---------------------------|
| <b><u>12.4. Mobility in soil</u></b> | No information available. |
|--------------------------------------|---------------------------|

|                                                        |                                                                                       |
|--------------------------------------------------------|---------------------------------------------------------------------------------------|
| <b><u>12.5. Results of PBT and vPvB assessment</u></b> | This product does not contain any substances that are assessed to be a PBT or a vPvB. |
|--------------------------------------------------------|---------------------------------------------------------------------------------------|

|                                          |                                                                   |
|------------------------------------------|-------------------------------------------------------------------|
| <b><u>12.6. Endocrine disrupting</u></b> | Based on available data, the classification criteria are not met. |
|------------------------------------------|-------------------------------------------------------------------|

properties

**12.7. Other adverse effects** No information available.

**PMT or vPvM properties** Based on available data, the classification criteria are not met.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

**Waste from residues/unused products** Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

**Contaminated packaging** Do not reuse empty containers.

## SECTION 14: Transport information

### IATA

**14.1 UN number or ID number** Not regulated  
**14.2 UN proper shipping name** Not regulated  
**14.3 Transport hazard class(es)** Not regulated  
**14.4 Packing group** Not regulated  
**14.5 Environmental hazards** Not applicable  
**14.6 Special precautions for user**  
**Special Provisions** None

### IMDG

**14.1 UN number or ID number** Not regulated  
**14.2 UN proper shipping name** Not regulated  
**14.3 Transport hazard class(es)** Not regulated  
**14.4 Packing group** Not regulated  
**14.5 Environmental hazards** Not applicable  
**14.6 Special precautions for user**  
**Special Provisions** None  
**14.7 Maritime transport in bulk according to IMO instruments** No information available

### RID

**14.1 UN number or ID number** Not regulated  
**14.2 UN proper shipping name** Not regulated  
**14.3 Transport hazard class(es)** Not regulated  
**14.4 Packing group** Not regulated  
**14.5 Environmental hazards** Not applicable  
**14.6 Special precautions for user**  
**Special Provisions** None

### ADR

**14.1 UN number or ID number** Not regulated  
**14.2 UN proper shipping name** Not regulated  
**14.3 Transport hazard class(es)** Not regulated  
**14.4 Packing group** Not regulated  
**14.5 Environmental hazards** Not applicable  
**14.6 Special precautions for user**  
**Special Provisions** None

### ADN

|                                   |                |
|-----------------------------------|----------------|
| 14.1 UN number or ID number       | Not regulated  |
| 14.2 UN proper shipping name      | Not regulated  |
| 14.3 Transport hazard class(es)   | Not regulated  |
| 14.4 Packing group                | Not regulated  |
| 14.5 Environmental hazard         | Not applicable |
| 14.6 Special precautions for user |                |
| Special Provisions                | None           |

## SECTION 15: Regulatory information

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

According to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

#### **15.1.1. EU-Regulations**

Comply with applicable regulations

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC. COMMISSION REGULATION (EU) 2020/2081 of 14 December 2020 amending Annex XVII to Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) as regards substances in tattoo inks or permanent make-up, Official Journal of the European Union as of 15th December 2020, L 423/6. Commission Regulation (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006. Not classified as dangerous according to the criteria of directive(s) 67/548/EEC and/or 1999/45/EC. Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008. Official Journal of the European Union 27.7.2012, No L 201/60. Classification EC 67/548 or EC 1999/45

#### **REACH Annex XVII (Restriction List)**

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

#### **REACH Annex XIV (Authorisation List)**

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

#### **REACH Candidate List (SVHC)**

Contains no substance(s) listed on the REACH Candidate List

#### **PIC Regulation (Prior Informed Consent)**

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

#### **POP Regulation (Persistent Organic Pollutants)**

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

#### **Ozone Regulation (1005/2009)**

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

#### **Explosives Precursors Regulation (2019/1148)**

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

#### **Drug Precursors Regulation (273/2004)**

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

#### **National regulations**

**Chemical Prohibition Ordinance (ChemVerbotsV)**

Not applicable.

**TRGS 905**

Not applicable

**European Union**

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

**Authorizations and/or restrictions on use:**

This product does not contain substances subject to authorization (Regulation (EC) No. 1907/2006 (REACH), Annex XIV) This product does not contain substances subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

**Persistent Organic Pollutants**

Not applicable

**Ozone-depleting substances (ODS) Regulation (EU) 2024/590**

Not applicable

**Explosives Precursors Marketing and Use (2019/1148)**

Not applicable.

