



SAFETY DATA SHEET ACESULFAME POTASSIUM REVISION 4, DATE 01 JAN 21

1. IDENTIFICATION

| | |
|----------------------------|--|
| Product Name | Acesulfame Potassium |
| Other Names | Acesulfame K (Ace K); Potassium acesulfame |
| Uses | Food additive; Sugar substitute/artificial sweetener. |
| Chemical Family | No Data Available |
| Chemical Formula | C ₄ H ₄ KNO ₄ S |
| Chemical Name | 1,2,3-Oxathiazin-4(3H)-one, 6-methyl-, 2,2-dioxide, potassium salt |
| Product Description | Mono-constituent substance (organic). |

Contact Details of the Supplier of this Safety Data Sheet

| Organisation | Location | Telephone |
|-------------------------|--|-----------------|
| Redox Ltd | 2 Swettenham Road Minto NSW 2566 Australia | +61-2-97333000 |
| Redox Ltd | 11 Mayo Road Wiri Auckland 2104 New Zealand | +64-9-2506222 |
| Redox Inc. | 3960 Paramount Boulevard Suite 107 Lakewood CA 90712 USA | +1-424-675-3200 |
| Redox Chemicals Sdn Bhd | Level 2, No. 8, Jalan Sapir 33/7 Seksyen 33, Shah Alam Premier Industrial Park 40400 Shah Alam Sengalor, Malaysia | +60-3-5614-2111 |

Emergency Contact Details

For emergencies only; DO NOT contact these companies for general product advice.

| Organisation | Location | Telephone |
|----------------------------|--------------|--|
| Poisons Information Centre | Westmead NSW | 1800-251525 131126 |
| Chemcall | Australia | 1800-127406 +64-4-9179888 |
| Chemcall | Malaysia | +64-4-9179888 |
| Chemcall | New Zealand | 0800-243622 +64-4-9179888 |
| National Poisons Centre | New Zealand | 0800-764766 |
| CHEMTREC | USA & Canada | 1-800-424-9300 CN723420 +1-703-527-3887 |

2. HAZARD IDENTIFICATION

Poisons Schedule (Aust)

Not Scheduled



Globally Harmonised System

| | |
|------------------------------|--|
| Hazard Classification | NOT hazardous according to the criteria of the Globally Harmonised System of Classification and Labelling of Chemicals (GHS) |
| Signal Word | None |

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) |
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Safe Work Australia

National Guide for Classifying Hazardous Chemicals under the Model WHS Regulations

| | |
|------------------------------|--|
| Hazard Classification | NOT hazardous according to the criteria of Safe Work Australia under Model WHS Regulations |
|------------------------------|--|

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients

| Chemical Entity | Formula | CAS Number | Proportion |
|----------------------|--|------------|------------|
| Acesulfame potassium | C ₄ H ₄ KNO ₄ S | 55589-62-3 | 100 % |

4. FIRST AID MEASURES

Description of necessary measures according to routes of exposure

| | |
|--|---|
| Swallowed | IF SWALLOWED: Rinse mouth, then drink plenty of water. Do not induce vomiting. Get medical advice/attention if you feel unwell. |
| Eye | IF IN EYES: Immediately flush eyes with running water for several minutes, holding eyelids open and occasionally lifting the upper and lower lids. Remove contact lenses if present and easy to do. Continue rinsing for 10 - 15 minutes. If eye irritation persists, get medical advice/attention. |
| Skin | IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash before reuse. If skin irritation occurs, get medical advice/attention. |
| Inhaled | IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing until recovered. If respiratory symptoms persist, get medical advice/attention. |
| Advice to Doctor | Treat symptomatically. |
| Medical Conditions Aggravated by Exposure | No information available. |

5. FIRE FIGHTING MEASURES

| | |
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| General Measures | If safe to do so, move undamaged containers from fire area. Cool containers with water spray until well after fire is out. |
| Flammability Conditions | Combustible solid; May burn but does not ignite readily. |

