# Safety Data Sheet

## 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

**Product Name:** **IMPREGNATED GRANULAR ACTIVATED CARBON**

**Recommended Use of the Chemical and Restrictions on Use** As an adsorbent in industrial, professional and consumer setting.

**Supplier:** Ixom Operations Pty Ltd
**ABN:** 51 600 546 512
**Street Address:** Level 8, 1 Nicholson Street
East Melbourne Victoria 3002
Australia

**Telephone Number:** +61 3 9906 3000
**Emergency Telephone:** **1 800 033 111 (ALL HOURS)**

Please ensure you refer to the limitations of this Safety Data Sheet as set out in the "Other Information" section at the end of this Data Sheet.

## 2. HAZARDS IDENTIFICATION

Classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for Transport by Road and Rail; DANGEROUS GOODS.

This material is hazardous according to Safe Work Australia; HAZARDOUS CHEMICAL.

**Classification of the chemical:**
Self-heating substances and mixtures - Category 2

**SIGNAL WORD:** WARNING


**Hazard Statement(s):**
H252 Self-heating in large quantities; may catch fire.

**Precautionary Statement(s):**

**Prevention:**
P235+P410 Keep cool. Protect from sunlight.
P280 Wear protective gloves / protective clothing / eye protection / face protection.

**Response:**
No response statements.

**Storage:**
P407 Maintain air gap between stacks/pallets.
P420 Store away from other materials.

**Disposal:**
P501 Dispose of contents and container in accordance with local, regional, national, international regulations.

**Poisons Schedule (SUSMP):** S5 Caution.

## 3. COMPOSITION AND INFORMATION ON INGREDIENTS

| Components | CAS Number | Proportion | Hazard Codes |
|---|---|---|---|
| Carbon | 7440-44-0 | >=90.00% | - |
| Potassium hydroxide | 1310-58-3 | 0-10.00% | H290 H302 H314 H318 |
| Copper oxide | 1317-38-0 | 0-10.00% | H302 H400 |
| Other component(s) | - | to 100% | - |

## 4. FIRST AID MEASURES

For advice, contact a Poisons Information Centre (e.g. phone Australia 131 126; New Zealand 0800 764 766) or a doctor.

**Inhalation:**
Remove victim from area of exposure - avoid becoming a casualty. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume most comfortable position and keep warm. Keep at rest until fully recovered. Seek medical advice if effects persist.

**Skin Contact:**
If skin contact occurs, remove contaminated clothing and wash skin with running water. If irritation occurs seek medical advice.

**Eye Contact:**
If in eyes, wash out immediately with water. In all cases of eye contamination it is a sensible precaution to seek medical advice.

**Ingestion:**
Rinse mouth with water. If swallowed, give activated charcoal if instructed. Never give anything by the mouth to an unconscious patient. Seek medical advice.

**Indication of immediate medical attention and special treatment needed:**
Medications efficiency can be reduced by the adsorbing power of the activated carbon.

## 5. FIRE FIGHTING MEASURES

**Suitable Extinguishing Media:**
Coarse water spray, fine water spray, normal foam, dry agent (carbon dioxide, dry chemical powder).

**Hazchem or Emergency Action Code:** 1Y

**Specific hazards arising from the chemical:**
Combustible solid.

**Special protective equipment and precautions for fire-fighters:**
On burning will emit toxic fumes, including those of carbon monoxide , carbon dioxide . Fire fighters to wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to vapour or products of combustion.

## 6. ACCIDENTAL RELEASE MEASURES

**Emergency procedures/Environmental precautions:**
Clear area of all unprotected personnel. Shut off all possible sources of ignition. Do not allow container or product to get into drains, sewers, streams or ponds. If contamination of sewers or waterways has occurred advise local emergency services.

