# 1. MATERIAL AND SUPPLY COMPANY IDENTIFICATION

Product name: ADVANCED DESCALER

|  |  |
| --- | --- |
| **Synonyms** | **Product Code** |
| Descaler | 145 |

**Recommended use:** Descaling agent.

**Supplier Name CLEAN PLUS CHEMICALS PTY LTD**

**Address** 16 George Young Street AUBURN NSW 2144

**Telephone** 02 9738 7444

**Emergency** 1800 201 700

**Email** customerservice@cleanplus.com.au

**Web Site** www.cleanplus.com.au

**SDS Date** 24 MAY 2024 Version 1.3

# 2. HAZARDS IDENTIFICATION

This material is hazardous according to health criteria of Safe Work Australia.

|  |
| --- |
|  |

**Signal Word**

Danger

**Hazard Classifications**

Skin Corrosion/Irritation - Category 1B

Serious Eye Damage/Irritation - Category 1

**Hazard Statement**

|  |  |
| --- | --- |
| H314 | Causes severe skin burns and eye damage. |

**Prevention Precautionary Statements**

|  |  |
| --- | --- |
| P102 | Keep out of reach of children. |
| P103 | Read label before use. |
| P260 | Do not breathe dust, fume, gas, mist, vapours or spray. |
| P264 | Wash hands, face and all exposed skin thoroughly after handling. |
| P280 | Wear protective clothing, gloves, eye/face protection and suitable respirator. |

**Response Precautionary Statements**

|  |  |
| --- | --- |
| P101 | If medical advice is needed, have product container or label at hand. |
| P301+P330+P331 | IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. |
| P303+P361+P353 | IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. |
| P363 | Wash contaminated clothing before reuse. |
| P304+P340 | IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. |
| P305+P351+P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P310 | Immediately call a POISON CENTRE or doctor/physician. |

**Storage Precautionary Statement**

|  |  |
| --- | --- |
| P405 | Store locked up. |

**Disposal Precautionary Statement**

|  |  |
| --- | --- |
| P501 | Dispose of contents/container in accordance with local, regional, national and international regulations. |

**Poison Schedule:** S6. Poison

**DANGEROUS GOOD CLASSIFICATION**

Classified as Dangerous Goods by the criteria of the “Australian Code for the Transport of Dangerous Goods by Road & Rail” and the “New Zealand NZS5433: Transport of Dangerous Goods on Land”.

**Dangerous Goods Class:** 8

# 3. COMPOSITION INFORMATION

|  |  |  |
| --- | --- | --- |
| CHEMICAL ENTITY | CAS NO | PROPORTION |
| Phosphoric acid | 7664-38-2 | 30 - 60 % |
| Ingredients determined to be non-hazardous |  | Balance |
|  |  | 100% |

# 4. FIRST AID MEASURES

If poisoning occurs, contact a doctor or Poisons Information Centre (Phone Australia 131 126, New Zealand 0800 764 766).

**Inhalation:**  Remove victim from exposure - avoid becoming a casualty. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume most comfortable position and keep warm. Keep at rest until fully recovered. Seek medical advice if effects persist.

**Skin Contact:**  If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. If swelling, redness, blistering or irritation occurs seek medical assistance. For gross contamination, immediately drench with water and remove clothing. Continue to flush skin and hair with plenty of water (and soap if material is insoluble). For skin burns, cover with a clean, dry dressing until medical help is available. If blistering occurs, do NOT break blisters. If swelling, redness, blistering, or irritation occurs seek medical assistance.

**Eye contact:**  Immediately irrigate with copious quantities of water for 15 minutes. Eyelids to be held open. Remove clothing if contaminated and wash skin. Urgently seek medical assistance. Transport to hospital or medical centre.

**Ingestion:**  Rinse mouth with water. If swallowed, do NOT induce vomiting. Give a glass of water to drink. Never give anything by the mouth to an unconscious patient. If vomiting occurs give further water. Seek medical advice.