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| Extinguishing Media | Use dry chemical, Carbon dioxide (CO ₂), foam or water spray for extinction - Do not use water jet. |
| Fire and Explosion Hazard | Potential dust explosion hazard: Fine dust may form explosive mixtures with air. |
| Hazardous Products of Combustion | Fire may produce irritating and/or toxic fumes, including Carbon oxides, Nitrogen oxides, Sulfur oxides, Potassium oxides. |
| Special Fire Fighting Instructions | Contain runoff from fire control or dilution water - Runoff may pollute waterways. |
| Personal Protective Equipment | Wear self-contained breathing apparatus (SCBA) and chemical splash suit. SCBA and structural firefighter's uniform may provide limited protection. |
| 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 | Ensure adequate ventilation. ELIMINATE all ignition sources (if dust clouds can occur). Do not touch or walk through spilled material. Avoid dust formation. Avoid breathing dust and contact with eyes, skin and clothing. |
| Clean Up Procedures | Collect material (sweep or vacuum up) and place it in suitable containers for later disposal (see SECTION 13); if appropriate, moisten first, or cover with damp absorbent, to avoid generating dust. |
| Containment | Stop leak if safe to do so - Prevent entry into waterways, drains or confined areas. Prevent dust cloud. |
| Decontamination | Ventilate area and wash site after material pickup is complete. |
| Environmental Precautionary Measures | Prevent entry into drains and waterways. |
| Evacuation Criteria | Spill or leak area should be isolated immediately. Keep unauthorised personnel away. |
| Personal Precautionary Measures | Use personal protective equipment as required (see SECTION 8). |

7. HANDLING AND STORAGE

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|------------------|---|
| Handling | Safety showers and eyewash facilities should be provided within the immediate work area for emergency use. Ensure adequate ventilation, especially in confined areas. Handle in accordance with good industrial hygiene and safety practice. Minimise dust generation and accumulation. Avoid breathing dust and contact with eyes, skin and clothing. Do not ingest. Use personal protective equipment as required (see SECTION 8). Potential dust explosion hazard: Keep away from heat and sources of ignition - No smoking. Take precautionary measures against static discharge. |
| Storage | Store in a cool, dry and well-ventilated place, out of direct sunlight. Avoid high humidity or moist areas. Keep containers tightly closed when not in use. Keep away from heat and sources of ignition - No smoking. Keep away from incompatible materials (see SECTION 10). |
| Container | Keep in the original container. |

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

| | |
|--------------------------|---|
| General | No specific exposure standards are available for this product. For dusts from solid substances without specific occupational exposure standards: - Safe Work Australia Exposure Standard (Nuisance dusts): 8 hr TWA = 10 mg/m ³ (measured as inhalable dust). - New Zealand WES (Particulates not otherwise classified): TWA = 10 mg/m ³ ; TWA = 3 mg/m ³ (respirable dust). |
| Exposure Limits | No Data Available |
| Biological Limits | No information available. |

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|--------------------------------------|--|
| 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 | <ul style="list-style-type: none"> - Respiratory protection: Wear respiratory protection in case of inadequate ventilation or if an inhalation risk exists. Recommended: Dust mask/particulate filter respirator (refer to AS/NZS 1715 & 1716). - Eye/face protection: Wear appropriate eye protection to avoid eye contact. Recommended: Safety glasses. - Hand protection: Handle with gloves. Recommended: Impervious gloves. - Skin/body protection: Wear appropriate personal protective clothing to avoid skin contact. Recommended: Overalls, safety shoes. |
| Special Hazards Precautions | No information available. |
| Work Hygienic Practices | Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Take off contaminated clothing and wash before reuse. |

9. PHYSICAL AND CHEMICAL PROPERTIES

| | |
|---------------------------------------|---|
| Physical State | Solid |
| Appearance | Crystalline powder |
| Odour | Odourless |
| Colour | White |
| pH | 5.5 - 7.5 (1% soln.) |
| Vapour Pressure | No Data Available |
| Relative Vapour Density | No Data Available |
| Boiling Point | No Data Available |
| Melting Point | No Data Available |
| Freezing Point | No Data Available |
| Solubility | Soluble in water |
| Specific Gravity | 1.81 |
| Flash Point | No Data Available |
| Auto Ignition Temp | No Data Available |
| Evaporation Rate | No Data Available |
| Bulk Density | No Data Available |
| Corrosion Rate | No Data Available |
| Decomposition Temperature | >225 °C |
| Density | No Data Available |
| Specific Heat | No Data Available |
| Molecular Weight | No Data Available |
| Net Propellant Weight | No Data Available |
| Octanol Water Coefficient | No Data Available |
| Particle Size | No Data Available |
| Partition Coefficient | No Data Available |
| Saturated Vapour Concentration | No Data Available |
| Vapour Temperature | No Data Available |
| Viscosity | No Data Available |
| Volatile Percent | No Data Available |
| VOC Volume | No Data Available |
| Additional Characteristics | No information available. |
| Potential for Dust Explosion | Fine dust may form explosive mixtures with air. |

| | |
|---|--|
| Fast or Intensely Burning Characteristics | No information available. |
| Flame Propagation or Burning Rate of Solid Materials | No information available. |
| Non-Flammables That Could Contribute Unusual Hazards to a Fire | No information available. |
| Properties That May Initiate or Contribute to Fire Intensity | Combustible solid; May burn but does not ignite readily. |
| Reactions That Release Gases or Vapours | Fire/decomposition may produce irritating and/or toxic fumes, including Carbon oxides, Nitrogen oxides, Sulfur oxides, Potassium oxides. |
| Release of Invisible Flammable Vapours and Gases | No information available. |

