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# *SAFETY DATA SHEET – Celite / Diatomite*

## 1. IDENTIFICATION

| | |
|---|---|
| **Revision Date** | July 2023 (*valid for 5 years from this date)* |
| **Product Name** | Diatomaceous Earth |
| **Other Names** | Celite, Diatomite |
| **Uses** | Filtration aid. |
| **Contact Information** | Chlorine Discounters<br>43 Clapham Road, Regents Park NSW 2143<br>Phone: 02-96454433<br>Fax: 02-96454030<br>Email:info@chlorinediscounters.com.au<br>W: www.chlorinediscounters.com.au |
| **Emergency Contact** | Managing Director or Operations Manager |

## 2. HAZARD IDENTIFICATION

| | |
|---|---|
| **Poisons Schedule (Aust)** | Not scheduled |
| **Globally Harmonised System** | |
| **Hazard Classification** | Hazardous according to the criteria of the Globally Harmonised System of Classification and Labelling of Chemicals (GHS) |
| **Hazard Categories** | Specific Target Organ Toxicity (Repeated Exposure) - Category 2 |
| **Pictograms** | |



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|---|---|---|
| **Signal Word** | Warning | |
| **Hazard Statements** | H373 | May cause damage to lungs through prolonged or repeated exposure via ingestion, skin contact, eye contact or inhalation. |

**Precautionary Statements**

| | | |
|---|---|---|
| **Prevention** | P260 | Do not breathe fume/gas/mist/vapours/spray**.** |
| **Response** | P314 | Get medical advice/attention if you feel unwell. |
| **Disposal** | P501 | Dispose of contents/container in accordance with local / regional / national / international regulations. |
| **National Transport Commission (Australia)** | | Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code) |
| **Dangerous Goods Classification** | NOT Dangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code) | |

# 3. COMPOSITION / INFORMATION ON INGREDIENTS

**Ingredients**

| Chemical Entity | CAS Number | Proportions (%) |
|---|---|---|
| DIATOMACEOUS EARTH | [61790-53-2] | >99.9 |
| Cristobalite | 14464-46-1 | <40 % |
| Quartz | 14808-60-7 | <4.0 % |

# 4. FIRST AID MEASURES

Description of necessary measures according to routes of exposure

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| **Swallowed** | Rinse mouth with water. Give plenty of water to drink provided victim is conscious. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Seek medical attention if symptoms appear. |
| **Eye** | Immediately flush eyes with plenty of water for 15 minutes, holding eyelids open. In all cases of eye contamination, it is a sensible precaution to seek medical advice. |
| **Skin** | If skin contact occurs, remove any contaminated clothing and wash skin with running water. If irritation occurs, seek medical advice. |
| **Inhaled** | Remove victim from exposure to fresh air. If not breathing, apply artificial respiration. If breathing is difficult, give oxygen. Seek medical attention. |
| **Advice to Doctor** | Treat symptomatically based on individual reactions of patient and judgement of doctor. |
| **Medical Conditions Aggravated by Exposure** | No information available on medical conditions aggravated by exposure to this product. |

# 5. FIRE FIGHTING MEASURES

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|---|---|
| **General Measures** | Clear fire area of all non-emergency personnel. Stay upwind. Keep out of low areas. Eliminate ignition sources. Move fire exposed containers from fire area if it can be done without risk. |
| **Flammability Conditions** | Product is a non-flammable solid. |
| **Extinguishing Media** | Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. |
| **Fire and Explosion Hazard** | Non-combustible solid. |
| **Hazardous Products of Combustion** | Silicon oxides |
| **Special Fire Fighting Instructions** | Do NOT allow firefighting water to reach waterways, drains or sewers. Store firefighting water for treatment. |
| **Personal Protective Equipment** | Fire fighters should wear a positive-pressure self-contained breathing apparatus (SCBA) and protective firefighting clothing (includes firefighting helmet, coat, trousers, boots and gloves). |
| **Flash Point** | No Data Available |
| **Lower Explosion Limit** | No Data Available |
| **Upper Explosion Limit** | No Data Available |
| **Auto Ignition Temperature** | No Data Available |
| **Hazchem Code** | No Data Available |

