# SAFETY DATA SHEET

**Revision date** 02-Mar-2026 **Revision Number** 3

## 1. Identification

**Product identifier**

**Product Name** V-325 Baby Blue

**Other means of identification**

**Product Code(s)** FG00042

**UN number or ID number** UN3082

**Synonyms** None

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

**Recommended use** Use product for its intended purpose as a glaze product intended for arts and crafts purposes. This product is intended for small batch use.

**Restrictions on use**

**Details of the supplier of the safety data sheet**

**Manufacturer Address**
American Art Clay Co Inc
6060 Guion Road
Indianapolis, IN 46254-1222 USA
Toll Free: 1-800-999-5456
CustomerCare@Amaco.com

**Emergency telephone number**

**Emergency Telephone** U.S. Poison Control 1-800-222-1222

## 2. Hazard(s) identification

**Classification of the substance or mixture**

| | |
|---|---|
| Skin sensitization | Category 1 |

**Hazards not otherwise classified (HNOC)**
Not applicable

**Label elements**



Warning

**Hazard statements**
May cause an allergic skin reaction.

**Precautionary Statements - Prevention**
Avoid breathing dust, fume, gas, mist, vapors and spray
Contaminated work clothing must not be allowed out of the workplace
Wear protective gloves

**Precautionary Statements - Response**
Specific treatment (see supplemental first aid instructions on this label)
IF ON SKIN: Wash with plenty of water and soap
If skin irritation or rash occurs: Get medical advice/attention
Take off contaminated clothing and wash it before reuse

**Precautionary Statements - Disposal**
Dispose of contents and container in accordance with local, regional, national, and international regulations as applicable

**Hazards classified under paragraph (d)(1)(ii) of 1910.1200**
No information available.

**Other information**
No information available.

## 3. Composition/information on ingredients

**Substance**

Not applicable.

**Mixture**

| Chemical name | CAS No. | Weight-% | Trade secret |
|---|---|---|---|
| Kaolin | 1332-58-7 | 5 - <10 | * |
| Quartz | 14808-60-7 | 5 - <10 | * |
| C.I. Pigment Blue 72 | 68186-87-8 | 3 - <5 | * |
| Zircon | 14940-68-2 | 3 - <5 | * |
| 1,3,5-Triazine-1,3,5(2H,4H,6H)-triethanol | 4719-04-4 | 0.1 - 1 | * |

*The exact percentage (concentration) of composition has been withheld as a trade secret.

## 4. First-aid measures

**Description of first aid measures**

**General advice** Show this safety data sheet to the doctor in attendance.

**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 with soap and water. May cause an allergic skin reaction. In the case of skin irritation or allergic reactions see a physician.

**Ingestion** Rinse mouth.

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

**Symptoms** Itching. Rashes. Hives.

**Effects of Exposure** No information available.

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

**Note to physicians** May cause sensitization in susceptible persons. Treat symptomatically.

## 5. Fire-fighting measures

**Suitable Extinguishing Media** Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

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

**Specific hazards arising from the chemical** Product is or contains a sensitizer. May cause sensitization by skin contact.

