MINING, OIL & GAS

METAL ORE RECOVERY, OIL & GAS EXTRACTION, COAL, EXPLOSIVES, MINERAL SANDS

1000 PRODUCTS ENDLESS POSSIBILITIES
MINING, OIL & GAS

ABOUT REDOX
Established in 1965 in Sydney, Redox is a leading chemical distributor active in the Australian, Malaysian, New Zealand and United States markets. Our business specialises in providing customers with the widest possible range of quality chemicals, ingredients and raw materials sourced from the world's best manufacturers.

Redox add value through its expert sourcing ability, efficient freight and warehousing network, stringent quality systems, close customer service, leveraged buying power and market knowledge. We look for long term partnerships, where shared values and common goals align for mutual benefit. Our relationships are open, innovative and based on teamwork. Let Redox become your supply chain partner and start to enjoy the benefits tens of thousands of customers enjoy around the globe.

QUALITY
Maintaining quality of output is absolutely vital to every one of Redox’s customers. To achieve the required standards, they must be assured that the raw materials they purchase consistently maintain stipulated standards. Redox is an ISO9001 certified company and relevant sites have HACCP and/or FSSC22000 Certification and commit to continual improvement. In addition to regular internal inspections and constant updates to comply with regulatory issues, SAI Global limited conducts bi-annual audits. We are committed to the Chemistry Australia Responsible Care program and the Code of Conduct to protect against the illicit use of chemicals and comply with all relevant environmental programs and occupational health and safety regulations. Redox are also Members of the Roundtable on Sustainable Palm Oil (RSPO), Sedex and subscribers to the EcoVadis Supplier Sustainability Ratings platform.

Our quality assurance program ensures all customers receive relevant and timely information on the storage and handling of chemicals, as well as information to protect the health and safety of employees and the environment.

The Redox labelling system for its packaged products is unique – defining product types and hazard codes, Redox batch numbers and barcodes. The system enables the incoming and outgoing deliveries to be quickly and easily matched to their analysis results. Therefore, at any time, Redox customers can request a certificate of analysis/conformity, either by fax or accompanying their delivery. This certificate contains all of the information required to ensure full traceability and accurate matching with the analysis results of the incoming delivery.

WE UNDERSTAND YOUR NEEDS
Redox has long been a key partner of the mining industry, with experience catering to the needs of gold, silver, tin, nickel, zinc, copper, coal, lead, vanadium, uranium, rare earth and oil & gas miners and processors.

EXTENSIVE RANGE OF QUALITY PRODUCTS
Redox is a one-stop-shop for mining reagents and, refining and forming chemicals, with more than 1000 products available. New additions to our extensive product list include frothers and collectors for a range of applications.

RELIABLE DELIVERY AND LOCAL REPRESENTATION
The mining industry demand reliability of supply and personal service, that’s why we have 11 regional sales offices across 4 countries with over 50 storage locations. It doesn’t matter if you are in Perth or Kuala Lumpur, Los Angeles or Auckland you can be sure that friendly help is not far away.

MEMBER OF THE FOLLOWING INDUSTRY ASSOCIATIONS:

- National Association of Chemical Distributors (NACD)
- Chemistry Australia
MINING, OIL & GAS