# 6. ACCIDENTAL RELEASE MEASURES

| | |
|---|---|
| **General Response** | Procedure Avoid accidents, clean up immediately. May be slippery when spilt.Eliminate all sources of ignition. Increase ventilation. Avoid generating dust. Stop leak if safe to do so. Isolate the danger area. Use clean, non-sparking tools and equipment. Adopt the dust suppression measures, eg: to spray it with water. |
| **Clean Up Procedures** | Contain and sweep/shovel up spills with dust binding material or use an industrial vacuum cleaner. Transfer to a suitable, labelled container and dispose of promptly. |
| **Containment** | Stop leak if safe to do so. Isolate the danger area. |
| **Environmental Precautionary Measures** | Do NOT let product reach drains or waterways. If product does enter a waterway, advise the Environmental Protection Authority or your local Waste Management. |
| **Evacuation Criteria** | Evacuate all unnecessary personnel. |
| **Personal Precautionary Measures** | Personnel involved in the clean-up should wear full protective clothing as listed in section 8. |

# 7. HANDLING AND STORAGE

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| **Handling** | Ensure an eye bath and safety shower are available and ready for use. Observe good personal hygiene practices and recommended procedures. Wash thoroughly after handling. Take precautionary measures against static |

| | |
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| | discharges by bonding and grounding equipment. Avoid contact with eyes, skin and clothing. Do not inhale product dust/fumes. |
| **Storage** | Store in a cool, dry, well-ventilated area. Keep containers tightly closed when not in use. Inspect regularly for deficiencies such as damage or leaks. Protect against physical damage. Store away from incompatible materials as listed in section 10. This product is not classified dangerous for transport according to The Australian Code for the Transport of Dangerous Goods By Road and Rail. |
| **Container** | Store in original packaging as approved by manufacturer |

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

| | |
|---|---|
| **General** | The following exposure standard has been established by the Safe Work Australia (SWA): Maximum allowable concentration: Workshop air contains more than 10% of free silica dust diatomaceous earth maximum allowable concentration of 2mg/m3; shop air contains less than 10% of free silica dust diatomaceous earth maximum allowable concentration of 10mg/m3<br><br>NOTE: The exposure value at the TWA is the average airborne concentration of a particular substance when calculated over a normal 8 hour working day for a 5 day working week. These exposure standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept to as low a level as is workable. These exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity. |
| **Exposure Limits** | No Data Available |
| **Biological Limits** | No information available on biological limit values for this product. |
| **Engineering Measures** | A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. |
| **Personal Protection Equipment** | RESPIRATOR: If the allowable exposure range is lower than 10 times, use N95 one-quarter or half large respiratory mask; If the allowable exposure range is lower than 50 times, use large respiratory mask with N95 filter; If the allowable exposure range is lower than 200 times, use positive pressure particle cleaning-cartridge air respirator with N95 filter; If the allowable exposure range is higher than 200 times, use large mask continual supplied-air respirator (AS1715/1716).<br>EYES: Goggles with side shields are preferred to prevent eye irritation (AS1336/1337).<br>HANDS: Not necessary in general (AS2161).<br>CLOTHING: Long-sleeved protective clothing and safety footwear (AS3765/2210). |
| **Work Hygienic Practices** | No Data Available |

