

Pictograms



Signal word

Danger

Hazard statement(s)

H290

May be corrosive to metals

H314

Causes severe skin burns and eye damage

Precautionary statement(s)

P234

Keep only in original packaging.

P260

Do not breathe dust/fume/gas/mist/vapors/spray.

P280

Wear protective gloves/protective clothing/eye protection/face protection.

P301+P330+P331

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303+P361+P353

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].

P304+P340

IF INHALED: Remove person to fresh air and keep 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 CENTER/doctor/physician

P363

Wash contaminated clothing before reuse.

P390

Absorb spillage to prevent material-damage.

P405

Store locked up.

P406

Store in a corrosive resistant/... container with a resistant inner liner.

P501

Dispose of contents/container to an approved waste disposal facility

SECTION 3: Composition/information on ingredients

Mixtures

Molecular weight: 63.011

Components

Component	CAS no.	Concentration
Water (EC no.: 231-791-2)	7732-18-5	35 - <= 94 % (weight)
CLASSIFICATIONS: No data available. HAZARDS: No data available.		
Nitric acid (40% to 70%) (EC no.: 231-714-2; Index no.: 007-030-00-3)	7697-37-2	6 - <= 64 % (weight)
CLASSIFICATIONS: Skin corrosion/irritation, Cat. 1A; Oxidizing liquids, Cat. 2; Corrosive to metals, Cat. 1. HAZARDS: H272 - May intensify fire; oxidizer; H290 - May be corrosive to metals; H314 - Causes severe skin burns and eye damage. [SCLs/M-factors/ATEs]: Inhalation: ATE = 2.65 mg/L (Vapours); Ox. Liq. 3; H272: C ≥ 65 %; Skin Corr. 1A; H314: C ≥ 20 %; Skin Corr. 1B; H314: 5 % ≤ C < 20 %		

SECTION 4: First-aid measures

Description of necessary first-aid measures

General advice

First Aid Facilities: Maintain eyewash fountain and drench facilities in work area.

Advice to Doctor: If exposure has been severe and/or the symptoms marked, monitor in hospital for 48 hours, because of the possibility of delayed pneumonitis and pulmonary oedema.

If inhaled

Remove from exposure, rest and keep warm. If breathing has stopped, apply artificial respiration. If breathing is difficult, give oxygen. Do not allow victim to move about

unnecessarily. Symptoms of pulmonary oedema can be delayed up to 48 hours after exposure. Do NOT use direct mouth-to-mouth method if victim ingested or inhaled the substance; use alternative respiratory method or apply artificial respiration. Seek urgent medical assistance.

In case of skin contact

If spilt on large areas of skin or hair, immediately drench with running water and remove clothing. Continue to wash skin and hair with plenty of water (and soap if material is insoluble) until advised to stop by the Poisons Information Centre or a doctor. Remove contaminated clothing, rings, watches, etc. if possible - DO NOT attempt to do so if they are adhering to the skin. Seek urgent medical assistance.

In case of eye contact

If in eyes, hold eyelids apart and flush the eye continuously with running water. Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes. Seek immediate medical assistance.

If swallowed

Rinse mouth thoroughly with water immediately. Give water to drink. DO NOT induce vomiting. Avoid vomiting (risk of perforation!). Do not attempt to neutralize. Seek immediate medical assistance.

Personal protective equipment for first-aid responders

WARNING: It may be hazardous to the person providing aid to give mouth-to-mouth resuscitation when the inhaled material is toxic, infectious or corrosive. Take proper precautions to ensure your own safety before attempting rescue (e.g. wear appropriate protective equipment, use the 'buddy' system).

Most important symptoms/effects, acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

Indication of immediate medical attention and special treatment needed, if necessary

For advice in an emergency, contact a Poisons Information Centre (Phone Australia 131 126) or a doctor at once.

SECTION 5: Fire-fighting measures

Suitable extinguishing media

When material is not involved in fire: Do not use water on material itself.