**International Inventories**

|                      |                                                  |
|----------------------|--------------------------------------------------|
| <b>TSCA</b>          | Contact supplier for inventory compliance status |
| <b>DSL/NDSL</b>      | Contact supplier for inventory compliance status |
| <b>EINECS/ELINCS</b> | Contact supplier for inventory compliance status |
| <b>ENCS</b>          | Contact supplier for inventory compliance status |
| <b>IECSC</b>         | Contact supplier for inventory compliance status |
| <b>KECL</b>          | Contact supplier for inventory compliance status |
| <b>PICCS</b>         | Contact supplier for inventory compliance status |
| <b>AIIC</b>          | Contact supplier for inventory compliance status |
| <b>NZIoC</b>         | Contact supplier for inventory compliance status |
| <b>TCSI</b>          | Contact supplier for inventory compliance status |

**Legend:**

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory  
**DSL/NDSL** - 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  
**NZIoC** - New Zealand Inventory of Chemicals  
**TCSI** - Taiwan Chemical Substance Inventory

**15.2. Chemical safety assessment****Chemical Safety Report**

No information available

**SECTION 16: Other information****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                                           |
| AIDII     | Italian Association of 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                                                                                 |
| CLP       | Classification, Labelling and Packaging Regulation; Regulation (EC) No 1272/2008                    |
| CMR       | Carcinogen, Mutagen or Reproductive Toxicant                                                        |
| DFG       | German Research Foundation                                                                          |
| DOT       | Department of Transportation (United States)                                                        |
| DSL       | Domestic Substances List (Canada)                                                                   |
| ECHA      | European Chemicals Agency                                                                           |
| EC Number | European Community number                                                                           |
| EmS       | Emergency Schedule                                                                                  |
| ENCS      | Existing and New Chemical Substances (Japan)                                                        |
| EPA       | U.S. Environmental Protection Agency                                                                |
| EWC       | European Waste Codes                                                                                |
| 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 Organization                                                           |
| IECSC     | Inventory of Existing Chemical Substances in China                                                  |
| IMDG      | International Maritime Dangerous Goods                                                              |
| IMO       | International Maritime Organization                                                                 |
| ISO       | International Organization for Standardization                                                      |
| KECI      | Korea Existing Chemicals Inventory                                                                  |
| LC50      | Lethal Concentration to 50% of a test population                                                    |
| LD50      | Lethal Dose to 50% of a test population (Median Lethal Dose)                                        |
| MAK       | Maximum Concentration at the Workplace                                                              |
| MAL       | Measuring Technical Hygienic Air Needs                                                              |
| MARPOL    | International Convention for the Prevention of Pollution from Ships                                 |
| MDLPS     | Ministry of Labor and Social Policy                                                                 |
| 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      | Organization 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                                                            |
| REACH   | Registration, Evaluation, Authorization, and Restriction of Chemicals (REACH) Regulation (EC 1907/2006) |
| 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                                                        |
| SVHC    | Substance of very high concern                                                                          |
| TCSI    | Taiwan Chemical Substance Inventory                                                                     |
| TDG     | Transport of Dangerous Goods (Canada)                                                                   |
| TRGS    | Technical Rule for Hazardous Substances                                                                 |
| 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                                                                                    |
| C       | Carcinogen                                                                                              |
| DS      | Dermal Sensitizer                                                                                       |
| Ot      | Ototoxicant                                                                                             |
| pOt     | Ototoxicant - potential to cause hearing disorders                                                      |
| PS      | Photosensitizer                                                                                         |
| RS      | Respiratory Sensitizer                                                                                  |
| S       | Sensitizer                                                                                              |
| poS     | Sensitizer - 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                                                      |

| Classification procedure                                        |                    |
|-----------------------------------------------------------------|--------------------|
| Classification according to Regulation (EC) No. 1272/2008 [CLP] | Method Used        |
| Acute oral toxicity                                             | Calculation method |
| Acute dermal toxicity                                           | Calculation method |
| Acute inhalation toxicity - gas                                 | Calculation method |
| Acute inhalation toxicity - vapor                               | Calculation method |
| Acute inhalation toxicity - dust/mist                           | Calculation method |
| Skin corrosion/irritation                                       | Calculation method |
| Serious eye damage/eye irritation                               | Calculation method |
| Respiratory sensitization                                       | Calculation method |
| Skin sensitization                                              | Calculation method |
| Mutagenicity                                                    | Calculation method |
| Carcinogenicity                                                 | Calculation method |
| Reproductive toxicity                                           | Calculation method |
| STOT - single exposure                                          | Calculation method |

|                          |                    |
|--------------------------|--------------------|
| STOT - repeated exposure | Calculation method |
| Chronic aquatic toxicity | Calculation method |
| Acute aquatic toxicity   | Calculation method |
| Aspiration hazard        | Calculation method |
| Ozone                    | Calculation method |

**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)  
European Chemicals Agency (ECHA) Committee for Risk Assessment (ECHA\_RAC)  
European Chemicals Agency (ECHA) (ECHA\_API)  
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)

Revision date 07-Nov-2025

**Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)****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**