

Safety Data Sheet

Section 1: Identification

Product Identifier: Iron filings (powder, wire filings)
Common Name: Iron
Recommended Use: Educational, demonstration purposes only
Restrictions of Use: To be used under supervision of qualified teacher

Importer Name:
Technos Pty Ltd
71 McClure Street
Thornbury Vic Australia
Tel: 61 3 94972555

Section 2: Hazards Identification

General Statement: Not classed as hazardous according to the approved criteria for classifying hazardous substances – safe work Australia. No classed as hazardous according to the Australian Dangerous Goods Code.

Section 3: Composition / information on ingredients

CAS: 7439-89-6 100% Iron

Section 4: First Aid Measures

Inhalation: If inhaled remove from contaminated area to fresh air. If breathing is difficult, give oxygen. Seek medical assistance.
Ingestion: Rinse mouth thoroughly with water immediately. Repeat. Do not induce vomiting.
Skin: Wash affected area with soap and water. Remove contaminated clothing and wash or discard. If any rash or symptoms develop seek medical assistance.
Eye: Irrigate with water for at least 15 minutes. If irritation persists, seek medical attention.
First Aid Facilities: Maintain eyewash fountain and safety shower in work area.
For further advice contact Poisons Information: 13 1126

Section 5: Fire Fighting Measures

Material does not burn. This product in large quantity is capable of producing a dust explosion.
Small Fire: use dry sand, powdered graphite, powdered salt or powdered limestone. Do not use water, carbon dioxide or dry chemicals.
Large fire: use water spray, fog or foam. If safe to do so move undamaged product from danger zone. Wear appropriate protective clothing and safety goggles.

Rev: October 2025

Controlled document SDS IRON

Section 6: Accidental Release Measures

Eliminate all ignition sources within at least 30 metres. Do not touch or walk through spilled material. Do not touch damaged containers or spilled material without gloves. Avoid generation of dusts. Do not inhale. Sweep up and use clean tools to scoop up debris for disposal in accordance with local regulations.

Environmental precautions: due to poor solubility of this product no harmful effect on aquatic organisms are to be expected.

Section 7: Handling and Storage

Do not breathe dust. Do not get in eyes, on skin or clothing. Avoid prolonged or repeated exposure. Use in well ventilated space away from ignition sources.

Corrosive in water. Store away from oxidizing agents. Keep container tightly closed and dry, away from direct sunlight. Store away from acids and halogenated materials. Store at room temperature.

Section: 8 Exposure Control/ Personal protection

Use in area with normal ventilation. Never use in a confined space. Wear Safety Glasses with using this product. Wear Gloves when handling this product. Always wash hands after handling this product. Observe normal safety and laboratory operating procedures.

Section: 9 Physical and chemical properties

Physical State: Solid. Grey-black filings. Odourless

Melting Point: 1300 – 1500 deg c

Boiling Point: 2730 – 1750 deg c

Insoluble, can react with water

Specific gravity: 7.86 @ 20 deg c

Non-combustible material – non flammable

Section 10: Stability and Reactivity

Reactivity: None expected

Chemical Stability: Stable to ignition temperature of 700 deg c. Sensitive to moisture. Stable in dry air but oxidises in moist air forming rust. (ca. 5 microns) powder forms are unstable and can ignite spontaneously in air.

Conditions to avoid: Heat, flame, ignition sources, dusting

Incompatible materials: strong oxidizers, water, acids, aldehydes, halogen-halogen compounds, hydrogen peroxide, hydrogen sulphide, nitrogen dioxide, nitrile compounds, oils.

Hazardous decomposition: toxic iron oxide fumes.

Section: 11 Toxicological Information

No information available. No health effects expected if the product is handled in accordance with this safety data information.

Ingestion: symptoms may include nausea, vomiting and diarrhoea or gastrointestinal disturbances.

Inhalation: symptoms may include irritation, coughing or shortness of breath

Skin: no symptoms expected

Eye: symptoms may include irritation, redness, and pain.

Carcinogenicity: Iron and steel founding is evaluated in the IARC monographs as group 1.

Carcinogenic to humans.

Rev: October 2025

Controlled document SDS IRON

Sections 12: Ecological information

No information available

Section: 13: Disposal Considerations

Dispose in accordance with all applicable local regulations

Sections: 14/15 Transport and Regulatory Information

Not applicable. Not classified as a dangerous good.

Disclosure:

The above information is based upon information available to us. Technos P/L shall not be held liable for any claims, losses or damages resulting from reliance on this information. Users should do their own research to determine the suitability of the information for their own use of this product. Self-risk assessments are recommended. Each State and Territory have their laws and regulations for disposing of product and it is recommended users check before discarding the product.

Rev: October 2025

Controlled document SDS IRON