**Explosion data**

**Sensitivity to mechanical impact** None.

**Sensitivity to static discharge** None.

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

## 6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures**

**Personal precautions** Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

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

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

**Methods for cleaning up** Pick up and transfer to properly labeled containers.

## 7. Handling and storage

**Precautions for safe handling**

**Advice on safe handling** Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse.

**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.

## 8. Exposure controls/personal protection

**Control Parameters**

**Exposure Limits**

| Chemical name | ACGIH TLV | OSHA PEL | NIOSH |
|---|---|---|---|
| Kaolin<br>1332-58-7 | TWA: 2 mg/m³ particulate matter containing no asbestos and <1% crystalline silica, respirable particulate matter | TWA: 15 mg/m³ total dust<br>TWA: 5 mg/m³ respirable fraction<br>(vacated) TWA: 10 mg/m³ total dust<br>(vacated) TWA: 5 mg/m³ respirable fraction | TWA: 10 mg/m³ total dust<br>TWA: 5 mg/m³ respirable dust |
| Quartz<br>14808-60-7 | TWA: 0.025 mg/m³ respirable particulate matter | TWA: 50 µg/m³<br>(vacated) TWA: 0.1 mg/m³ respirable dust<br>: (250)/(%SiO2 + 5) mppcf TWA respirable fraction<br>: (10)/(%SiO2 + 2) mg/m³ TWA respirable fraction | TWA: 0.05 mg/m³; respirable dust<br>IDLH: 50 mg/m³ respirable dust |
| C.I. Pigment Blue 72<br>68186-87-8 | TWA: 0.02 mg/m³ Co inhalable particulate matter | - | - |
| Zircon<br>14940-68-2 | STEL: 10 mg/m³ Zr<br>TWA: 5 mg/m³ Zr | TWA: 5 mg/m³ Zr<br>(vacated) TWA: 5 mg/m³ Zr<br>(vacated) STEL: 10 mg/m³ Zr | IDLH: 25 mg/m³ Zr<br>TWA: 5 mg/m³ except Zirconium tetrachloride Zr<br>STEL: 10 mg/m³ Zr |

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

**Other information on limit values** Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

**Biological occupational exposure limits**

| Chemical name | ACGIH |
|---|---|
| C.I. Pigment Blue 72<br>68186-87-8 | 15 µg/L - urine (Cobalt) - end of shift at end of workweek |

**Appropriate engineering controls**

**Engineering controls** Showers
Eyewash stations
Ventilation systems.

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

**Eye/face protection** Wear safety glasses with side shields (or goggles).

**Hand protection** Wear suitable gloves.

**Skin and body protection** Wear suitable protective clothing.

**Respiratory protection** Use appropriate respiratory protection.

## 9. Physical and chemical properties

**Information on basic physical and chemical properties**

| | |
|---|---|
| **Physical state** | Liquid |
| **Appearance** | No information available |
| **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 |
| **Boiling point (or initial boiling point or boiling range)** | No data available | 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** | No data available | None known |
| **Autoignition temperature** | 410 °C / 770 °F | None known |
| **Decomposition temperature** | No data available | None known |
| **SADT (°C)** | No data available | None known |
| **pH** | No data available | 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 |
| **Solubility** | No data available | None known |
| **Water solubility** | No data available | None known |
| **Partition coefficient n-octanol/water (log value)** | No data available | None known |
| **Vapor pressure (includes evaporation rate)** | No data available | None known |
| **Evaporation rate** | No data available | None known |
| **Density and/or 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** | | No information available |
| **Particle Size** | No data available | |
| **Particle Size Distribution** | No data available | |

**Other information**

| | |
|---|---|
| **Explosive properties** | No information available |
| **Oxidizing properties** | No information available |
| **Softening point** | No information available |
| **Molecular weight** | No information available |
| **VOC content** | No information available |
| **Liquid Density** | No information available |
| **Bulk density** | No information available |

## 10. Stability and reactivity

**Reactivity** No information available.

**Chemical stability** Stable under normal conditions.

**Possibility of hazardous reactions** None under normal processing.

**Conditions to avoid** None known based on information supplied.

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

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

## 11. Toxicological information

**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** May cause sensitization by skin contact. Specific test data for the substance or mixture is not available. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons. (based on components).

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

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

**Symptoms** Itching. Rashes. Hives.

**Acute toxicity** No information available.

**Numerical measures of toxicity**

**The following ATE values have been calculated for the mixture**

| | |
|---|---|
| **ATEmix (oral)** | 18,261.00 mg/kg |
| **ATEmix (dermal)** | 20,484.20 mg/kg |
| **ATEmix (inhalation-gas)** | 99,999.00 ppm |
| **ATEmix (inhalation-dust/mist)** | 21.56 mg/l |
| **ATEmix (inhalation-vapor)** | 99,999.00 mg/l |