PRODUCT LINES

<table>
<thead>
<tr>
<th>CHEMICALS</th>
<th>CAS NO.</th>
</tr>
</thead>
<tbody>
<tr>
<td>MINING</td>
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<tr>
<td>Activated Carbon</td>
<td>7440-44-0</td>
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<tr>
<td>Aluminium Sulphate</td>
<td>7784-31-8</td>
</tr>
<tr>
<td>Ammonium Thiogalate</td>
<td>7783-18-8</td>
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<td>Automate Red</td>
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<td>Barite</td>
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<td>Borax Anhydrous</td>
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<td>Calcium Oxide</td>
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<td>Caustic Soda Pearl</td>
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<tr>
<td>Citric Acid</td>
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<tr>
<td>Cobalt Sulphate</td>
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<td>Collectors</td>
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<tr>
<td>Copper Sulphate</td>
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<tr>
<td>Di Isobutyl Ketone</td>
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<tr>
<td>Diatomaceous Earth</td>
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<td>Electrode Paste</td>
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<td>Ferrous Sulphate</td>
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<td>Fluorspar</td>
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<tr>
<td>Frothers - large Range</td>
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<td>Guar Gum</td>
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<tr>
<td>Grinding Media</td>
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<td>Hydrochloric Acid</td>
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<tr>
<td>Hydrogen Peroxide</td>
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<tr>
<td>Hydroxyamine Sulphate</td>
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<tr>
<td>Lactic Acid</td>
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<td>Lithium Carbonate</td>
<td>554-18-2</td>
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<tr>
<td>Lime Hydrated</td>
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MAGNESIUM OXIDE: 1309-48-4
Methyl Isobutyl Carboxyl: 108-11-3
Nitrate of Soda: 7631-99-4
Nitric Acid: 7697-37-2
Oleic Acid: 112-80-1
Oxalic Acid: 6153-56-6
Poly Aluminium Chloride: 1227-46-9
Potassium Amyl Xanthate: 2720-73-2
Potassium Nitrate: 7757-79-1
Potassium Permananganate: 7222-64-7
Quebracho: 140-55-4
Silica Flour: 14808-60-7
Soda Ash: 497-19-8
Sodium Chloride: 7647-14-5
Sodium Cyanide: 143-33-9
Sodium Ethyl Xanthate: 140-90-9
Sodium Gluconate: 527-07-1
Sodium Hydrogensulphide: 16781-80-5
Sodium Hydrogensulphate: 16721-80-5
Sodium Hydrogensulphate Liquid: 16721-80-5
Sodium Hypochlorite: 7681-52-9
Sodium Isobutyl Xanthate: 25306-75-6
Sodium Lignosulphonate: 8061-51-6
Sodium Metabisulphite: 7681-57-4
Sodium Nitrobenzenesulphonate: 127-68-4
Sodium Nitrite: 7632-00-0
Sodium Silicate: 1344-09-8
Sodium Silicofluoride 1: 6893-85-9
Sodium Sulphide: 1313-82-2
Sulphuric Acid: 7664-93-9
Thiourea: 62-56-6
Wax Microcrystalline: 62321-60-7
Xanthates - Full range: 11038-66-3
Zinc Dust: 7440-66-6
Zinc Sulphate: 7446-19-7, 7733-02-0

REDOX MAINTAINS THE HIGHEST QUALITY IN ITS SUPPLY OF BOTH PRODUCTS AND SERVICES. IT HAS BEEN CERTIFIED AS A QUALITY ENDORSED COMPANY SINCE 1993, ACKNOWLEDGING ITS CAPACITY TO CONTROL THE QUALITY OF ITS PRODUCTS.
OIL & GAS

Acetic Acid  61-19-7, 64-19-7
Aluminium Sulphate  7784-31-8
Ammonium Acetate  1336-71-6
Ammonium Chloride  1762-95-4
Acetone  67-64-1
Benzene  7127-43-7
Bentonite  1318-93-0, 1302-78-9
Boric Acid  10043-35-3
Calcium Chloride  10043-52-4
Calcium Hypophosphite  7778-54-3
Calcium Nitrate  13477-34-4
Carboxy Methyl Cellulose  9004-32-4
Castor Oil  8001-79-4, 68187-84-8
Caustic Potash  1310-58-3
Caustic Soda Liquid  1310-73-2
Caustic Soda Pearl  1310-73-2
Citric Acid  77-92-9
Defoamer  63148-62-9
Diisopropanol Glycol  25265-71-8
Dithanolamine  111-42-2
Diethylene Glycol Monobutyl Ether  112-34-5
Diisopropanol Glycol Monobutyl Ether  34590-94-8
EDTA Tetrasodium Salt  13235-36-4
Ester Gum Pentamethylene  68333-69-7
Ethylene Glycol Monobutyl Ether  111-76-2
Fatty Alcohol  103818-93-5
Ferric Sulphate  7782-63-0
Gluconaldehyde  111-30-8
Glycerine  56-81-5
Gum Guai  9000-30-0
Hydrochloric Acid  7647-01-0
Hydrogen Peroxide  7722-84-1
Ion Proly Alcohol  67-63-0
Methanol  67-56-1
Monochloroacetic Acid  75-04-7
Monooctadecyl Glycol  107-21-1
Nitrate of Soda  7831-99-4
Polyanionic Cellulose  9004-32-4
Polyethylene Glycol  25322-68-3

