# SAFETY DATA SHEET
# DE100™

## 1. IDENTIFICATION

**PRODUCT IDENTIFIERS**

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|---|---|
| **PRODUCT NAME** | DE100™ |
| **OTHER NAMES** | Amorphous silica, siliceous mineral |
| **PRODUCT CODES** | APP |
| **RECOMMENDED USES** | Stockfeed additive |

**DETAILS OF MANUFACTURER**

| | |
|---|---|
| **ORGANISATION** | BOS WHOLESALE |
| **LOCATION** | 93 Main St<br>Kandanga QLD 4570<br>Australia |
| **TELEPHONE** | PH: 07 5484 3771 (same for emergency) |
| **EMAIL** | EMAIL tim@kandanga.com.au |
| **EMERGENCY TELEPHONE** | |

## 2. HAZARD IDENTIFICATION

**GHS CLASSIFICATION**
Carcinogenicity – category 1A
Specific target organ toxicity (repeated exposure) – category 1

**GHS LABEL ELEMENTS**

**HAZARD**

May cause cancer by inhalation
Causes damage to the lungs through prolonged exposure if inhaled

**PREVENTION**
Read label before use
Do not handle until all safety precautions have been read and understood
Do not breathe dust
Wash hands thoroughly after handling
Do not eat, drink or smoke when using this product
Use personal protective equipment as required

**RESPONSE**
IF exposed or concerned: Get medical advice / attention or if you feel unwell

**STORAGE**
Store locked up

**DISPOSAL**
Dispose of contents/container in accordance with local, regional, national and international regulations

## 3. COMPOSITION AND INFORMATION ON INGREDIENTS

| INGREDIENT | CAS NUMBER | PROPORTION |
|---|---|---|
| Amorphous silica and other mineral oxides | 61790-53-2 | >99% |
| Quartz, Respirable fraction ($SiO_2$) | 14808-60-7 | <1% |

## 4. FIRST AID MEASURES

**DESCRIPTION OF FIRST AID MEASURES**

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| **EYE CONTACT** | Flush the contaminated eye(s) with lukewarm, gently flowing water. If irritation persists, seek medical advice. |
| **SKIN CONTACT** | If skin contact occurs, remove contaminated clothing and wash skin with running water. If irritation persists, seek medical advice. |
| **INGESTION** | No known adverse effects if ingested in small quantities. If irritation persists, seek medical advice. |
| **INHALATION** | Remove the source of contamination or move to fresh air. If irritation persists, seek medical advice. |
| **TREATMENT** | Treat symptomatically based on individual reactions of patient and judgement of doctor. |

## 5. FIRE FIGHTING MEASURES

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| **EXTINGUISHING MEDIA** | The material is non-combustible. Use appropriate fire extinguisher for the surrounding environment. |
| **SPECIFIC HAZARDS ARISING FROM THE CHEMICAL** | Not applicable, the material is non-combustible. |
| **SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIRE-FIGHTERS** | Not applicable, the material is non-combustible. |
| **HAZCHEM CODE** | None allocated |

## 6. ACCIDENTAL RELEASE MEASURES

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|---|---|
| **PERSONAL PRECAUTIONS** | Personal protective equipment as per section 8 is recommended for all personnel involved with the clean-up, and within a poorly ventilated environment. |
| **EMERGENCY PROCEDURES** | Not applicable, material is inert. |
| **ENVIRONMENTAL PRECAUTIONS** | Material does not present environmental concerns. |
| **METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP** | Contain and dampen spilled material to avoid airborne dust. Sweep, shovel, or use an industrial vacuum cleaner to remove material and place in container for use or disposal. |

## 7. HANDLING AND STORAGE

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|---|---|
| **PRECAUTIONS FOR SAFE HANDLING** | Avoid handling practices that promote dust generation. Repair or dispose of broken containers and packaging. |
| **CONDITIONS FOR SAFE STORAGE** | Store locked up in a cool, dry, well-ventilated area to maintain packaging integrity. Keep containers and packaging sealed when not in use. Do not store near hydrofluoric acid. |

# 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

## CONTROL PARAMETERS

### EXPOSURE LIMITS

| | | |
|---|---|---|
| Amorphous silica | 10 mg/m$^3$ TWA* | NES, ASCC, NIOSH REL |
| | 6 mg/m$^3$ TWA* | NIOSG REL, Cal/OSHA PEL |
| Quartz, respirable fraction ($SiO_2$) | 0.05 mg/m$^3$ TWA* | NES, ASCC, OSHA, NIOSH REL |

*Time weighted average exposure standard (TWA) means the average airborne concentration of a substance over an eight-hour working day, for a five-day working week. A person conducting a business or undertaking must ensure that a worker is not exposed to airborne contaminants above the workplace exposure standard.

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| **ENGINEERING CONTROLS** | Use in well-ventilated areas, or use of local exhaust ventilation is recommended for poorly ventilated areas.<br>Carry out work so to minimise dust generation and exposure to dust |
| **BIOLOGICAL LIMITS** | No data available. |

## PERSONAL PROTECTIVE EQUIPMENT

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|---|---|
| **EYE** | No additional requirements. Recommended goggles with side shields to prevent eye irritation. |
| **SKIN** | No additional requirements. |
| **RESPIRATORY** | Use of N95 filtering facepieces or better filters are recommended for airborne exposures to crystalline silica at concentrations less than or equal to 0.5 mg/m$^3$. Use of powered air-purifying respirator (PAPR) and M-307 respiratory hardhat recommended for airborne exposures to crystalline silica at concentrations up to 1.25 mg/m$^3$. Use of air-purifying full face reusable respirators recommended for airborne exposures to crystalline silica at concentrations greater than 1.25 mg/m$^3$. |