**Notes to physician:** Treat symptomatically. Can cause corneal burns.

# 5. FIRE FIGHTING MEASURES

**Hazchem Code:** 2R

**Suitable extinguishing media:** If material is involved in a fire use water fog (or if unavailable fine water spray), alcohol resistant foam, standard foam, dry agent (carbon dioxide, dry chemical powder).

**Specific hazards:** Non-combustible material.

**Fire fighting further advice:** Not applicable.

# 6. ACCIDENTAL RELEASE MEASURES

**SMALL SPILLS**

Wear protective equipment to prevent skin and eye contamination. Avoid inhalation of vapours or dust. Wipe up with absorbent (clean rag or paper towels). Collect and seal in properly labelled containers or drums for disposal.

**LARGE SPILLS**

Clear area of all unprotected personnel. Slippery when spilt. Avoid accidents, clean up immediately. Wear protective equipment to prevent skin and eye contamination and the inhalation of vapours. Work up wind or increase ventilation. Contain - prevent run off into drains and waterways. Use absorbent (soil, sand or other inert material). Collect and seal in properly labelled containers or drums for disposal. If contamination of crops, sewers or waterways has occurred advise local emergency services.

**Dangerous Goods – Initial Emergency Response Guide No:** 37

# 7. HANDLING AND STORAGE

**Handling:** Avoid eye contact and skin contact. Avoid inhalation of vapour, mist or aerosols.

**Storage:** Store in a cool, dry, well-ventilated place and out of direct sunlight. Store away from foodstuffs. Store away from incompatible materials described in Section 10. Store away from sources of heat and/or ignition. Store locked up. Keep container standing upright. Keep containers closed when not in use - check regularly for leaks.

This material is classified as a Class 8 Corrosive as per the criteria of the “Australian Code for the Transport of Dangerous Goods by Road & Rail” and/or the “New Zealand NZS5433: Transport of Dangerous Goods on Land” and must be stored in accordance with the relevant regulations.

This material is a Scheduled Poison Schedule 6 (Poison) and must be stored, maintained and used in accordance with the relevant regulations.

# 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**National occupational exposure limits:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | TWA | | STEL | | NOTICES |
|  | ppm | mg/m3 | ppm | mg/m3 |  |
|  |  |  |  |  |  |
| Phosphoric acid 7664-38-2 | - | 1 | - | 3 | - |

As published by Safe Work Australia.

TWA - The time-weighted average airborne concentration over an eight-hour working day, for a five-day working week over an entire working life.

STEL (Short Term Exposure Limit) - the average airborne concentration over a 15 minute period which should not be exceeded at any time during a normal eight-hour workday.

These Exposure Standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept too 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.

If the directions for use on the product label are followed, exposure of individuals using the product should not exceed the above standard. The standard was created for workers who are routinely, potentially exposed during product manufacture.

**Biological Limit Values:** As per the “National Model Regulations for the Control of Workplace Hazardous Substances (Safe Work Australia)” the ingredients in this material do not have a Biological Limit Allocated.

**Engineering Measures:** Ensure ventilation is adequate to maintain air concentrations below Exposure Standards. Use only in well ventilated areas. Use with local exhaust ventilation or while wearing appropriate respirator.

**Personal Protection Equipment:** RUBBER BOOTS, OVERALLS, GLOVES, APRON, FACE SHIELD.

MANUFACTURING, PACKAGING AND TRANSPORT: Wear rubber boots, overalls, gloves, apron, face shield. Available information suggests that gloves made from nitrile rubber should be suitable for intermittent contact. However, due to variations in glove construction and local conditions, the user should make a final assessment. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.

If risk of inhalation of exists, wear organic vapour/particulate respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716.

RECOMMENDATIONS FOR CONSUMER USE: Wear gloves. Wash hands after use.