Potassium Acetate  127-08-2
Potassium Chloride  7447-40-7
Potassium Carbonate  584-08-7
Potassium Sulphate  7778-80-5
Propylene Glycol  57-55-6
Soda Ash  497-19-8
Sodium Acetate  127-09-3
Sodium Bicarbonate  144-55-8
Sodium Bisulphite  7681-38-1
Sodium Bromide  7647-15-6
Sodium Formate  141-53-7
Sodium Laureth Sulfate  68891-38-3
Sodium Sulphite  7757-83-7
Sulphamic Acid  5329-14-6
Tetra Potassium Pyrophosphate  7320-34-5
Tetra Sodium Pyrophosphate  7722-88-5
Triethanolamine  102-71-6
Triethylene Glycol  112-27-6
Xanthan Gum  1138-66-2
Zinc Oxide  1314-13-2

EXPLOSIVES

Acetic Acid  61-19-7, 64-19-7
Automate Blue  64742-94-6
Automate Orange  78188-51-7
Automate Red  78188-51-7
Automate Yellow  78188-51-7
Calcium Nitrate  13477-34-4, 15245-12-2
Caustic Soda Liquid  1310-73-2
Cyanuric Acid  5949-29-1
DBNPA  10222-01-2
Epox White  9006-50-7
Gelling Solution  8000-30-0
Guar Gum  9000-30-0
Hexametane  100-97-0
Magnesium Nitrate  15245-12-2
Nitrate of Soda  7631-99-4
Nitric Acid  7697-37-2
Phosphoric Acid  7664-38-2
Potassium Nitrate  7757-79-1
Potassium Permanganate  7722-64-7
Soda Ash  497-19-8
Sodium Nitrate  76120-00-0
Sodium Perchlorate  7601-89-0
Sodium Sulphate  1313-82-2, 7757-83-7
Sodium Thiocyanate  540-72-7
Sulphamic Acid  5329-34-6
Urea  57-13-6
Zinc Oxide  1314-13-2

OUR EXPERIENCE IN MINING CHEMICALS, REAGENTS AND PROCESSING AIDS GIVE US THE KNOWLEDGE TO HELP OUR CLIENTS ACHIEVE EFFICIENCIES AND COST SAVINGS NEEDED IN TODAY’S COMPETITIVE MARKETPLACE.
ALPHABETICAL PRODUCT LISTING

A
Acetic Acid
Acetone
Activated Carbon
Aluminium Sulphate
Ammonia Aqueous
Ammonium Thiocyanate
Automate Blue
Automate Orange
Automate Red
Automate Yellow
B
Bente
Bentonite
Borax Anhydrous
Boric Acid
C
Calcium Chloride
Calcium Lignosulphonate
Calcium Hypophosphite
Calcium Lignosulphonate
Calcium Nitrate
Calcium Oxide
Castor Oil
Carboxy Methyl Cellulose
Caustic Potash
Caustic Soda Liquid
Caustic Soda Pearl
Citric Acid
Cobalt Sulphate
Collectors
Copper Sulphate

D
DBNPA
Defoamer
Di Isobutyl Ketone
Diatomaceous Earth
Diethanolamine
Diethylene Glycol
Diethylene Glycol
Dipropylene Glycol
Dipropylene Glycol

E
EDTA Tetrasodium Salt
Egg White
Electrode Paste
Ester Gum Pentaerytheritol
Ethylene Glycol Monobutyl Ether
F
Fatty Alcohol
Ferrocene

G
Gassing Solution
Glutaraldehyde
Glycerine
Grinding Media
Guar Gum

H
Hexamine
Hydrochloric Acid
Hydrogen Peroxide
Hydroxyamine Sulphate

I
Iso Propyl Alcohol
Lactic Acid
Lead Nitrate
Lime Hydrated
Litharge
Lithium Carbonate
Magnesium Nitrate
Magnesium Oxide
Methanol
Methyl Isobutyl Carbinol
Monoethanolamine
Monoethylene Glycol

N
Nitrile of Soda
Nitric Acid

O
Oleic Acid
Oxalic Acid
Phosphoric Acid
Poly Aluminium Chloride
Poly Anionic Cellulose
Polyethylene Glycol
Potassium Acetate
Potassium Amyl Xanthate
Potassium Carbonate
Potassium Chloride
Potassium Nitrate
Potassium Permanganate
Potassium Sulphate
Propylene Glycol