Small fire: Use CO₂, dry chemical, dry sand or flooding quantities of water. If safe to do so, move undamaged containers from the fire area.

Large fire: Flood fire with large quantities of water while knocking down vapours with water fog - If insufficient water supply, knock down vapours only.

Cool containers with flooding quantities of water until well after the fire is out. Avoid getting water inside the containers.

Specific hazards arising from the chemical

Corrosive, irritating and highly toxic gases of nitrogen oxides. (May react with many metals, particularly in powdered form, to form extremely flammable hydrogen gas.)

Does not burn but may produce poisonous and/or corrosive fumes upon heating. Heat of reaction may be enough to ignite combustible materials. Will react with water possibly violently releasing flammable, poisonous and/or corrosive gases and runoff. Contact with metals may evolve flammable hydrogen gas. Fire may produce irritating, poisonous and/or corrosive gases. Runoff may pollute waterways. Containers may explode when heated or contaminated with water.

Special protective actions for fire-fighters

Fire fighters should wear full protective clothing and self-contained breathing apparatus (SCBA) operated in positive pressure mode. Fight fire from safe location.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

[7Q] Personal Precautions: Avoid inhalation of fumes.

[7R] Personal Protection: Wear appropriate protective clothing and equipment - Refer to section 8.

Methods and materials for containment and cleaning up

[3B] Spills & Disposal: Do not touch or walk through spilled material. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Stop leak if safe to do so - Prevent entry into waterways, drains or confined areas. Vapour-suppressing foam may be used to control vapours - Water spray may be used to knock down or divert vapour clouds. **DO NOT GET WATER INSIDE CONTAINERS.**

Small Spill: Cover with DRY earth, sand or other non-combustible material followed by a plastic sheet to minimize spreading or contact with rain. Use clean non-sparking tools to collect material and place it into loosely-covered plastic containers for later disposal.

SECTION 7: Handling and storage

Precautions for safe handling

Avoid ingestion and inhalation of gas/fumes/vapour/spray. Avoid contact with skin and eyes, clothing and other combustible materials. Keep container tightly closed and locked up. Work under fume extractor. Use only with adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Wash thoroughly after handling. Immediately change contaminated clothing and wash promptly. Discard contaminated shoes. Keep away from incompatibles such as reducing agents, combustible materials, metals, alkalis. Do not use with metal spatula or other metal items. May corrode metallic surfaces. Do not empty into drains, dispose of this material and its container in a safe way. When diluting, the acid should always be added slowly to water and in small amounts. Never use hot water and never add water to the acid. Water added to acid can cause uncontrolled boiling and splashing.

Conditions for safe storage, including any incompatibilities

Corrosive materials should be stored in a separate safety storage cabinet or room. Store in tightly closed containers, in a cool, dry, well-ventilated area with acid resistant floors and good drainage. Store away from incompatible substances, alkalis, combustible materials, organic materials and metals - may corrode metallic surfaces. Keep container closed when not in use. Inspect periodically for damage or evidence of leaks or corrosion. Protect from physical damage, direct sunlight, heat, water and moisture. Do not wash out container and use it for other purposes. Containers of this material may be hazardous when empty since they retain product residues (vapours, liquid); observe all warnings and precautions listed for the product.