**Component Information**

| Chemical name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|---|---|---|---|
| Kaolin<br>1332-58-7 | > 5000 mg/kg ( Rat ) | > 5000 mg/kg ( Rat ) | - |
| C.I. Pigment Blue 72<br>68186-87-8 | > 5000 mg/kg ( Rat ) | - | > 5.06 mg/L ( Rat ) 4 h |
| 1,3,5-Triazine-1,3,5(2H,4H,6H)-triethanol<br>4719-04-4 | = 763 mg/kg ( Rat ) | > 4000 mg/kg ( Rat ) | = 0.4 mg/L ( Rat ) 4 h<br>= 0.338 mg/L ( Rat ) 4 h |

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

**Skin corrosion/irritation** No information available.

**Serious eye damage/eye irritation** No information available.

**Respiratory or skin sensitization** May cause an allergic skin reaction.

**Germ cell mutagenicity** No information available.

**Carcinogenicity** 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 | ACGIH | IARC | NTP | OSHA |
|---|---|---|---|---|
| Quartz<br>14808-60-7 | A2 - Suspected Human Carcinogen | Group 1 - Carcinogenic to humans | Known Human Carcinogen | Present |
| C.I. Pigment Blue 72<br>68186-87-8 | A3 | Group 2B | Reasonably Anticipated | X |

**Legend**

**ACGIH (American Conference of Governmental Industrial Hygienists)**
A1 - Known Human Carcinogen
A2 - Suspected Human Carcinogen
A3 - Animal Carcinogen

**IARC (International Agency for Research on Cancer)**
Group 1 - Carcinogenic to Humans
Group 2A - Probably Carcinogenic to Humans
Group 2B - Possibly Carcinogenic to Humans

**NTP (National Toxicology Program)**
Known - Known Carcinogen
Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen

**OSHA (Occupational Safety and Health Administration of the US Department of Labor)**
X - Present

**Reproductive toxicity** No information available.

**STOT - single exposure** No information available.

**STOT - repeated exposure** No information available.

**Aspiration hazard** No information available.

**Other adverse effects** No information available.

**Interactive effects** No information available.

## 12. Ecological information

**Ecotoxicity**

| Chemical name | Algae/aquatic plants | Fish | Toxicity to microorganisms | Crustacea |
|---|---|---|---|---|
| 1,3,5-Triazine-1,3,5(2H,4H,6H)-triethanol | - | LC50: =16.07mg/L (96h, Danio rerio) | - | - |

| | | | | |
|---|---|---|---|---|
| 4719-04-4 | | | | |

**Persistence and degradability** No information available.

**Bioaccumulation**

**Component Information**

| Chemical name | Partition coefficient |
|---|---|
| 1,3,5-Triazine-1,3,5(2H,4H,6H)-triethanol<br>4719-04-4 | <-2.3<br>-2<br>-1.3 |

**Other adverse effects** No information available.

## 13. Disposal considerations

**Disposal 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.

**California Hazardous Waste Status** This product contains one or more substances that are listed with the State of California as a hazardous waste.

## 14. Transport information

**DOT**

**UN number or ID number** UN3082
**Proper shipping name** Environmentally hazardous substance, liquid, n.o.s.
**Transport hazard class(es)** 9
**Packing group** III
**Special Provisions** 8, 146, 173, 335, IB3, T4, TP1, TP29
**DOT Marine Pollutant** PP
**Marine pollutant** Frits, chemicals
**Description** UN3082, Environmentally hazardous substance, liquid, n.o.s. (Frits, chemicals), 9, III, Marine pollutant
**Emergency Response Guide Number** 171

**TDG**

**UN number or ID number** UN3082
**UN proper shipping name** Environmentally hazardous substance, liquid, n.o.s.
**Transport hazard class(es)** 9
**Packing group** III
**Special Provisions** 16, 99
**Marine pollutant name** Frits, chemicals.
**Description** UN3082, Environmentally hazardous substance, liquid, n.o.s. (Frits, chemicals), 9, III