**Hygiene measures:**  Keep away from food, drink and animal feeding stuffs. When using do not eat, drink or smoke. Wash hands prior to eating, drinking or smoking. Avoid contact with clothing. Avoid eye contact and skin contact. Avoid inhalation of vapour, mist or aerosols. Ensure that eyewash stations and safety showers are close to the workstation location.

# 9. PHYSICAL AND CHEMICAL PROPERTIES

|  |  |
| --- | --- |
| **Base Units:** | Litres |
| **Form:** | Liquid |
| **Colour:** | Clear |
| **Odour:** | Acidic |

|  |  |
| --- | --- |
| **Solubility:** | Soluble in water. |
| **Specific Gravity (20 °C):** | 1.14 – 1.16 |
| **Relative Vapour Density (air=1):** | >1 |
| **Vapour Pressure (20 °C):** | N Av |
| **Flash Point (°C):** | N App |
| **Flammability Limits (%):** | N App |
| **Autoignition Temperature (°C):** | N App |
| **Melting Point/Range (°C):** | N Av |
| **Boiling Point/Range (°C):** | Approx. 100 |
| **Decomposition Point (°C):** | N Av |
| **pH:** | 0.5 - 1.5 |
| **Viscosity:** | N Av |
| **Total VOC (g/Litre):** | N Av |

(Typical values only - consult specification sheet)

N Av = Not available, N App = Not applicable

# 10. STABILITY AND REACTIVITY

**Chemical stability:** This material is thermally stable when stored and used as directed.

**Conditions to avoid:** May be corrosive to some metals.

**Incompatible materials:** Oxidising agents, alkalis and metals.

**Hazardous decomposition products:** Oxides of carbon and nitrogen, smoke and other toxic fumes.

**Hazardous reactions:** No known hazardous reactions.

# 11. TOXICOLOGICAL INFORMATION

No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label. Symptoms or effects that may arise if the product is mishandled and overexposure occurs are:

**Acute Effects**

**Inhalation:** Material may be an irritant to mucous membranes and respiratory tract.

**Skin contact:** Contact with skin will result in severe irritation. Corrosive to skin - may cause skin burns.

**Ingestion:** Swallowing can result in nausea, vomiting, diarrhoea, abdominal pain and chemical burns to the gastrointestinal tract.

**Eye contact:** A severe eye irritant. Corrosive to eyes: contact can cause corneal burns. Contamination of eyes can result in permanent injury.

**Acute toxicity**

**Inhalation:** This material has been classified as non-hazardous.

Acute toxicity estimate (based on ingredients): >20 mg/L

**Skin contact:** This material has been classified as non-hazardous.

Acute toxicity estimate (based on ingredients): >2,000 mg/Kg

**Ingestion:** This material has been classified as non-hazardous.

Acute toxicity estimate (based on ingredients): >2,000 mg/Kg

**Corrosion/Irritancy:** Eye: this material has been classified as a Category 1 Hazard (irreversible effects to eyes). Skin: this material has been classified as a Category 1B Hazard (irreversible effects to skin).

**Sensitisation:** Inhalation: this material has been classified as not a respiratory sensitiser. Skin: this material has been classified as not a skin sensitiser.

**Aspiration hazard:** This material has been classified as non-hazardous.

**Specific target organ toxicity (single exposure):** This material has been classified as non-hazardous.

**Chronic Toxicity**

**Mutagenicity:** This material has been classified as non-hazardous.

**Carcinogenicity:** This material has been classified as non-hazardous.

**Reproductive toxicity (including via lactation):** This material has been classified as non-hazardous.

**Specific target organ toxicity (repeat exposure):** This material has been classified as non-hazardous.

# 12. ECOLOGICAL INFORMATION

Avoid contaminating waterways.

