Safety Data Sheet Iron Standard 1 mg/L (Nitric Acid 2% Matrix)

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SECTION 1: Identification

GHS Product identifier

Product name	Iron Standard 1 mg/L (Nitric Acid 2% Matrix)
Product number	5922/
Brand	ACR

Recommended use of the chemical and restrictions on use

Laboratory and Analytical Reagent

Supplier's details

Name	ChemSupply Australia Pty Ltd
Address	38-50 Bedford Street 5013 Gillman South Australia Australia
Telephone	08 8440 2000
email	www.chemsupply.com

Emergency phone number

CHEMCALL 1800 127 406 (Australia) / +64-4-917-9888 (International)

SECTION 2: Hazard identification

General hazard statement

Classified as dangerous goods according to the Australian Dangerous Goods Code (ADG).

Classified as Hazardous according to the Globally Harmonised System of classification and labelling of Chemicals (GHS) including Work, Health and Safety regulations, Australia.

Classification of the substance or mixture

GHS classification in accordance with: UN GHS revision 7

- Skin corrosion/irritation, Cat. 2
- Serious eye damage/eye irritation, Cat. 2A

GHS label elements, including precautionary statements

Pictograms

Signal word	**Warning**
Hazard statement(s)	
H315	Causes skin irritation
H319	Causes serious eye irritation
Precautionary statement(s)	
P264	Wash hands thoroughly after handling.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352	IF ON SKIN: Wash with plenty of water/soap
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P332+P313	If skin irritation occurs: Get medical advice/attention.
P337+P313	If eye irritation persists: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash it before reuse.

SECTION 3: Composition/information on ingredients

Mixtures

Other components either not classified as Hazardous under the GHS, or below cut-off concentrations to be classified as Hazardous.

Hazardous components

Component	CAS no.	Concentration
Nitric acid (70% to 80%) (EC no.: 231-714-2; Index no.: 007-030-00-3)	7697-37-2	2 % (volume)

SECTION 4: First-aid measures

Description of necessary first-aid measures

General advice	For advice, contact a Poisons Information Centre (e.g. phone Australia 13 11 26; New Zealand 0800 764 766) or a doctor (at once).
If inhaled	If inhaled, remove from contaminated area. Apply artificial respiration if not breathing.
In case of skin contact	If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water.
In case of eye contact	If in eyes, hold eyelids apart and flush eye continuously with running water. Continue flushing until advised to stop by a Poisons Information Centre (e.g. phone Australia 13 11 26; New Zealand 0800 764 766) or a doctor, or for at least 15 minutes.
If swallowed	If swallowed, do NOT induce vomiting.

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
Use fire extinguishing media appropriate for surrounding environment. Use water spray, dry chemical, carbon dioxide, or appropriate foam. This material is substantially water.

Specific hazards arising from the chemical
Contact with metals may produce hydrogen gas. Excess thermal conditions or contact with combustible materials may cause decomposition and yield nitrogen oxides.

Hazardous Combustion Products

Hydrogen, nitrogen oxides.

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
Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Vapours can accumulate in low areas. For personal protection see section 8.

Environmental precautions
Do not let product enter drains.

Methods and materials for containment and cleaning up
Contain the spill. Place inert absorbent material onto spillage. Collect the material and place into a suitable labelled container. Do not dilute material but contain. Dispose of waste according to the applicable local and national regulations.

SECTION 7: Handling and storage

Precautions for safe handling
Corrosive liquid. Attacks skin and eyes. Causes burns. Avoid breathing in vapours, mist or fumes. Wear suitable protective clothing, gloves and eye/face protection when mixing and using. Use in designated areas with adequate ventilation. Keep containers tightly closed. Ensure a high level of personal hygiene is maintained when using this product, that is, always wash hands after handling, and before eating, drinking, smoking or using the toilet facilities. Avoid exposure. Do not handle until all safety precautions have been read and understood.

Conditions for safe storage, including any incompatibilities
Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

SECTION 8: Exposure controls/personal protection

Control parameters

CAS: 7697-37-2
Nitric acid (70% to 80%)
AU/SWA (Australia): 4 ppm; 10 mg/m3 STEL inhalation; 2 ppm; 5.2 mg/m3 TWA 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.

Body protection
Suitable protective workwear, e.g. cotton overalls buttoned at neck and wrist is recommended. Chemical resistant apron is recommended where large quantities are handled.

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.