Q
Quebracho
S
Silica Flour
Soda Ash
Sodium Acetate
Sodium Acid Pyrophosphate
Sodium Bicarbonate
Sodium Bisulphite
Sodium Bromide
Sodium Chloride
Sodium Cyanide
Sodium Ethyl Xanthate
Sodium Formate
Sodium Gluconate
Sodium Hydrosulphate
Sodium Hydrosulphite Liquid
Sodium Hypochlorite
Sodium Iso Butyl Xanthate
Sodium Lauryl Ether Sulphate
Sodium Lignosulphonate
Sodium Metabisulphite
Sodium Nitrite
Sodium Nitrobenzenesulphonate
Sodium Perchlorate
Sodium Silicofluoride
Sodium Silicate
Sodium Sulphide
Sodium Sulphite
Sulphating Agents
Sulphamic Acid
Sulphuric Acid

T
Tetra Potassium Pyrophosphate
Tetra Sodium Pyrophosphate
Thiourea
Triethylenamine
Triethylene Glycol

U
Urea
W
Wax Microcrystalline
X
Xanthan Gum
Xanthates - Full Range
Z
Zinc Dust
Zinc Oxide
Zinc Sulphate

IN THE FIELD OF EXPLOSIVES MANUFACTURER REDOX PARTNERS WITH CLIENTS TO DELIVER INNOVATIVE SPECIALTY CHEMICALS FOR EMULSIFICATION AS WELL AS COMMODITY CHEMICAL FUELS AND OXIDANTS.
Redox supplies more than 1,000 different chemicals and ingredients to clients throughout Australia, Malaysia, New Zealand and the United States.

Our range is sourced from quality raw material manufacturers throughout the world and supplied to clients in 140 unique industries. We know and understand the complexities of your market and act to ensure you receive the best products to allow your business to thrive.

Redox’s range includes bulk commodity chemicals where our efficient logistics network and wide sourcing ability makes the difference to specialty ingredients where innovation and knowledge is key.

Clients have the choice of solid, liquid and gaseous forms, as well as a broad range of secure packaging and tailored transportation options designed to maximize efficiency, product integrity and safety.

From small sachets to bags, bulk bags, bulk powder to carboys, drums, IBC’s/Totes to liquid bulk tankers, Redox offer the flexibility and convenience that your business demands.

**ANIMAL HEALTH & NUTRITION**

Our wide range of products play a vital role in the stockfeed, aquaculture, pet food and veterinary health markets.

We provide:
- Amino acids and proteins
- Feed improvers, enzymes and preservatives
- Vitamins, trace elements and minerals

**CROP PROTECTION & PRODUCTION**

Redox continues to add value to the supply chain with key relationships with the Crop Nutrition, Horticulture and Protection sectors.

Our product range includes:
- Improvers for broad acre and drip delivery
- Growth mediums for Horticulture and Potting soils
- Herbicides, fungicides and other foliar applications

**FOOD & BEVERAGE**

Constant interaction with nutritionists and regulatory bodies ensures that this division stays at the forefront of the Industry. We provide an extensive range of:
- Sweeteners and stabilizers
- Minerals and phosphates
- Basic and functional ingredients
- Acidulants and preservatives.

**PLASTIC, RUBBER & FOAM**

Our product range includes:
- Polymers – PE, HDPE, LDPE, LLDPE, PET, Polystyrene
- Engineering plastics
- Isocyanates
- Polyols
- UV monomers and oligomers
- Flame retardants
- Solvents
- Silane coupling agents and a range of plasticisers.

**BUILDING & CONSTRUCTION**

Redox products are utilised in the manufacture and treatment of:
- Glass
- Bricks
- Insulation
- Timber
- Fiberglass and more.

**WATER & POWER**

For the safest and cleanest water, we supply quality water treatment chemicals such as:
- Flocculants
- pH adjusters
- Filter media
- Scale inhibitors
- Fluoridation additives
- Organophosphates and biocides
- Ion Exchange Resins.

**SURFACE COATINGS**

An integral supplier of raw materials used in the Surface Coating industry, including:
- Filters
- Pigments
- Solvents
- Oxides
- Amines
- Acids
- Glycols and resins.

**PETROLEUM & CHEMICALS**

Redox offers a superior world-wide sourcing network and expert logistics to deliver the low-cost raw materials to help chemical manufacturing grow and prosper.

**METALS**

Redox are active in the Steel, Galvanising, Refractory and Electroplating Industries.

