

Section 1 - Identification of the Material and Supplier



Pfizer Australia Pty Ltd
38-42 Wharf Road
West Ryde NSW 2114
Tel: 1800 814 883
Fax: (02) 9850 3399

Pfizer Australia Pty Ltd

A.B.N. 50 008 422 348

| | |
|-----------------------------|--|
| Chemical nature: | Sulphuric acid in water solution. |
| Trade Name: | SERELISA[®] and LACTELISA[®] Kit Stop Solution |
| Product Use: | This product is a component of several SERELISA [®] and LACTELISA [®] test kits including: LACTELISA [®] BLV Ab Mono Indirect LACTELISA [®] BLV Ab Bi Tank 250 LACTELISA [®] Brucella Ab Mono Indirect SERELISA BHV-1 Total Ab Mono Indirect SERELISA [®] BLV Ab Bi Indirect SERELISA [®] BLV Ab Mono Indirect SERELISA [®] Brucella OCB Ab Mono Indirect SERELISA [®] PCV2 Ab Mono Blocking SERELISA [®] PCV2 Ag Capture |
| Creation Date: | June, 2011 |
| This version issued: | June, 2011 and is valid for 5 years from this date. |

Section 2 - Hazards Identification

Statement of Hazardous Nature

This product is classified as: C, Corrosive. Hazardous according to the criteria of SWA.

Not a Dangerous Good according to the Australian Dangerous Goods (ADG) Code.

Risk Phrases: R34, R38. Causes burns. Irritating to skin.

Safety Phrases: S20, S23, S28, S36, S46, S24/25. When using, do not eat or drink. Do not breathe vapours or mists. After contact with skin, wash immediately with plenty of soap and water. Wear suitable protective clothing. If swallowed, contact a doctor or Poisons Information Centre immediately and show this MSDS or label. Avoid contact with skin and eyes.

SUSMP Classification: None allocated.

ADG Classification: None allocated. Not a Dangerous Good under the ADG Code.

UN Number: None allocated

Emergency Overview

Physical Description & colour: Clear colourless liquid.

Odour: No odour.

Major Health Hazards: causes burns, skin irritant.

Potential Health Effects

Inhalation:

Short term exposure: Available data indicates that this product is irritating, although unlikely to cause anything more than transient discomfort. If liquid enters nasal passages, it will cause pain and burn nasal membranes. Patients with inhalation burns may develop acute pulmonary oedema.

Long Term exposure: No data for health effects associated with long term inhalation.

Skin Contact:

Short term exposure: Available data indicates that this product is corrosive to the skin. Capable of causing moderate to severe burns with ulceration. Can penetrate to deeper layers of skin, resulting in third degree burns.

MATERIAL SAFETY DATA SHEET

Corrosion will continue until product is removed or neutralised. Severity depends on concentration and duration of exposure. Burns may not be immediately painful; the onset of pain may be minutes to hours.

Long Term exposure: No data for health effects associated with long term skin exposure.

Eye Contact:

Short term exposure: This product is corrosive to eyes. It will cause severe pain, and corrosion of the eye and surrounding facial tissues. Unless exposure is quickly treated, permanent blindness and facial scarring is likely.

Long Term exposure: No data for health effects associated with long term eye exposure.

Ingestion:

Short term exposure: Significant oral exposure is considered to be unlikely. However, this product is corrosive to the gastrointestinal tract. Capable of causing moderate to severe burns with ulceration. Can penetrate to deeper layers of skin, resulting in third degree burns. Corrosion will continue until product is removed or neutralised. Severity depends on concentration and duration of exposure.

Long Term exposure: No data for health effects associated with long term ingestion.

Carcinogen Status:

SWA: No significant ingredient is classified as carcinogenic by SWA.

NTP: Sulphuric Acid is classified by NTP as reasonably anticipated to be carcinogenic to humans.

See the NTP website for further details. A web address has not been provided as addresses frequently change.

IARC: No significant ingredient is classified as carcinogenic by IARC.

Section 3 - Composition/Information on Ingredients

| Ingredients | CAS No | Conc,% | TWA (mg/m ³) | STEL (mg/m ³) |
|----------------|-----------|--------|--------------------------|---------------------------|
| Sulphuric acid | 7664-93-9 | 11 | 1 | 3 |
| Water | 7732-18-5 | to 100 | not set | not set |

This is a commercial product whose exact ratio of components may vary slightly. Minor quantities of other non hazardous ingredients are also possible.

The SWA TWA exposure value is the average airborne concentration of a particular substance when calculated over a normal 8 hour working day for a 5 day working week. The STEL (Short Term Exposure Limit) is an exposure value that may be equalled (but should not be exceeded) for no longer than 15 minutes and should not be repeated more than 4 times per day. There should be at least 60 minutes between successive exposures at the STEL. The term "peak" is used when the TWA limit, because of the rapid action of the substance, should never be exceeded, even briefly.

Section 4 - First Aid Measures

General Information:

You should call The Poisons Information Centre if you feel that you may have been poisoned, burned or irritated by this product. The number is 131 126 from anywhere in Australia (0800 764 766 in New Zealand) and is available at all times. Have this MSDS with you when you call.

Inhalation: No first aid measures normally required. However, if inhalation has occurred, and irritation has developed, remove to fresh air and observe until recovered. If irritation becomes painful or persists more than about 30 minutes, seek medical advice.