**Personal precautions/Protective equipment/Methods and materials for containment and cleaning up:**
Slippery when spilt. Avoid accidents, clean up immediately. Wear protective equipment to prevent skin and eye contact and breathing in dust. Work up wind or increase ventilation. Cover with damp absorbent (inert material, sand or soil). Sweep or vacuum up, but avoid generating dust. Collect and seal in properly labelled containers or drums for disposal.

## 7. HANDLING AND STORAGE

This material is a Scheduled Poison S5 and must be stored, maintained and used in accordance with the relevant regulations.

**Precautions for safe handling:**
Avoid skin and eye contact and breathing in dust. Avoid handling which leads to dust formation. Keep out of reach of children. Wash hands thoroughly after handling. Launder contaminated clothing before reuse. When using do not eat, drink or smoke. May form flammable dust clouds in air. For precautions necessary refer to Safety Data Sheet "Dust Explosion Hazards".

**Conditions for safe storage, including any incompatibilities:**
Store in a cool, dry, well ventilated place and out of direct sunlight. Store away from sources of heat or ignition. Store away from foodstuffs. Store away from incompatible materials described in Section 10. Keep containers closed when not in use - check regularly for spills.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Control Parameters:** No value assigned for this specific material by Safe Work Australia. However, Workplace Exposure Standard(s) for constituent(s):

Copper dusts & mists (as Cu): 8hr TWA = 1 mg/m$^3$
Potassium hydroxide: Peak Limitation = 2 mg/m$^3$

As published by Safe Work Australia Workplace Exposure Standards for Airborne Contaminants.

TWA - The time-weighted average airborne concentration of a particular substance when calculated over an eight-hour working day, for a five-day working week.

Peak Limitation - a maximum or peak airborne concentration of a particular substance determined over the shortest analytically practicable period of time which does not exceed 15 minutes.

These Workplace Exposure Standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept to as low a level as is workable. These workplace exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.

**Appropriate engineering controls:**
Ensure ventilation is adequate and that air concentrations of components are controlled below quoted Workplace Exposure Standards. Keep containers closed when not in use.

If in the handling and application of this material, safe exposure levels could be exceeded, the use of engineering controls such as local exhaust ventilation must be considered and the results documented. If achieving safe exposure levels does not require engineering controls, then a detailed and documented risk assessment using the relevant Personal Protective Equipment (PPE) (refer to PPE section below) as a basis must be carried out to determine the minimum PPE requirements.

**Individual protection measures, such as Personal Protective Equipment (PPE):**
The selection of PPE is dependent on a detailed risk assessment. The risk assessment should consider the work situation, the physical form of the chemical, the handling methods, and environmental factors.

OVERALLS, SAFETY SHOES, SAFETY GLASSES, GLOVES, DUST MASK.

Wear overalls, safety glasses and impervious gloves. Avoid generating and inhaling dusts. If determined by a risk assessment an inhalation risk exists, wear a dust mask/respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

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|---|---|
| **Physical state:** | Granules |
| **Colour:** | Black |
| **Odour:** | Odourless |
| **Solubility:** | Insoluble in water. |
| **Specific Gravity:** | 400-750 kg/m$^3$ (Density) |
| **Relative Vapour Density (air=1):** | Not applicable |
| **Vapour Pressure (20 °C):** | Not applicable |
| **Flash Point (°C):** | Not available |
| **Flammability Limits (%):** | Not available |
| **Autoignition Temperature (°C):** | Not available |
| **Melting Point/Range (°C):** | Not available |
| **pH:** | Not available |

## 10. STABILITY AND REACTIVITY

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|---|---|
| **Reactivity:** | No hazardous reactions if stored and handled as prescribed/indicated. |
| **Chemical stability:** | Stable under normal ambient and anticipated storage and handling conditions of temperature and pressure. |
| **Possibility of hazardous reactions:** | May react with solvents and strong oxidising agents . Dust explosion hazard. |
| **Conditions to avoid:** | Avoid dust generation. Avoid exposure to heat. Avoid exposure to humidity. Avoid exposure to direct sunlight. |
| **Incompatible materials:** | Incompatible with strong acids, strong oxidising agents, flammable materials, solvents. |
| **Hazardous decomposition products:** | Carbon monoxide. Carbon dioxide. |