Nitric acid (5-70%) is corrosive (corrosion rate greater than 1.25 mm/year) to most metals at 21 °C, including carbon steel (e.g. types 1010, 1020, 1075 and 1095), type 3003 aluminium, cast iron (e.g. gray, ductile and high nickel cast iron), nickel, nickel-base alloys (e.g. Monel and Hastelloy B and D), copper, copper-nickel, bronze (unspecified), aluminium bronze, silicon bronze, brass (unspecified), admiralty brass, naval brass and lead. It attacks (corrosion rate less than or equal to 0.5 mm/year to greater than or equal to 1.27 mm/year) some 400 series stainless steels at 21 °C. Stainless steels with high chromium content (most 300 series) exhibit excellent or good resistance to nitric acid. concentrations ranging from 0-65% up to the boiling point. Types 304, 304L, R12S, 2RE10 (high chromium and nickel content) and 7-Mo duplex stainless steel are particularly recommended for use with nitric acid. High-silicon cast iron (Duriron) and high-chromium cast iron, higher chromium nickel alloys (e.g. G-30 and 690), nickel-base alloys (e.g. Hastelloy C and Incoloy 825), tantalum, titanium, zirconium, gold and platinum-type metals also have excellent resistance to nitric acid. Aluminium alloys (types 1100 and 3003) can only be used for very high concentrations of nitric acid (80-100%).

Corrosivity to Non-Metals: Nitric acid (5-100%) at 21 °C attacks plastics, such as acrylonitrile-butadiene-styrene (ABS), nylon, styrene-acrylonitrile, polystyrene and polyurethane; and elastomers, such as nitrile Buna N (NBR), natural rubber, isoprene, neoprene, chloroprene, polyester, styrene butadiene (SBR), polyurethane, chlorinated polyethylene, ethylene-propylene, ethylene-propylene terpolymer and low density polyethylene. Nitric acid (5-100%) does not attack plastics, such as Teflon, and other fluorocarbons; and elastomers such as Viton and other fluorocarbons (e.g. Kalrez and Chemraz (up to 50%)). Nitric acid (concentrations up to 50%) does not attack plastics, e.g. polyvinyl chloride (PVC), chlorinated polyvinyl chloride (CPVC), polypropylene, thermoset polyester (Bisphenol A-fumarate and Isophthalic acid), high density polyethylene and ultra high molecular weight polyethylene and elastomers e.g. butyl rubber.

[7Z] Recommended Materials: Store in a metallic or coated fibreboard drum using a strong polyethylene inner package.

SECTION 8: Exposure controls/personal protection

Control parameters

CAS: 7697-37-2

Nitric acid (40% to 70%)

AU/SWA (Australia): 4 ppm; 10 mg/m³ STEL inhalation; 2 ppm; 5.2 mg/m³ TWA inhalation; Cal/OSHA: 2 ppm, (ST) 4 ppm PEL inhalation; NIOSH: 2 ppm, (ST) 4 ppm REL inhalation; OSHA: 2 ppm PEL inhalation; 5 mg/m³ PEL inhalation

Appropriate engineering controls

Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, gas, etc.) below recommended exposure limits.

Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection

The use of a face shield, chemical goggles or safety glasses with side shield protection as appropriate. Must comply with Australian Standards AS 1337 and be selected and used in accordance with AS 1336.

Skin protection

Clean impervious clothing should be worn. Clothing for protection against chemicals should comply with AS 3765 Clothing for Protection Against Hazardous Chemicals.

Hand Protection: Ensure hand protection complies with AS 2161, Occupational protective gloves - Selection, use and maintenance.

Body protection

Footwear: Safety boots in industrial situations is advisory, foot protection should comply with AS 2210, Occupational protective footwear - Guide to selection, care and use.

Body Protection: Clean clothing or protective clothing should be worn, preferably with an apron. Clothing for protection against chemicals should comply with AS 3765 Clothing for Protection Against Hazardous Chemicals.

Respiratory protection

If engineering controls are not effective in controlling airborne exposure then an approved respirator with a replaceable vapor/ mist filter should be used. Refer to relevant regulations for further information concerning respiratory protective requirements. Reference should be made to Australian Standards AS/ NZS 1715, Selection, Use and Maintenance of Respiratory Protective Devices; and AS/NZS 1716, Respiratory Protective Devices, in order to make any necessary changes for individual circumstances.

