



MATERIAL SAFETY DATA SHEET

SECTION 1 – IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name: Speed

Manufacturer's Product Code: 5907

Other Names: Concentrated drain opener

Major Recommended Uses: As a drain opener to dissolve sludge and other organic material.

Supplier's Details: Mantek
 7 Ralph Street, Alexandria
 Sydney NSW 2015
 Telephone Number (Office Hours): (02) 9669 0261
 Fax Number: (02) 9693 1562
 Emergency Telephone Number: (02) 9214 0755

Date of Issue: Feb 2010

SECTION 2 – HAZARDS IDENTIFICATION

Hazard Classification: Classified as hazardous according to the criteria of NOHSC.

Dangerous Goods Class & Sub-risk: Corrosive. Class 8, no sub-risk.

Poisons Schedule: Schedule 6

Risk Phrases: Causes severe burns.

Safety Phrases:

- Keep out of reach of children.
- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- Never add water to this product.
- In case of accident or if you feel unwell, seek medical advice immediately (show the label wherever possible.)
- Avoid contact with eyes and skin.

SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients

Chemical Entity	CAS No	Proportion
Sulphuric acid	7664-93-9	>60%
'Ingredients determined not to be hazardous'		to 100%

SECTION 4 – FIRST AID MEASURES

Skin: Wash affected areas with copious quantities of water immediately. Remove contaminated clothing and wash before re-use. Treat skin and clothing with 1% sodium bicarbonate solution or a paste of baking soda to neutralise acid residues. Seek medical attention.

Eye: Immediately flush eyes with large amounts of water for at least 15 minutes, holding eyelids apart to ensure thorough flushing of the entire eye surface. Seek medical attention immediately.

Inhalation: Remove victim from exposure to fresh air. If breathing is laboured, ensure airways are clear and have qualified person give oxygen through a facemask. Seek medical attention.

Ingestion: Rinse mouth thoroughly with water immediately and give large quantities of water to drink. Do NOT induce vomiting. Seek immediate medical assistance. Drink a teaspoon or more of milk of magnesia, chalk whiting or raw egg white.

First Aid Facilities: An eye washer or eye wash solution should be present close to work area along with a safety shower if splashing of materials is likely.

Advice to Doctor: There is no specific antidote. Treat the patient symptomatically as for strong acids.

Additional Information: Target organs: None known. The primary route of entry into the body is absorption.

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SECTION 5 – FIRE FIGHTING MEASURES

The product is not classified as flammable or considered combustible.

Suitable Extinguishing Media: In the event of a fire, use dry chemical, CO₂ or foam. Whilst using water to cool combustibles in vicinity may be done, take care as contact of water with sulphuric acid will generate heat and may cause splattering. Use extinguishing agents appropriate for surrounding environment.

Special Protective Equipment and Precautions for Fire Fighters: Fire fighters should avoid any contact with the acid and wear self-contained breathing apparatus and full protective gear.

Fire/Explosive Hazards: Product reacts violently with water. Decomposition on heating can emit toxic fumes and oxides of sulphur.

Hazchem Code: 2P

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SECTION 6 – ACCIDENTAL RELEASE MEASURES

Wear appropriate protective clothing. Spills may be slippery.

Methods and Materials for Containment and Clean Up: Avoid all contact and wear full protective clothing. Due to the nature of the product packaging, a large spill is highly unlikely. In the event of a small spill, quickly trap and contain spill using an inert absorbent - organic or combustible materials such as sawdust or rags should never be used to soak up spills. Add enough absorbent to completely absorb spill. Prevent run-off into drains and waterways. Shovel or sweep up and place into labelled drums or bags and dispose of in accordance with local, state or federal laws for acid wastes. Use lime or soda ash to neutralise, adjusting pH to 6-10. Neutralisation or dilution of strong sulphuric acid will always be accompanied by a very strong chemical reaction with release of heat and possible splattering of the acid. Flush to sewer as a greatly diluted solution. Wash residues with copious amounts of water. For large spills notify Emergency Services.

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SECTION 7 – HANDLING AND STORAGE

Precautions for Safe Handling: Observe precautions stated on product label, and follow industry safety regulations. Smoking, eating and drinking should be prohibited in work areas where the product is used. Do not get in eyes, on skin or on clothing. Do not take internally. Avoid breathing mist or fumes.

Conditions for Safe Storage: Store in a cool, dry, well-ventilated area away from heat sources. Store in the closed original container. Keep dry as reacts with water. Protect against physical damage and water. Separate carbides, chlorates, fulminates, nitrates, picrates, powdered metals and combustible materials.

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SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Standards: Keep air concentration below the following NOHSC limits:
Sulphuric acid: TLV/TWA - 1mg/m³; STEL – 3mg/m³.

Engineering Controls: Use with local exhaust ventilation or other controls to maintain air concentrations below the recommended exposure limits.

Personal Protective Equipment: Avoid all contact.

Eye/Face Protection: Avoid contact with eyes. Safety goggles as a minimum, and preferably an acid resistant face shield should be worn. The use of faceshield, chemical goggles or safety glasses with side shield protection complying with AS/NZS 1337 is recommended.