## 9. PHYSICAL AND CHEMICAL PROPERTIES

| | |
|---|---|
| **Physical State** | Solid |
| **Odour** | Odourless |
| **Colour** | White |

| | |
|---|---|
| **pH** | 9 - 10.5 |
| **Vapour Pressure** | No Data Available |
| **Relative Vapour Density** | No Data Available |
| **Boiling Point** | No Data Available |
| **Freezing Point** | No Data Available |
| **Specific Gravity** | No Data Available |
| **Flash Point** | No Data Available |
| **Bulk Density** | No Data Available |
| **Decomposition Temperature** | No Data Available |
| **Appearance** | White powder |
| **Auto Ignition Temp** | No Data Available |
| **Potential for Dust Explosion** | No Data Available |
| **Fast or Intensely Burning Characteristics** | No Data Available |

## 10. STABILITY AND REACTIVITY

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|---|---|
| **Chemical Stability** | Product is stable under normal conditions of use, storage and temperature. |
| **Conditions to Avoid** | Avoid excessive heat, direct sunlight, static discharges, generating dust, moisture and high temperatures. |
| **Materials to Avoid** | Strong acids, Hydrogen fluoride. |
| **Hazardous Decomposition Products** | When involved in a fire, this product may generate irritating fumes. |
| **Hazardous Polymerisation** | Will not occur |

## 11. TOXICOLOGICAL INFORMATION

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|---|---|
| **General Information** | This product contains crystalline silica (CS), which is considered a hazard by inhalation. IARC has classified inhalation of CS as a carcinogen for humans (Group 1). CS is listed by NTP as a known human carcinogen. Inhalation of CS is also a known cause of silicosis, a noncancerous lung disease., Prolonged inhalation of crystalline silica may result in silicosis, a disabling pulmonary fibrosis characterized by fibrotic changes and miliary nodules in the lungs, a dry cough, shortness of breath, emphysema, decreased chest expansion, and increased susceptibility to tuberculosis. In advanced stages, loss of appetite, pleuritic pain, and total incapacity to work. Advanced silicosis may result in death due to cardiac failure or destruction of lung tissue. Crystalline silica is classified as group 1 "known to be carcinogenic to humans" by IARC and "sufficient evidence" of carcinogenicity by the NTP., The chronic health risks are associated with respirable particles of 3-4 um over protracted periods of time. Currently, there is a limited understanding of the mechanisms of quartz toxicity, including its mechanisms for lung carcinogenicity. Additional studies are needed to determine whether the cell transforming activity of quartz is related to its carcinogenic potential. Respirable silica may cause immune system disorders, increased risk to develop pulmonary tuberculosis, and increased incidence of kidney disease. |

| | |
|---|---|
| | Liver - Irregularities - Based on Human Evidence (Silicon dioxide)<br>Liver - Irregularities - Based on Human Evidence (Quartz) |
| **Eye Irritant** | May be an eye irritant. Exposure to the dust may cause discomfort due to particulate nature. May cause physical irritation to the eyes. |
| **Inhalation** | May cause damage to organs through prolonged or repeated exposure if inhaled. |
| **Carcinogen Category** | No Data Available |

## 12. ECOLOGICAL INFORMATION

| | |
|---|---|
| **Eco-toxicity** | It is generally considered inertia. The product used will show enormously different properties with different contamination, there for special consideration should be made. |
| **Persistence/Degradability** | No information available on persistence/degradability for this product. |
| **Mobility** | No information available on mobility for this product. |
| **Environmental Fate** | Avoid contaminating waterways, drains and sewers. |
| **Bioaccumulation Potential** | No information available on bioaccumulation for this product. |
| **Environmental Impact** | No Data Available |

## 13. DISPOSAL CONSIDERATIONS

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|---|---|
| **General Information** | Dispose of in accordance with all local, state and federal regulations. All empty packaging should be disposed of in accordance with Local, State, and Federal Regulations or recycled/reconditioned at an approved facility. |
| **Special Precautions for Land Fill** | Contact a specialist disposal company or the local waste regulator for advice. |