SECTION 9: Physical and chemical properties

Basic physical and chemical properties

Physical state	Liquid
Appearance	Clear, colourless to slightly yellowish liquid. Hygroscopic (absorbs moisture from the air).
Color	No data available.
Odor	Disagreeable, pungent, acrid, suffocating odour.
Odor threshold	0.29-0.98 ppm (cited as 0.75 to 2.5 mg/m ³) (detection). Warning Properties: NOT RELIABLE - Odour threshold about the same magnitude as TWA. Irritation has been reported at 60.6 ppm (cited as 155 mg/m ³) (30 times greater than TWA).
Melting point/freezing point	-20 °C (50%)
Boiling point or initial boiling point and boiling range	114.7-116.4 °C (50%).
Flammability	Not combustible. Can react with most metals to liberate flammable hydrogen gas which can form explosive mixtures

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Lower and upper explosion limit/flammability limit

Flash point

Explosive properties

Auto-ignition temperature

Decomposition temperature

Oxidizing properties

pH

Kinematic viscosity

Solubility

Partition coefficient n-octanol/water (log value)

Vapor pressure

Evaporation rate

Density and/or relative density

Relative vapor density

Particle characteristics

with air. Heat of reaction with reducing agents or combustibles may cause ignition.

No data available.

No data available.

No data available.

No data available.

No data available.

Will cause a moderate increase in the burning rate of combustible materials with which it comes into contact.

<1 (0.1 M solution, 20 °C); strong acid.

Viscosity: 0.761 cps @ 25 °C.

Solubility in Water: Miscible (soluble) in all proportions.

Solubility in Organic Solvents: Soluble in diethyl ether. Reacts with many organic solvents (e.g. alcohols, ketones, ethers and esters).

Log P(oct) = 0.21 (estimated).

Partial Pressure: 0.37-0.4 kPa (2.78-3 mm Hg) 70% at 20 °C; 0.547 kPa (4.1 mm Hg) 70% at 25 °C; 0.036-0.04 kPa (0.27-0.3 mm Hg) 50% at 20 °C; 0.052 kPa (0.39 mm Hg) 50% at 25 °C.

No data available.

Specific Gravity: 1.41 (68%); 1.31 (50%); 1.2489 (40% @ 20 °C); 1.1822 (30% @ 20 °C); 1.1170 (20% @ 20 °C).

The highest known value is 2.3 (Air = 1) (Nitric acid, fuming).

Weighted average: 1.12 (Air = 1) (30%).

No data available.

Supplemental information regarding physical hazard classes

No data available.

Further safety characteristics (supplemental)

Saturated Vapour Concentration: 3700-3900 ppm (0.37-0.39%) (70% at 20 °C); 5400 ppm (0.54%) (70% at 25 °C, calculated); 400 ppm (0.04%) (50% at 20 °C); 500 ppm (0.05%) (50% at 25 °C, calculated).

Other Information: The yellow colour is due to the release of nitrogen dioxide on exposure to light.

SECTION 10: Stability and reactivity

Reactivity

Stable under normal conditions of storage and handling.

Reacts with incompatible materials

Chemical stability

Stable under normal conditions of storage and handling. Slow decomposition occurs at room temperature (accelerated by exposure to light, air, organic matter and increases in temperature) with formation of nitrogen oxides, which may colour the acid yellow or red.

Containers may burst when heated.

Possibility of hazardous reactions

Highly reactive - may react violently or explosively and/or ignite spontaneously with many organic and inorganic chemicals, combustible and easily oxidizable materials. May react violently or explosively with most metals particularly powdered metals (e.g. antimony, bismuth, germanium, manganese or titanium), alkali metals (e.g. lithium or sodium) or alkaline earth metals (e.g. magnesium or calcium) and/or cause fire, with generation of extremely flammable hydrogen gas. Extremely reactive or incompatible with alkalis. May react violently or explosively with organic chemicals (e.g., alcohols, acids, anhydrides, aldehydes, ketones, amines, ethers, hydrocarbons, alkanethiols, nitriles, nitroalkanes and nitroaromatics) and/or ignite spontaneously. May react violently or explosively with non-metals (e.g. arsenic,