10. STABILITY AND REACTIVITY

| | |
|---|--|
| General Information | No information available. |
| Chemical Stability | Stable under normal conditions. |
| Conditions to Avoid | Avoid dust formation. Keep away from heat and sources of ignition. |
| Materials to Avoid | Incompatible/reactive with oxidising agents, acids, metals. |
| Hazardous Decomposition Products | Fire/decomposition may produce irritating and/or toxic fumes, including Carbon oxides, Nitrogen oxides, Sulfur oxides, Potassium oxides. |
| Hazardous Polymerisation | Will not occur. |

11. TOXICOLOGICAL INFORMATION

| | |
|----------------------------|--|
| General Information | Information on possible routes of exposure: - Ingestion: No adverse effects expected; Swallowing large amounts may cause nausea and vomiting. - Eye contact: May cause physical/mechanical irritation. - Skin contact: May cause physical/mechanical irritation through prolonged or repeated contact. - Inhalation: Exposure to dust may cause irritation of the respiratory tract. Chronic effects: No information available. |
| Carcinogen Category | None |

12. ECOLOGICAL INFORMATION

| | |
|----------------------------------|--|
| Ecotoxicity | Aquatic toxicity: - LC50, Fish (Zebra fish): 1,800 - 2,500 mg/L (96 h) [ECHA]. - EC50, Daphnia magna: >1,000 mg/L (24 h) [ECHA]. - EC50/NOEC, Algae (Scenedesmus subspicatus): >100 mg/L (72 h) [ECHA]. |
| Persistence/Degradability | Acesulfame K is regarded as neither readily, nor inherently biodegradable. |
| Mobility | Acesulfame K has a low potential to adsorb to soil surface and very low potential to volatilise from the water surface. The main environmental compartment for distribution is the water phase. |
| Environmental Fate | Prevent entry into drains and waterways. |
| Bioaccumulation Potential | No information available. |
| Environmental Impact | No Data Available |

13. DISPOSAL CONSIDERATIONS

| | |
|--|--|
| General Information | Recycle to process, if possible. Dispose of surplus and non-recyclable product/solutions via a licensed disposal company and in accordance with local/regional/national regulations. Dissolve/mix material with combustible solvent and burn in a chemical incinerator equipped with afterburner and scrubber. |
| Special Precautions for Land Fill | Contaminated packaging: Dispose of as unused product. |

14. TRANSPORT INFORMATION**Land Transport (Australia)**

ADG Code

| | |
|-----------------------------|--|
| Proper Shipping Name | Acesulfame Potassium |
| Class | No Data Available |
| Subsidiary Risk(s) | No Data Available |
| | No Data Available |
| UN Number | No Data Available |
| Hazchem | No Data Available |
| Pack Group | No Data Available |
| Special Provision | No Data Available |
| Comments | NON-DANGEROUS GOODS: Not regulated for LAND transport. |

Land Transport (Malaysia)

ADR Code

| | |
|-----------------------------|--|
| Proper Shipping Name | Acesulfame Potassium |
| Class | No Data Available |
| Subsidiary Risk(s) | No Data Available |
| | No Data Available |
| UN Number | No Data Available |
| Hazchem | No Data Available |
| Pack Group | No Data Available |
| Special Provision | No Data Available |
| Comments | NON-DANGEROUS GOODS: Not regulated for LAND transport. |

Land Transport (New Zealand)

NZS5433

| | |
|-----------------------------|----------------------|
| Proper Shipping Name | Acesulfame Potassium |
| Class | No Data Available |
| Subsidiary Risk(s) | No Data Available |
| | No Data Available |
| UN Number | No Data Available |
| Hazchem | No Data Available |
| Pack Group | No Data Available |
| Special Provision | No Data Available |

Comments

NON-DANGEROUS GOODS: Not regulated for LAND transport.