## 14. TRANSPORT INFORMATION

**Land Transport (Australia)**

| | |
|---|---|
| **Regulation Name** | **ADG** |
| **UN Number** | Not applicable. |
| **Shipping Name** | DIATOMACEOUS EARTH |
| **Dangerous Goods Class** | Not applicable. |
| **Subsidiary Risk** | Not applicable. |
| **Pack Group** | Not applicable. |
| **Precaution for User** | No data available. |
| **Hazchem Code** | N/A |
| **EPG** | Not applicable. |
| **Special Provision** | Not applicable. |
| **National Transport Commission (Australia)** | Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code) |
| **Dangerous Goods Classification** | NOT Dangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code) |

# 15. REGULATORY INFORMATION

| | |
|---|---|
| **General Information** | No Data Available |
| **Poisons Schedule (Aust)** | Not scheduled |

**National/Regional Inventories**

| | |
|---|---|
| **Australia (AICS)** | Listed |

# 16. OTHER INFORMATION

| | |
|---|---|
| **Literature References** | No data available. |
| **Sources for Data** | No data available. |

**Legend to Abbreviations and Acronyms**

| | |
|---|---|
| **<** | less than |
| **<** | greater than |
| **ADG** | Australian Dangerous Goods Code |
| **AICS** | Australian Inventory of Chemical Substances |
| **CAS** | Chemical Abstracts Service (Registry Number) |
| **cm2** | square centimeters |
| **CO2** | Carbon Dioxide |
| **COD** | Chemical Oxygen Demand |
| **deg C ( 'C )** | degrees Celsius |
| **ERMA** | Environmental Risk Management Authority |
| **G** | gram |
| **g/cm3** | grams per cubic centimetre |
| **g/l** | grams per litre |
| **HSNO** | Hazardous Substance and New Organism |
| **IATA** | International Air Transport Association Dangerous Goods Regulations |
| **IDLH** | Immediately Dangerous to Life and Health |
| **IMDG** | International Maritime Dangerous Goods Code |
| **Immiscible** | liquids are insoluble in each other |
| **Kg** | kilogram |
| **kg/m3** | kilograms per cubic metre |
| **LC50** | LC stands for lethal concentration. LC50 is the concentration of a material in air which causes the death of 50% (one half) of a group of test animals. The material is inhaled over a set period of time, usually 1 or 4 hours. |
| **LD50** | LD stands for Lethal Dose. LD50 is the amount of a material, given all at once, which causes the death of 50% (one half) of a group of test animals |
| **Ltr** | Litre |

| | |
|---|---|
| **m3** | cubic metre |
| **mbar** | millibar |
| **mg** | milligram |
| **mg/24H** | milligrams per 24 hours |
| **mg/kg** | milligrams per kilogram |
| **mg/m3** | milligrams per cubic metre |
| **Misc** | miscible |
| **Miscible** | liquids form one homogeneous liquid phase regardless of the amount of either component present |
| **Mm** | millimetre |
| **mPa.s** | milli Pascal per second |
| **N/A** | Not Applicable |
| **NOHSC** | National Occupational Health and Safety Commission |
| **OECD** | Organization for Economic Co-operation and Development |
| **PEL** | Permissible Exposure Limit |
| **Ppb** | parts per billion |
| **Ppm** | parts per million |
| **ppm/2h** | parts per million per 2 hours |
| **ppm/6h** | parts per million per 6 hours |
| **RCP** | Reciprocal Calculation Procedure |
| **STEL** | Short Term Exposure Limit |
| **TLV** | Threshold Limit Value |
| **Tne** | tonne |
| **TWA** | Time Weighted Average |
| **ug/24H** | micrograms per 24 hours |
| **UN** | United Nations (number) |
| **Wt** | weight |

This SDS summarises Chlorine Discounters best knowledge of the health and safety hazard information of the selected substance and how to safely handle the selected substance in the workplace however Chlorine Discounters expressly disclaims that the SDS is a representation or guarantee of the chemical specifications for the substance.

Each user should read the SDS and consider the information in the context of how the selected substance will be handled and used in the workplace including its use in conjunction with other substances.