Environmental exposure controls
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

SECTION 9: Physical and chemical properties

Basic physical and chemical properties

Physical state	Liquid
Appearance	Clear colourless liquid
Color	Colourless
Odor	Slight acidic odor
Odor threshold	No data available.
Melting point/freezing point	No data available.
Boiling point or initial boiling point and boiling range	No data available.
Flammability	Not flammable
Lower and upper explosion limit/flammability limit	N/A
Flash point	N/A
Explosive properties	No data available.
Auto-ignition temperature	No data available.
Decomposition temperature	No data available.
Oxidizing properties	No data available.
pH	Acidic (pH < 1)
Kinematic viscosity	No data available.
Solubility	Miscible
Partition coefficient n-octanol/water (log value)	No data available.
Vapor pressure	No data available.
Evaporation rate	No data available.
Density and/or relative density	Approx 1
Relative vapor density	No data available.
Particle characteristics	No data available.

Supplemental information regarding physical hazard classes
No data available.

Further safety characteristics (supplemental)
No data available.

SECTION 10: Stability and reactivity

Reactivity
Reacts with incompatible materials

Chemical stability
Stable under recommended storage conditions.

Possibility of hazardous reactions
May react vigorously or violently with the incompatible materials listed above. Excess thermal conditions may yield hazardous nitrogen oxides. Contact with metals may produce hazardous concentrations of hydrogen gas.
Will corrode metals. Will produce toxic gases on contact with cyanides, sulphides etc.

Conditions to avoid
Avoid storing in direct sunlight and avoid extremes of temperature.

Incompatible materials
Strong bases, strong oxidisers, reducing agents, metals, combustible materials.

Hazardous decomposition products
Nitrogen oxides, hydrogen.

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity
Corrosive. Oxidiser. May be harmful if swallowed, inhaled, or absorbed through the skin. Causes irritation of the eyes, skin, respiratory tract, and gastrointestinal tract. May enter lungs if swallowed or vomited. Liquid and vapors are corrosive. May cause tissue damage.

Skin corrosion/irritation
Causes severe skin burns. Corrosive to skin. The symptoms may include redness, itching and swelling, irritation, severe pain and chemical burns with resultant skin/tissue destruction.

Serious eye damage/irritation
Causes serious eye damage. Eye contact will cause stinging, blurring,tearing, evere pain and chemical burns, resulting in possible blindness.

Respiratory or skin sensitization
Inhalation of product vapours may cause irritation of nose, throat and respiratory system and possible harmful corrosive effects to the respiratory system. Not expected to be a respiratory or skin sensitiser.

Germ cell mutagenicity
Not considered to be a mutagenic hazard.

Carcinogenicity

Occupational exposure to strong-inorganic-acid mists containing nitric acid may be carcinogenic to humans (Group 1) according to the IARC (International Agency https://publications.iarc.fr/Book-And-Report-Series/Iarc-Monographs-On-The-Identification-Of-Carcinogenic-Hazards-To-Humans/Occupational-Exposures-To-Mists-And-Vapours-From-Strong-Inorganic-Acids-And-Other-

Industrial-Chemicals-1992

Reproductive toxicity
Not considered to be toxic to reproduction.

Specific target organ toxicity (STOT) - single exposure
Not expected to cause toxicity to a specific target organ.

Specific target organ toxicity (STOT) - repeated exposure
Not expected to cause toxicity to a specific target organ.

Aspiration hazard
Not expected to be an aspiration hazard.

SECTION 12: Ecological information

Toxicity
No data available on product

Persistence and degradability
No data available on product

Bioaccumulative potential
No data available.

Mobility in soil
No data available.

Results of PBT and vPvB assessment
No data available.

Endocrine disrupting properties
No data available.

Other adverse effects
No data available

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.

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

SECTION 14: Transport information

ADG (Road and Rail)
UN Number: 3264
Class: 8
Packing Group: III
Proper Shipping Name: CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Contains Nitric Acid)

Marine pollutant: No
IERG No: 154

Hazchem emergency action code (EAC)
2X

IMDG
UN Number: 3264
Class: 8
Packing Group: III
EMS Number: F-A, S-B
Proper Shipping Name: CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Contains Nitric Acid)
Special Provisions: 223, 274
Marine Pollutant: No

IATA
UN Number: 3264
Class: 8
Packing Group: III
Proper Shipping Name: CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Contains Nitric Acid)
Pax/Cargo Pkg Inst: 852
Max Net Qty/Pkg: 5L
Cargo Aircraft Only Pkg Inst: 856
Max Net Qty/Pkg: 60L
Special Provisions: A3, A803

SECTION 15: Regulatory information

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

Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP)
S5

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.

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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 fot 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 Airbourne 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)