**MEX**

**UN number or ID number** UN3082
**UN proper shipping name** Environmentally hazardous substance, liquid, n.o.s.
**Transport hazard class(es)** 9

| | |
|---|---|
| **Packing group** | III |
| **Technical Name** | Frits, chemicals |
| **Description** | UN3082, Environmentally hazardous substance, liquid, n.o.s. (Frits, chemicals), 9, III |
| **Special Provisions** | 274, 331, 335 |

**ICAO (air)**

| | |
|---|---|
| **UN number or ID number** | UN3082 |
| **UN proper shipping name** | Environmentally hazardous substance, liquid, n.o.s. |
| **Transport hazard class(es)** | 9 |
| **Packing group** | III |
| **Description** | UN3082, Environmentally hazardous substance, liquid, n.o.s. (Frits, chemicals), 9, III |
| **Special Provisions** | A97, A158, A197, A215 |

**IATA**

| | |
|---|---|
| **UN number or ID number** | UN3082 |
| **UN proper shipping name** | Environmentally hazardous substance, liquid, n.o.s. |
| **Transport hazard class(es)** | 9 |
| **Packing group** | III |
| **Technical Name** | Frits, chemicals |
| **Description** | UN3082, Environmentally hazardous substance, liquid, n.o.s. (Frits, chemicals), 9, III |
| **Special Provisions** | A97, A158, A197 |
| **ERG Code** | 9L |

**IMDG**

| | |
|---|---|
| **UN number or ID number** | UN3082 |
| **UN proper shipping name** | Environmentally hazardous substance, liquid, n.o.s. |
| **Transport hazard class(es)** | 9 |
| **Packing group** | III |
| **EmS-No.** | F-A, S-F |
| **Special Provisions** | 274, 335, 969 |
| **Marine pollutant** | P |
| **Marine Pollutant** | Frits, chemicals |
| **Description** | UN3082, Environmentally hazardous substance, liquid, n.o.s. (Frits, chemicals), 9, III, Marine pollutant |

**RID**

| | |
|---|---|
| **UN number or ID number** | UN3082 |
| **UN proper shipping name** | Environmentally hazardous substance, liquid, n.o.s. |
| **Transport hazard class(es)** | 9 |
| **Packing group** | III |
| **Classification code** | M6 |
| **Special Provisions** | 274, 335, 375, 601 |
| **Description** | UN3082, Environmentally hazardous substance, liquid, n.o.s. (Frits, chemicals), 9, III |

**ADR**

| | |
|---|---|
| **UN number or ID number** | UN3082 |
| **UN proper shipping name** | Environmentally hazardous substance, liquid, n.o.s. |
| **Transport hazard class(es)** | 9 |
| **Packing group** | III |
| **Classification code** | M6 |
| **Tunnel restriction code** | (-) |
| **Special Provisions** | 274, 335, 601, 375 |
| **Description** | UN3082, Environmentally hazardous substance, liquid, n.o.s. (Frits, chemicals), 9, III, (-) |

**ADN**

| | |
|---|---|
| **UN number or ID number** | UN3082 |
| **UN proper shipping name** | Environmentally hazardous substance, liquid, n.o.s. |
| **Transport hazard class(es)** | 9 |
| **Packing group** | III |
| **Classification code** | M6 |
| **Special Provisions** | 274, 335, 375, 601 |
| **Description** | UN3082, Environmentally hazardous substance, liquid, n.o.s. (Frits, chemicals), 9, III |

**Equipment Requirements** PP

## 15. Regulatory information

**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**

**TSCA** Contact supplier for inventory compliance status.

| Chemical name | CAS No. | Inventory Listing Status | Commercial Activity Designation |
|---|---|---|---|
| Water | 7732-18-5 | Present | Active |
| Kaolin | 1332-58-7 | Present | Active |
| Feldspar | 68476-25-5 | Present | Active |
| Quartz | 14808-60-7 | Present | Active |
| Frits, chemicals | 65997-18-4 | Present | Active |
| C.I. Pigment Blue 72 | 68186-87-8 | Present | Active |
| Zircon | 14940-68-2 | Present | Active |
| Smectite-group minerals | 12199-37-0 | Present | Active |
| Sodium carboxymethyl cellulose | 9004-32-4 | Present | Active |
| 1,3,5-Triazine-1,3,5(2H,4H,6H)-triethanol | 4719-04-4 | Present | Active |
| Ethanolamine | 141-43-5 | Present | Active |