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boron, finely divided carbon, phosphorus or silicon), non-metalhydrides (e.g. arsine, phosphine, stibine or tetraborane) or reducing agents (e.g. potassium phosphinate) and ignite. Ignites spontaneously (hypergolic) on contact with crotonaldehyde, hydrazine, dimethylhydrazine, divinyl ether, pyrocatechol, the ignition delay being 1 millisecond (ms). Mixtures with ammonia, aniline, diborane, furfuryl alcohol or terpenes are self-igniting. Reacts with sulfides (e.g. sodium or potassium sulfide) to produce toxic and flammable hydrogen sulfide gas and toxic sulfur dioxide gas. May ignite and/or explode with carbides (e.g. cesium carbide), fluorine, phosphorus halides (e.g. phosphorus trichloride) or other phosphorus compounds (e.g. cadmium phosphide). Mixtures with metal cyanides (e.g. sodium cyanide, potassium cyanide or calcium cyanide) produce a violent reaction, with formation of very toxic and flammable hydrogen cyanide. Interaction with sulfur halides (e.g. sulfur dichloride or disulfur dibromide) is violent, with generation of the corresponding hydrogen halide. Reacts with water or steam to produce heat and toxic, corrosive and flammable vapours. The acid must be added slowly to water with stirring to avoid possible splattering.

Conditions to avoid

Heat and high temperatures, light, air, moisture, confined spaces, combustibles, organic compounds, and incompatible materials.

Incompatible materials

Most metals particularly powdered metals (e.g. antimony, bismuth, germanium, manganese or titanium), metal alloys, alkali metals (e.g. lithium or sodium) or alkaline earth metals (e.g. magnesium or calcium), strong bases, metallic oxides, nonmetallic oxides, organic chemicals (e.g., water or steam, alcohols, acids, anhydrides, aldehydes, ketones, amines, ethers, turpentine, hydrocarbons, alkanethiols, nitriles, nitrides, organic nitro compounds, acetylidenes, nitroalkanes and nitroaromatics), combustible materials, flammable liquids, oxidizable substances, hydrogen peroxide, chromic acid, non-metals (e.g. arsenic, boron, finely divided carbon, phosphorus or silicon), non-metal hydrides (e.g. arsine, phosphine, stibine or tetraborane) or reducing agents (e.g. potassium phosphinate), crotonaldehyde, hydrazine and derivatives, dimethylhydrazine, divinyl ether, pyrocatechol, ammonia, aniline, diborane, furfuryl alcohol or terpenes, sulfides (e.g. hydrogen sulfide, sodium or potassium sulfide), carbides (e.g. cesium carbide), halogens, fluorine, halogen compounds, phosphorus halides (e.g. phosphorus trichloride) or other phosphorus compounds (e.g. cadmium phosphide), metal cyanides (e.g. sodium cyanide, potassium cyanide or calcium cyanide), nonmetallic halides, sulfur halides (e.g. sulfur dichloride or disulfur dibromide), and lithium silicide.

Hazardous decomposition products

Toxic nitrogen oxides fumes and hydrogen nitrate. Will react with water or steam to produce heat and toxic and corrosive fumes.

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity

Ingestion: May be fatal if swallowed. Corrosive! Swallowing can cause immediate pain and burns to the lips, mouth, tongue, teeth, throat, oesophagus, and digestive system, severe abdominal pain, nausea, vomiting, bloody vomiting, diarrhoea and death if ingested. May cause perforation of the digestive tract. May cause severe and permanent damage to the digestive tract. Liquid or spray mist may produce tissue damage to mouth. The uptake of large quantities of nitrites/nitrates, in general produces methaemoglobinaemia. Because of immediate pain when taken into the mouth, strong mineral acids are not often swallowed. Ingestion is not a typical route of occupational exposure. The lowest located lethal dose in humans is 430 mg/kg.