Skin Protection: Impervious rubber or PVC rubber gloves, splash apron, overalls or protective apparel, and fully enclosed work shoes or rubber boots should be worn. Wear gloves of impervious material conforming to AS/NZS 2161.

Respiratory Protection: If the recommended atmospheric exposure concentration can not be maintained, a combination particulate/gas respirator, Class B, (inorganic vapour) should be used. Self-contained breathing apparatus may be needed for prolonged periods of exposure. Reference should be made to Australian Standard AS/NZS 1715 and AS/NZS 1716.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Appearance	:A dense, amber coloured, non-viscous liquid.
pH	:0.3 (1N soln at 25°C.)
Vapour Pressure	:<0.001 mm Hg at 20°C
Vapour Density (Air = 1)	:3.4
Solubility in Water (g/L)	:Complete. Also soluble in most organic solvents (may react)
Boiling Point	:270°C
Specific Gravity (@15°C)	:1.7
Flashpoint	:Not applicable.
Flashpoint Method	:T.C.C.
Flammability Limits (%)	:Not applicable
Evaporation rate	:Not applicable (BU A/C = 1)
Volatility by volume	:0

SECTION 10 – STABILITY AND REACTIVITY

Stability: Stable.

Hazardous Polymerisation: Will not occur.

Conditions/Materials to Avoid: Reacts violently or explosively with a wide range of organic and inorganic chemicals, including water, solvents, strong oxidising agents, combustible materials, alkalis, metals, chlorates, picrates, nitrates, alcohol. Corrosive to most metals in the presence of moisture, liberating hydrogen gas.

Hazardous Decomposition Products: Oxides of sulphur and nitrogen, hydrogen gas.

SECTION 11 – TOXICOLOGICAL INFORMATION

Health Effects:

Acute - Swallowed: Ingestion causes severe burns of the mouth, oesophagus and stomach, along with nausea, vomiting, intense thirst and diarrhoea. Ingestion can result in abdominal pain and can be fatal.

Acute - Eye: Corrosive to eyes; contact can cause corneal burns. Permanent eye damage, including loss of sight, may occur.

Acute - Skin: Highly corrosive to skin. Causes severe burns.

Acute - Inhaled: Harmful by inhalation. Possible harmful corrosive effects. Inhalation of the vapours produces severe irritation of the respiratory tract with coughing, burning of the throat and choking.

Chronic: Chronic ingestion may produce fatal effects from oesophageal or gastric necrosis. Eye exposure may result in irreparable corneal damage and blindness as well as permanent scarring of eyelids. Chronic skin exposure will cause burning and charring and subsequent scarring. Chronic inhalation may produce glottal or pulmonary oedema.

Target Organs: None known.

Product Contains Chemicals Listed as Carcinogens by:

International Agency for the Research of Cancer (IARC): NO Other: NO

Note: Although there is NO direct link established between exposure to sulphuric acid itself and cancer in humans, the IARC classifies occupational exposure to strong inorganic acid mists containing sulphuric acid as carcinogenic to humans. This classification applies only to acidic mists containing sulphuric acid and not to sulphuric acid or sulphuric acid solutions. Exposure to mists should be avoided and kept to below the NOHSC exposure limits. Normal use of the product as a drain opener precludes mists in excess of the established threshold limit.)

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SECTION 12 – ECOLOGICAL INFORMATION

Highly toxic to aquatic life. Concentrations greater than 1-2mg/L may be lethal to fish. Lowering pH below about 5 could induce fatalities in aquatic life.

Persistence/Degradability: The product is water-based, inorganic, and is biodegradable. It readily dissociates in the environment and is not believed to bioaccumulate.

Mobility: Soluble in water. Avoid contaminating waterways as product is highly acidic and can react with water.

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SECTION 13 – DISPOSAL CONSIDERATIONS

Dispose of waste in a closed, labelled container in accordance with local, state and Commonwealth laws. Do not re-use empty container. Wash residues with copious amounts of water. Before rinsing, empty containers may contain product residues that exhibit the hazards of the bulk product.

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SECTION 14 – TRANSPORT INFORMATION

UN Number: UN1830

UN Proper Shipping Name: Sulphuric acid

Transport Hazard Class: Corrosive. ADG Class 8, no sub-risk.

This product is incompatible in a placard load with any of the following: Class 1 (Explosives); Class 4.3 (Dangerous When Wet Substances); Class 5 (Oxidising Agents & Organic Peroxides); Class 6 (when a cyanide); Class 7(Radioactive Substances). They are also incompatible with food and food packaging in any quantity.

Packaging Group: II

Hazchem Code: 2P

Group Text EPG: 8A2

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SECTION 15 - REGULATORY INFORMATION



Poisons Schedule: Schedule 6;

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SECTION 16 – OTHER INFORMATION

Initial copy of MSDS.

Since the user's working conditions are not known by the supplier, the information supplied on this safety data sheet is based on our current level of knowledge and on national and community regulations. The product must not be used for any purposes other than those specified in Section 1 without first obtaining written handling instructions. MANTEK assumes no responsibility for personal injury or property damage caused by the use, storage, or disposal of the product in a manner not recommended on the product label. Users assume all risks associated with such non-recommended use, storage or disposal of the product.

It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations. The information given on this safety data sheet must be regarded as a description of the safety requirements relating to our product and not a guarantee of its properties.