**DSL/NDSL** Contact supplier for inventory compliance status.
**EINECS/ELINCS** Contact supplier for inventory compliance status.
**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.
**NZIoC** Contact supplier for inventory compliance status.
**TCSI** 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 and Evaluated Chemical Substances
**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

**US Federal Regulations**

**SARA 313**
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

| Chemical name | SARA 313 - Threshold Values % |
|---|---|
| Feldspar - 68476-25-5 | 1.0 |

**SARA 311/312 Hazard Categories**
Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

**CWA (Clean Water Act)**
This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

| Chemical name | CWA - Reportable Quantities | CWA - Toxic Pollutants | CWA - Priority Pollutants | CWA - Hazardous Substances |
|---|---|---|---|---|
| C.I. Pigment Blue 72<br>68186-87-8 | - | X | - | - |

**CAA (Clean Air Act)**
This product does not contain any substances regulated as pollutants pursuant to Clean Air Act (CAA).

**CERCLA**
This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

**US State Regulations**

**California Proposition 65**
This product contains the following Proposition 65 chemicals:

| Chemical name | California Proposition 65 |
|---|---|
| Quartz | Carcinogen |

**U.S. State Right-to-Know Regulations**

| Chemical name | New Jersey | Massachusetts | Pennsylvania |
|---|---|---|---|
| Water<br>7732-18-5 | - | - | X |
| Feldspar<br>68476-25-5 | X | - | X |
| Kaolin<br>1332-58-7 | X | X | X |
| Quartz<br>14808-60-7 | X | X | X |
| C.I. Pigment Blue 72<br>68186-87-8 | X | - | X |
| Ethanolamine<br>141-43-5 | X | X | X |

**U.S. EPA Label Information**

**EPA Pesticide Registration Number** Not applicable

## 16. Other information

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **NFPA** | **Health hazards** 2 | **Flammability** 1 | **Instability** 0 | **Special hazards** - |
| **HMIS** | **Health hazards** 2 | **Flammability** 0 | **Physical hazards** 0 | **Personal protection** - |

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

*No information available*

**Legend**

| | |
|---|---|
| ACGIH | The American Conference of Governmental Industrial Hygienists (ACGIH) Documentation of Threshold Limit Values and Biological Indices (latest edition) |
| ADN | Obsolete European Agreement on International Transport of Dangerous Goods by Road (ADN) |
| ADR | Agreement concerning the International Carriage of Dangerous Goods by Road (Europe) |
| AIIC | Australian Inventory of Industrial Chemicals |
| P240 - Ground and bond container and receiving equipment | Acute Toxicity Estimate |
| P263 - Avoid contact during pregnancy and while nursing | ASTM (formerly known as the American Society for Testing and Materials) |
| bar | Biological Reference Values for Chemical Compounds in the Work Area |
| Paste | Biological tolerance values for occupational exposure |
| MEX | Biological exposure limits |
| European Export/Import Restrictions per (EC) 649/2012 - Annex Number | Body weight |
| Ceiling | Maximum limit value |
| CMR Effects | CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction) |
| DOT | DOT (Department of Transportation) |
| DSL | Canadian Domestic Substances List (DSL) |
| EmS | Emergency Schedule |
| ENCS | ENCS (Existing and New Chemical Substances) |
| EPA | EPA (Environmental Protection Agency) |
| GHS | The Globally Harmonized System of Classification and Labeling of Chemicals (GHS) |
| HMIS | Hazardous Materials Identification System |
| IARC | IARC - International Agency for Research on Cancer |
| IATA | (IATA) International Air Transport Association |
| IBCs | International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk |
| ICAO | OBSOLETE The transportation of primary lithium cells and batteries is regulated by the International Civil Aviation Organization, International Air Transport Association, International Maritime Dangerous Goods Code and the US Department of Transportation. The batteries must meet the following criteria for shipment: 1. Air shipments must meet the requirements listed in Special Provision A45 of the International Air Transport Association Dangerous Goods Regulations. 2. Meet the requirements for the US Department of Transportation listed in 49 CFR 173.185. 3. The transport of primary lithium batteries is prohibited aboard passenger aircraft. Refer to the Federal Register December 15, 2004 (Hazardous Materials; Prohibited on the Transportation of Primary Lithium Batteries and Cells Aboard Passenger Aircraft; Final Rule) |
| IECSC | China (IECSC) |
| IMDG | Sea transport (IMDG) |
| Directive 84/449/EEC, Annex, C.10 | International Maritime Organization |
| Directive 84/449/EEC, Annex, A.7 | ISO (The International Organization for Standardization) |
| KECL | South Korea (KECL) |
| LC50 | Lethal Concentration to 50% of a test population |
| LD50 | Lethal Dose to 50% of a test population (Median Lethal Dose) |
| Harmful Substances - names to be indicated on the label; Industrial Safety and Health Law enforcement order article 18 (related to Industrial Safety and Health Law article 57) | International Convention for the Prevention of Pollution from Ships |
| NFPA | National Fire Protection Association |
| NIOSH | **NIOSH** - National Institute for Occupational Safety and Health |