**Acute aquatic hazard:** This material has been classified as non-hazardous.

Acute toxicity estimate (based on ingredients): >100 mg/L

**Long-term aquatic hazard:** This material has been classified as non-hazardous. Non-rapidly or rapidly degradable substance for which there are adequate chronic toxicity data available OR in the absence of chronic toxicity data, Acute toxicity estimate (based on ingredients): >100 mg/L, where the substance is not rapidly degradable and/or BCF < 500 and/or log Kow < 4.

**Ecotoxicity:** No information available.

**Persistence and degradability:** No information available.

**Bioaccumulative potential:** No information available.

**Mobility:** No information available.

# 13. DISPOSAL CONSIDERATIONS

Persons conducting disposal, recycling or reclamation activities should ensure that appropriate personal protection equipment is used, see “Section 8. Exposure Controls and Personal Protection” of this SDS.

If possible material and its container should be recycled. If material or container cannot be recycled, dispose in accordance with local, regional, national and international Regulations.

# 14. TRANSPORT INFORMATION

**ROAD AND RAIL TRANSPORT**

Classified as Dangerous Goods by the criteria of the “Australian Code for the Transport of Dangerous Goods by Road & Rail” and the “New Zealand NZS5433: Transport of Dangerous Goods on Land”.



|  |  |
| --- | --- |
| **UN No:** | 1805 |
| **Dangerous Goods Class:** | 8 |
| **Packing Group:** | III |
| **Hazchem Code:** | 2R |
| **Emergency Response Guide No:** | 37 |
|  |  |
| **Proper Shipping Name:** | PHOSPHORIC ACID, SOLUTION |

**Segregation Dangerous Goods:** Not to be loaded with explosives (Class 1), dangerous when wet substances (Class 4.3), oxidising agents (Class 5.1), organic peroxides (Class 5.2), radioactive substances (Class 7) or food and food packaging in any quantity. Note 1: Concentrated strong alkalis are incompatible with concentrated strong acids. Note 2: Concentrated strong acids are incompatible with concentrated strong alkalis. Note 3: Acids are incompatible with Dangerous Goods of Class 6 which are cyanides. Exemptions may apply.

**MARINE TRANSPORT**

Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.



|  |  |
| --- | --- |
| **UN No:** | 1805 |
| **Dangerous Goods Class:** | 8 |
| **Packing Group:** | III |
|  |  |
| **Proper Shipping Name:** | PHOSPHORIC ACID, SOLUTION |

**AIR TRANSPORT**

Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.



|  |  |
| --- | --- |
| **UN No:** | 1805 |
| **Dangerous Goods Class:** | 8 |
| **Packing Group:** | III |
|  |  |
| **Proper Shipping Name:** | PHOSPHORIC ACID, SOLUTION |

# 15. REGLATORY INFORMATION

**HSNO Group Standard:**  HSR002526 - Cleaning Products (Corrosive) Group Standard 2006

**This material is not subject to the following international agreements:**

Montreal Protocol (Ozone depleting substances)

The Stockholm Convention (Persistent Organic Pollutants)

The Rotterdam Convention (Prior Informed Consent)

**This material is subject to the following international agreements:**

Basel Convention (Hazardous Waste)

• Wastes from the production, formulation and use of biocides and phytopharmaceuticals

International Convention for the Prevention of Pollution from Ships (MARPOL)

• Annex III - Harmful Substances carried in Packaged Form

**This material/constituent(s) is covered by the following requirements:**

• The *Standard for the Uniform Scheduling of Medicines and Poisons* (SUSMP) established under the Therapeutic Goods Act (Commonwealth).

# 16. OTHER INFORMATION

This Safety Data Sheet document has been compiled by Clean Plus Chemicals. Further clarification regarding any aspect of this product should contact Clean Plus Chemicals directly. While Clean Plus Chemicals has taken all due care to include accurate and up-to-date information in this SDS, it does not provide any warranty as to accuracy or completeness. As far as lawfully possible, Clean Plus Chemicals accepts no liability for any loss, injury or damage (including consequential loss) which may be suffered or incurred by any person as a consequence of their reliance on the information contained in this SDS.