Land Transport (United States of America)

US DOT

| | |
|----------------------|--|
| Proper Shipping Name | Acesulfame Potassium |
| Class | No Data Available |
| Subsidiary Risk(s) | No Data Available |
| | No Data Available |
| UN Number | No Data Available |
| Hazchem | No Data Available |
| Pack Group | No Data Available |
| Special Provision | No Data Available |
| Comments | NON-DANGEROUS GOODS: Not regulated for LAND transport. |

Sea Transport

IMDG Code

| | |
|----------------------|---|
| Proper Shipping Name | Acesulfame Potassium |
| Class | No Data Available |
| Subsidiary Risk(s) | No Data Available |
| UN Number | No Data Available |
| Hazchem | No Data Available |
| Pack Group | No Data Available |
| Special Provision | No Data Available |
| EMS | No Data Available |
| Marine Pollutant | No |
| Comments | NON-DANGEROUS GOODS: Not regulated for SEA transport. |

Air Transport

IATA DGR

| | |
|----------------------|---|
| Proper Shipping Name | Acesulfame Potassium |
| Class | No Data Available |
| Subsidiary Risk(s) | No Data Available |
| UN Number | No Data Available |
| Hazchem | No Data Available |
| Pack Group | No Data Available |
| Special Provision | No Data Available |
| Comments | NON-DANGEROUS GOODS: Not regulated for AIR transport. |

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 |

Environmental Protection Authority (New Zealand)

Hazardous Substances and New Organisms Amendment Act 2015

| | |
|---------------|---------------|
| Approval Code | Not Hazardous |
|---------------|---------------|

National/Regional Inventories

| | |
|--|----------------|
| Australia (AIIIC) | Listed |
| Canada (DSL) | Not Determined |
| Canada (NDSL) | Not Determined |
| China (IECSC) | Not Determined |
| Europe (EINECS) | Not Determined |
| Europe (REACH) | Not Determined |
| Japan (ENCS/METI) | Not Determined |
| Korea (KECI) | Not Determined |
| Malaysia (EHS Register) | Not Determined |
| New Zealand (NZIoC) | Listed |
| Philippines (PICCS) | Not Determined |
| Switzerland (Giftliste 1) | Not Determined |
| Switzerland (Inventory of Notified Substances) | Not Determined |
| Taiwan (NCSR) | Not Determined |
| USA (TSCA) | Not Determined |

16. OTHER INFORMATION

| | |
|-----------------------|--|
| Related Product Codes | ACEPOT1000, ACEPOT1001, ACEPOT1002, ACEPOT1004, ACEPOT1005, ACEPOT1006, ACEPOT1007, ACEPOT1008, ACEPOT1009, ACEPOT1010, ACEPOT1100, ACEPOT2000, ACEPOT2010, ACEPOT2013, ACEPOT2020, ACEPOT2100, ACEPOT2200, ACEPOT2300, ACEPOT3000, ACEPOT3003, ACEPOT3100, ACEPOT6000 |
| Revision | 4 |
| Revision Date | 01 Jan 2021 |
| Key/Legend | <p>< Less Than</p> <p>> Greater Than</p> <p>AICS Australian Inventory of Chemical Substances</p> <p>atm Atmosphere</p> <p>CAS Chemical Abstracts Service (Registry Number)</p> <p>cm² Square Centimetres</p> <p>CO₂ Carbon Dioxide</p> <p>COD Chemical Oxygen Demand</p> |

deg C (°C) Degrees Celcius

EPA (New Zealand) Environmental Protection Authority of New Zealand

deg F (°F) Degrees Farenheit

g Grams

g/cm³ Grams per Cubic Centimetre

g/l Grams per Litre

HSNO Hazardous Substance and New Organism

IDLH Immediately Dangerous to Life and Health

immiscible Liquids are insoluable in each other.

inHg Inch of Mercury

inH₂O Inch of Water

K Kelvin

kg Kilogram

kg/m³ Kilograms per Cubic Metre

lb Pound

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 or L 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 or Miscible Liquids form one homogeneous liquid phase regardless of the amount of either component present.

mm Millimetre

mmH₂O Millimetres of Water

mPa.s Millipascals per Second

N/A Not Applicable

NIOSH National Institute for Occupational Safety and Health

NOHSC National Occupational Health and Safety Commission

OECD Organisation for Economic Co-operation and Development

Oz Ounce

PEL Permissible Exposure Limit

Pa Pascal

ppb Parts per Billion

ppm Parts per Million

ppm/2h Parts per Million per 2 Hours

ppm/6h Parts per Million per 6 Hours

psi Pounds per Square Inch

R Rankine

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

wt Weight