## 11. TOXICOLOGICAL INFORMATION

No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label. Symptoms or effects that may arise if the product is mishandled and overexposure occurs are:

**Ingestion:** No adverse effects expected, however, large amounts may cause nausea and vomiting.

**Eye contact:** May be an eye irritant. Exposure to the dust may cause discomfort due to particulate nature. May cause physical irritation to the eyes.

**Skin contact:** Contact with skin may result in irritation.

**Inhalation:** Breathing in dust may result in respiratory irritation.

**Acute toxicity:** No LD50 data available for the product. However, for the major constituent:
Oral LD50 (rat): >2000 mg/kg
Inhalation LC50 (rat): >64.4 mg/L

**Skin corrosion/irritation:** Non-irritant (rabbit).
**Serious eye damage/irritation:** Non-irritant (rabbit).
**Respiratory or skin sensitisation:** Not a skin sensitiser (mouse).

**Chronic effects:** No information available for the product.

**Aspiration hazard:** Not classified.

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity** Avoid contaminating waterways.

## 13. DISPOSAL CONSIDERATIONS

**Disposal methods:**
Refer to Waste Management Authority. Dispose of contents and container in accordance with local, regional, national, international regulations.

## 14. TRANSPORT INFORMATION

**Road and Rail Transport**
Classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for Transport by Road and Rail; DANGEROUS GOODS.


**UN No:** 1362
**Transport Hazard Class:** 4.2 Spontaneously Combustible
**Packing Group:** III
**Proper Shipping Name or Technical Name:** CARBON, ACTIVATED
**Hazchem or Emergency Action Code:** 1Y

**Marine Transport**
Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea; DANGEROUS GOODS.

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|---|---|
| **UN No:** | 1362 |
| **Transport Hazard Class:** | 4.2 Spontaneously Combustible |
| **Packing Group:** | III |
| **Proper Shipping Name or Technical Name:** | CARBON, ACTIVATED |
| **IMDG EMS Fire:** | F-A |
| **IMDG EMS Spill:** | S-J |

**Air Transport**
Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air; DANGEROUS GOODS. TRANSPORT PROHIBITED under the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air in Passenger and Cargo Aircraft; may be transported by Cargo Aircraft Only.

| | |
|---|---|
| **UN No:** | 1362 |
| **Transport Hazard Class:** | 4.2 Spontaneously Combustible |
| **Packing Group:** | III |
| **Proper Shipping Name or Technical Name:** | CARBON, ACTIVATED |

## 15. REGULATORY INFORMATION

**Classification:**
This material is hazardous according to Safe Work Australia; HAZARDOUS CHEMICAL.

**Classification of the chemical:**
Self-heating substances and mixtures - Category 2

**Hazard Statement(s):**
H252 Self-heating in large quantities; may catch fire.

**Poisons Schedule (SUSMP):** S5 Caution.

All the constituents of this material are listed on the Australian Inventory of Chemical Substances (AICS).

## 16. OTHER INFORMATION

This safety data sheet has been prepared by Ixom Operations Pty Ltd Toxicology & SDS Services.

**Reason(s) for Issue:**
First Issue Primary SDS

This SDS summarises to our best knowledge at the date of issue, the chemical health and safety hazards of the material and general guidance on how to safely handle the material in the workplace. Since Ixom Operations Pty Ltd cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, assess and control the risks arising from its use of the material.

If clarification or further information is needed, the user should contact their Ixom representative or Ixom Operations Pty Ltd at the contact details on page 1.

Ixom Operations Pty Ltd's responsibility for the material as sold is subject to the terms and conditions of sale, a copy of which is available upon request.