| | |
|---|---|
| n.o.s. | Not Otherwise Specified |
| NOAEC | No Observed Adverse Effect Concentration |
| NOAEL | NOAEL (No observed adverse effect level) |
| Other names | No Observable Effect Loading Rate |
| NTP | **NTP** - National Toxicology Program |
| NZIoC | NZIoC - New Zealand Inventory of Chemicals |
| Harmful Substances - names to be indicated on the label; Industrial Safety and Health Law enforcement order article 18 (related to Industrial Safety and Health Law article 57) | OECD (Organization for Economic Cooperation and Development) |
| OEL | Occupational exposure limits |
| OSHA | OSHA (Occupational Safety and Health Administration of the US Department of Labor) |
| PBT | Persistent, Bioaccumulative and Toxic substance |
| PICCS | PICCS - Philippines Inventory of Chemicals and Chemical Substances |
| Spillage instructions | Persistent, Mobile and Toxic |
| Terrestrial ecotoxicity | Personal protective equipment |
| Canada WHMIS 2015 which includes the amended Hazardous Products Act (HPA) and the Hazardous Products Regulation (HPR) | Quantitative Structure Activity Relationships [QSAR] |
| RID | Agreement concerning the International Carriage of Dangerous Goods by Rail (Europe) |
| Diagnostic cycle: 6 months | Self-Accelerating Decomposition Temperature |
| SAR | Structure-activity relationship |
| SARA | Superfund Amendments and Reauthorization Act |
| SDS | Safety Data Sheet |
| SL | Surface Limit |
| STEL | **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 | TDG (Transport of Dangerous Goods) Canada |
| TSCA | TSCA (Toxic Substances Control Act) |
| TWA | Time-Weighted Average |
| The product does not contain any substance(s) classified as PBT or vPvB above the threshold of declaration | United Nations |
| VOC | Volatile organic compounds |
| vPvB | Very Persistent and Very Bioaccumulative |
| vPvM | Very Persistent and Very Mobile |
| As | Allergenic substance |
| 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 |

**Key literature references and sources for data used to compile the SDS**
Agency for Toxic Substances and Disease Registry (ATSDR)
U.S. Environmental Protection Agency ChemView Database

European Food Safety Authority (EFSA)
EPA (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)
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)
National Toxicology Program (NTP)
New Zealand's Chemical Classification and Information Database (CCID)
Organization for Economic Co-operation and Development Environment, Health, and Safety Publications
Organization for Economic Co-operation and Development High Production Volume Chemicals Program
Organization for Economic Co-operation and Development Screening Information Data Set
World Health Organization

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**Disclaimer**

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**End of Safety Data Sheet**