Inhalation: Corrosive. May be fatal if inhaled. Inhalation of vapours or mists may produce severe irritation and chemical burns to the respiratory tract and the digestive system, and may cause burning pain in the nose and throat, coughing, sneezing, wheezing, choking, and difficulty breathing. Inhalation of mist can cause harmful corrosive effects including lesions of the nasal septum. Severe exposure to nitric acid fumes and/or vapours may cause acute pulmonary oedema, asphyxia, chemical pneumonitis, spasm, inflammation, oedema of the larynx and bronchi, upper airway obstruction caused by oedema, or chronic obstructive lung disease, bronchopneumonia, cardiac failure, delayed pulmonary fibrosis, and death. Aspiration may lead to pulmonary oedema. Symptoms of pulmonary oedema (chest pain and shortness of breath) can be delayed for up to 24 or 48 hours after exposure. May affect behaviour and urinary system. Other symptoms may include nausea, and vomiting.

Skin corrosion/irritation

Corrosive to the skin. Liquid and mist cause severe burns to all body tissue. Symptoms may include severe irritation, itching, pain, reddening, blistering, scaling, deep, penetrating ulcers, a change in skin colour from yellow to brown and permanent scarring, depending on the concentration of the solution and the duration of contact.

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Serious eye damage/irritation

Corrosive. Contact may cause severe eye burns, and permanent injury, including blindness, depending on the concentration of the solutions and duration of contact. Liquid or spray mist may produce tissue damage to eyes. Vapours are irritating and may cause damage to the eyes. Symptoms may include inflammation, redness, watering, and itching.

Respiratory or skin sensitization

No data available.

Germ cell mutagenicity

No data available.

Carcinogenicity

Chronic overexposure to vapour, fumes or aerosols may produce adverse effects on the lungs and erosion of the teeth. Acid mists, strong inorganic: Classified by the International Agency for Research on Cancer (IARC) as a Group 1. Group 1 - The agent is carcinogenic to humans.

Reproductive toxicity

No data available.

Summary of evaluation of the CMR properties

No data available.

Specific target organ toxicity (STOT) - single exposure

No data available.

Specific target organ toxicity (STOT) - repeated exposure

No data available.

Aspiration hazard

No data available.

Additional information

Chronic Effects: Repeated or prolonged inhalation of vapours and mists can cause respiratory irritation, with the possible development of lung injury (e.g. chronic bronchitis), and more severe exposure results in a chemical pneumonitis and pulmonary oedema which may be fatal. Symptoms may or may not be delayed. Severe over-exposure can result in death. It may also affect behaviour (headache, dizziness, drowsiness, muscle contraction or spasticity, weakness, loss of coordination, mental confusion), and urinary system (kidney failure, decreased urinary output after several hours of uncorrected circulatory collapse). Repeated or prolonged contact with spray mist may produce chronic eye irritation and severe skin irritation, skin burns and ulcerations. Repeated skin contact with low concentrations of acid solutions, mists or vapour can cause skin irritation, redness, swelling and pain (dermatitis). Repeated exposure to nitric acid vapours, mists or aerosols may cause discolouration and/or erosion of teeth (dental enamel).

Nitric acid (40% to 70%): Inhalation, rat: LC50 = 260 mg/m³/30M;

Inhalation, rat: LC50 = 130 mg/m³/4H;

Inhalation, rat: LC50 = 67 ppm(NO₂)/4H;

SECTION 12: Ecological information

Toxicity

Toxic for aquatic organisms. Toxic effect on fish and plankton. Harmful effect due to pH shift. Forms corrosive mixtures with water even if diluted. Does not cause biological oxygen deficit. Hazard for drinking water supplies. The following applies to nitrates in general: may contribute to the eutrophication of water supplies. Hazard for drinking water.

[8X] Acute Toxicity - Fish: The following applies to nitrates in general: LC50 > 500 mg/l.