# 9. PHYSICAL AND CHEMICAL PROPERTIES

| | |
|---|---|
| **Appearance** | Off white |
| **Odour** | Odourless |
| **Odour threshold** | No data available |
| **pH (20°C, 1:5 water)** | 8 - 9 |
| **Melting point** | No data available |
| **Freezing point** | No data available |
| **Boiling point** | No data available |
| **Boiling range** | No data available |
| **Flash point** | No data available |
| **Evaporation rate** | No data available |
| **Flammability (solid, gas)** | No data available |
| **Upper explosive limit** | No data available |
| **Lower explosive limit** | No data available |
| **Vapour pressure** | No data available |
| **Vapour density** | No data available |
| **Relative density** | 2.0 |
| **Solubility** | Low solubility in water |
| **Auto-ignition temperature** | No data available |

| | |
|---|---|
| **Decomposition temperature** | No data available |
| **Viscosity** | No data available |

## 10. STABILITY AND REACTIVITY

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|---|---|
| **REACTIVITY** | Not applicable, material is inert. |
| **CHEMICAL STABILITY** | Not applicable, material is inert. |
| **POSSIBILITY OF HAZARDOUS REACTIONS** | Not applicable, material is inert. |
| **CONDITIONS TO AVOID** | Not applicable, material is inert. |
| **INCOMPATIBLE MATERIALS** | Silica containing materials may react with hydrofluoric acid. |
| **HAZARDOUS DECOMPOSITION PRODUCTS** | Not applicable, material is inert. |

## 11. TOXICOLOGICAL INFORMATION

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|---|---|
| **ACUTE TOXICITY** | No data available. |
| **SKIN CORROSION/IRRITATION** | May cause irritation to skin. |
| **EYE DAMAGE/IRRITATION** | May cause irritation to eyes. |
| **RESPIRATORY SENSITISATION** | Inhalation can cause irritation to the respiratory tract. |
| **GERM CELL MUTAGENICITY** | No data available. |
| **CARCINOGENICITY** | Amorphous silica is not classifiable as to its carcinogenicity to humans (IARC Group 3).<br>Quartz, ($SiO_2$), is classified as an IARC Category 1 carcinogen within the respirable fraction.<br>Test data on the mixture provides sufficient evidence that there is < 1% respirable crystalline silica. |
| **REPRODUCTIVE TOXICITY** | No data available. |
| **CHRONIC EFFECTS** | Prolonged or repeated exposure to this material's dust, or any nuisance dust, may result in irritation to the eyes and respiratory tract. As this product may contain traces of respirable crystalline silica, respiratory equipment (section 8) is required for exposure over the action limit of 25 µg/$m^3$ (OSHA). |

## 12. ECOLOGICAL INFORMATION

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|---|---|
| **ECOTOXICITY** | No information available. |
| **PERSISTENCE AND DEGRABILITY** | No information available. |
| **BIOACCUMULATIVE POTENTIAL** | No information available. |
| **MOBILITY IN SOIL** | No information available. |
| **OTHER ADVERSE EFFECTS** | No information available. |

## 13. DISPOSAL CONSIDERATIONS

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|---|---|
| **DISPOSAL CONTAINERS AND METHODS** | Waste material to be disposed of at an approved municipal landfill or land application site. No special containers are required. |
| **PACKAGING DISPOSAL** | Dispose of in accordance with applicable local, state, and federal regulations. |

## 14. TRANSPORT INFORMATION

**ROAD & RAIL**

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|---|---|
| | Not defined as a Dangerous Good by the Australian Code for the Transport of Dangerous Goods by Road & Rail |
| **SEA** | Not a Dangerous Good according to the IMDG Code |
| **AIR** | Not a Dangerous Good according to the IATA Dangerous Good Regulations |
| **UN NUMBER** | None allocated |
| **PROPER SHIPPING NAME** | None allocated |
| **TRANSPORT HAZARD CLASS** | None allocated |
| **SUBSIDIARY RISK** | None allocated |
| **PACKING GROUP** | None allocated |
| **HAZCHEM** | None allocated |
| **SPECIAL PROVISIONS** | None allocated |

## 15. REGULATORY INFORMATION

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|---|---|
| **POISONS SCHEDULE** | Not scheduled (SUSMP) |
| **AICS** | Listed - Chemical identified as low concern to human health by application of expert validated rules |

## 16. OTHER INFORMATION

**INDICATION OF CHANGES**

| | |
|---|---|
| **ORIGINAL ISSUE DATE** | 08/09/24 |
| **REVISION DATE** | 19/10/22 |
| **REVISION NUMBER** | 12 |
| **REASON FOR ISSUE** | Update |

**ABBREVIATIONS OR ACRONYMS USED**

| | |
|---|---|
| AICS | Australian Inventory of Chemical Substances |
| ASCC | Australian Safety and Compensation Comission |
| CAS | Chemical Abstracts Service |
| GHS | Globally Harmonized System of classification and labelling |
| IARC | International Agency for Research on Cancer |
| IATA | International Air Transport Association |
| IMDG | International Maritime Dangerous Goods |
| NES | National Occupational Exposure Standard |
| NIOSH | National Institute for Occupation Safety and Health |
| OSHA | Occupational Safety and Health Administration |
| PAPR | Powered air-purifying respirator |
| REL | Recommended exposure limit |
| STOT | Specific target organ toxicity |
| SUSMP | Standard for the Uniform Scheduling of Medicines and Poisons |
| TWA | Time weighted average |