**PERSONAL CARE**

Whether you are formulating a shampoo or sunscreen Redox have a wide variety of innovative commodity and specialty ingredients for the Personal Care specialist.

**ANIMAL HEALTH & NUTRITION**

Our wide range of products play a vital role in the stockfeed, aquaculture, pet food and veterinary health markets.

We provide:
- Amino acids and proteins
- Feed improvers, enzymes and preservatives
- Vitamins, trace elements and minerals

**TANNING & TEXTILES**

Our experienced, industry trained personnel make Redox a market leader in sourcing and distribution of commodity chemicals to the tanneries and textile plants of the region.

**LUBRICANTS & AUTOMOTIVE**

Redox provides key products to service the lubricant and automotive industry with a leading position in the Diesel Exhaust Fluid market.

**DETERGENT**

Our detergent customers use our quality materials to manufacture products for Industrial, Institutional and Consumer markets.

**HUMAN HEALTH**

Redox constantly monitors changes in regulatory standards to effectively deliver competitively priced, high quality, innovative products to the Nutraceutical and Pharmaceutical sectors.

**CHEMICAL MANUFACTURE**

Redox constantly monitors changes in regulatory standards to effectively deliver competitively priced, high quality, innovative products to the Nutraceutical and Pharmaceutical sectors.

**PRODUCT LINES**

Redox supplies more than 1,000 different chemicals and ingredients to clients throughout Australia, Malaysia, New Zealand and the United States.

**OUR VALUE**

We know and understand what’s important to you. If you’re ready to talk, you’ve come to the right place. Talk to one of our industry-focused experts today.
Since 2017, Redox completed projects to fit an additional three sites with photovoltaic solar generation systems. Bringing total capacity to 500kW across five Australian sites, Redox will continue to install solar power generation systems as a practical environmental initiative that also lowers operating expenses. The electricity generated will reduce CO2 emissions by 1,280,000kg per annum which is equivalent to:

**MARKET PLACE**

Redox understands the importance of sourcing its products from ethical and socially responsible suppliers, ensuring labour rights, health and safety, the environment and business ethics, are not compromised. As such, Redox has memberships with relevant ethical organisations including Sedex, RSPO (Roundtable on Sustainable Palm Oil) and the NACD (National Association of Chemical Distributors). This ensures that we interact within ethical supply chains and enables Redox to demonstrate leadership as a responsible business within the market.

**ENVIRONMENT AND COMMUNITY**

Since 2017, Redox completed projects to fit an additional three sites with photovoltaic solar generation systems. Bringing total capacity to 500kW across five Australian sites, Redox will continue to install solar power generation systems as a practical environmental initiative that also lowers operating expenses. The electricity generated will reduce CO2 emissions by 1,280,000kg per annum which is equivalent to:

- 280 Passenger cars
- OR
- 5,380 Computers

**WORKPLACE**

Redox is an equal opportunity employer which enjoys the benefit of a diverse team. Employment decisions at Redox are based on job requirements, individual qualifications and business needs without regard to race, colour, nationality, religion, gender, age, sexual-orientation or disability. It is our policy to provide equal employment opportunity to all persons. We are committed to fair employment practices and are proud to be an equal opportunity employer, providing employees with a work environment free of harassment and discrimination. Redox also offers support programmes for employees including an independent counselling service covering areas such as bereavement, divorce and alcohol abuse. Our maternity leave processes ensure employees are ready to return to work. We work with our employees to accommodate flexible working where possible. Redox uses professional benchmarking and diagnostic tools to evaluate performance on a regular basis, and measures its impact on employees. Redox ensures there is open communication between all levels of the business, which is highlighted through regular meetings and a casual workplace culture.

At Redox, Corporate Social Responsibility (CSR) is about responsible business leadership. It influences how business is conducted, interactions with stakeholders, and the value contributed to society.
As the use of the products described in this document is outside the control of Redox Pty Ltd, we make no representation or warranty concerning the suitability or fitness of those products for any purpose. It is your sole responsibility to ensure that the products will have the qualities and attributes that will make them fit for any purpose required of them, even if that purpose is made known to us at any time. This includes responsibility on your part to conduct in a timely manner all appropriate tests and quality checks on the products and any goods made from them. We disclaim any liability if any products are not suitable or fit for any such purpose. The sale and delivery by us of any of the products described in this document is subject to our Standard Terms and Conditions of Sale, a copy of which is available from our website or on request.