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Bioaccumulative potential

No bioaccumulation is to be expected ($\log P(o/w) < 1$).

Mobility in soil

Distribution: $\log p(o/w)$: -2.3 (anhydrous substance).

Other adverse effects

Environmental Fate: Terrestrial: During transport through the soil, nitric acid will dissolve some of the soil material, in particular, the carbonate based materials. The acid will be neutralized to some degree with adsorption of the proton also occurring on clay materials. However, significant amounts of acid are expected to remain for transport down toward the ground water table. Upon reaching the ground water table, the acid will continue to move, now in the direction of the ground water flow.

SECTION 13: Disposal considerations

Disposal methods

Product disposal

Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers.

Waste treatment

Small quantities may be diluted & carefully neutralised with soda ash or slaked lime. After dilution and neutralisation, disposal may be possible through the sewer system after consultation with your local authority.

Larger quantities should be disposed of through a registered Waste Disposal Authority or agent.

Sewage disposal

No bioaccumulation is to be expected ($\log P(o/w) < 1$).

Other disposal recommendations

Do not discharge this material into waterways, drains and sewers.

SECTION 14: Transport information

ADG (Road and Rail)

UN Number: 2031

Class: 8

Packing Group: II

Proper Shipping Name: NITRIC ACID

Environmental Hazards: Toxic for aquatic organisms. Toxic effect on fish and plankton. Harmful effect due to pH shift. Forms corrosive mixtures with water even if diluted. Does not cause biological oxygen deficit. Hazard for drinking water supplies.

Hazchem emergency action code (EAC)

2R

IMDG

UN Number: 2031

Class: 8

Packing Group: II

EMS Number:

Proper Shipping Name: NITRIC ACID

IATA

UN Number: 2031

Class: 8

Packing Group: II

Proper Shipping Name: NITRIC ACID

SECTION 15: Regulatory information

Safety, health and environmental regulations specific for the product in question

Australia SUSMP

Poison Schedule: S6

Canadian Domestic Substances List (DSL)

Chemical name: Nitric acid

CAS: 7697-37-2

Massachusetts Right To Know Components

Chemical name: Nitric acid

CAS number: 7697-37-2

New Jersey Right To Know Components

Common name: NITRIC ACID

CAS number: 7697-37-2

Pennsylvania Right To Know Components

Chemical name: Nitric acid

CAS number: 7697-37-2

SECTION 16: Other information

Further information/disclaimer

ChemSupply Australia Pty Ltd does not warrant that this product is suitable for any use or purpose. The user must ascertain the suitability of the product before use or application intended purpose. Preliminary testing of the product before use or application is recommended. Any reliance or purported reliance upon ChemSupply Australia Pty Ltd with respect to any skill or judgement or advice in relation to the suitability of this product of any purpose is disclaimed. Except to the extent prohibited at law, any condition implied by any statute as to the merchantable quality of this product or fitness for any purpose is hereby excluded. This product is not sold by description. Where the provisions of Part V, Division 2 of the Trade Practices Act apply, the liability of ChemSupply Australia Pty Ltd is limited to the replacement of supply of equivalent goods or payment of the cost of replacing the goods or acquiring equivalent goods.

Preparation information

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Standard for the Uniform Scheduling of Medicines and Poisons, Commonwealth of Australia

National Road Transport Commission, 'Australian Code for the Transport of Dangerous Goods by Road and Rail 7th. Ed.'

Safe Work Australia, 'National Code of Practice for the Preparation of Safety Data Sheets for Hazardous Chemicals', July 2020.

Safe Work Australia, 'National Guide for Classifying Hazardous Chemicals', July 2020.

Safe Work Australia, Workplace Exposure Standards for Airborne Contaminants, December 2019

Safe Work Australia, Hazardous Chemical Information System (HCIS), hcis.safeworkaustralia.gov.au

IATA, Dangerous Goods Regulations (DGR)

IMO, International Maritime Dangerous Goods Code (IMDG)