Skin Contact: Flush contaminated area with lukewarm, gently flowing water for at least 20-30 minutes, by the clock. DO NOT INTERRUPT FLUSHING. If necessary, keep emergency vehicle waiting (show paramedics this MSDS and take their advice). Under running water, remove contaminated clothing, shoes and leather goods (eg watchbands and belts). If irritation persists, repeat flushing. Seek medical attention.

Eye Contact: Immediately flush the contaminated eye(s) with lukewarm, gently flowing water for at least 20-30 minutes, by the clock, while holding the eyelid(s) open. Neutral saline solution may be used as soon as it is available. DO NOT INTERRUPT FLUSHING. If necessary, keep emergency vehicle waiting (show paramedics this MSDS and take their advice). Take care not to rinse contaminated water into the unaffected eye or onto face. If irritation persists, repeat flushing. Call a Poisons Information Centre or a doctor urgently. Take special care if exposed person is wearing contact lenses.

Ingestion: If swallowed, do NOT induce vomiting; rinse mouth thoroughly with water and contact a Poisons Information Centre. Urgent hospital treatment is likely to be needed. Give activated charcoal if instructed.

Section 5 - Fire Fighting Measures

Fire and Explosion Hazards: The major hazard in fires is usually inhalation of heated and toxic or oxygen deficient (or both), fire gases. There is no risk of an explosion from this product under normal circumstances if it is involved in a fire.

This product is likely to decompose only after heating to dryness, followed by further strong heating.

MATERIAL SAFETY DATA SHEET

Fire decomposition products from this product may be toxic if inhaled. Take appropriate protective measures.

Extinguishing Media: Not Combustible. Use extinguishing media suited to burning materials.

Fire Fighting: If a significant quantity of this product is involved in a fire, call the fire brigade. Cool closed, undamaged containers exposed to fire with water spray.

Flash point: Does not burn.

Upper Flammability Limit: Does not burn.

Lower Flammability Limit: Does not burn.

Autoignition temperature: Not applicable - does not burn.

Flammability Class: Does not burn.

Section 6 - Accidental Release Measures

Accidental release: In the event of a major spill, prevent spillage from entering drains or water courses. Wear full protective chemically resistant clothing including eye/face protection, gauntlets and self contained breathing apparatus. See below under Personal Protection regarding Australian Standards relating to personal protective equipment. Suitable materials for protective clothing include rubber, butyl rubber, neoprene, Teflon, polyethylene. Eye/face protective equipment should comprise as a minimum, protective goggles. If there is a significant chance that vapours or mists are likely to build up in the cleanup area, we recommend that you use a respirator. Usually, no respirator is necessary when using this product. However, if you have any doubts consult the Australian Standard mentioned below (section 8). Otherwise, not normally necessary.

Stop leak if safe to do so, and contain spill. Absorb onto sand, vermiculite or other suitable absorbent material. If spill is too large or if absorbent material is not available, try to create a dike to stop material spreading or going into drains or waterways. Sweep up and shovel or collect recoverable product into labelled containers for recycling or salvage, and dispose of promptly. Recycle containers wherever possible after careful cleaning. After spills, wash area preventing runoff from entering drains. If a significant quantity of material enters drains, advise emergency services. Contaminated area may be neutralised by washing with weak or dilute alkali. Baking soda, washing soda and limestone are suitable. This material may be suitable for approved landfill. Ensure legality of disposal by consulting regulations prior to disposal. Thoroughly launder protective clothing before storage or re-use. Advise laundry of nature of contamination when sending contaminated clothing to laundry.

Section 7 - Handling and Storage

Handling: Keep exposure to this product to a minimum, and minimise the quantities kept in work areas. Check Section 8 of this MSDS for details of personal protective measures, and make sure that those measures are followed. The measures detailed below under "Storage" should be followed during handling in order to minimise risks to persons using the product in the workplace. Also, avoid contact or contamination of product with incompatible materials listed in Section 10.

Storage: Refrigerate, preferably between 2 and 8°C, but do not freeze. Make sure that containers of this product are kept tightly closed. Make sure that the product does not come into contact with substances listed under "Incompatibilities" in Section 10. Some liquid preparations settle or separate on standing and may require stirring before use. Check packaging - there may be further storage instructions on the label.

Section 8 - Exposure Controls and Personal Protection

The following Australian Standards will provide general advice regarding safety clothing and equipment:

Respiratory equipment: **AS/NZS 1715**, Protective Gloves: **AS 2161**, Occupational Protective Clothing: AS/NZS 4501 set 2008, Industrial Eye Protection: **AS1336** and **AS/NZS 1337**, Occupational Protective Footwear: **AS/NZS2210**.

| SWA Exposure limits | TWA (mg/m ³) | STEL (mg/m ³) |
|---------------------|--------------------------|---------------------------|
| Sulphuric acid | 1 | 3 |

No special equipment is usually needed when occasionally handling small quantities. The following instructions are for bulk handling or where regular exposure in an occupational setting occurs without proper containment systems.

Ventilation: No special ventilation requirements are normally necessary for this product. However make sure that the work environment remains clean and that vapours and mists are minimised.

Eye Protection: Your eyes must be completely protected from this product by splash resistant goggles with face shield. All surrounding skin areas must be covered. Emergency eye wash facilities must also be available in an area close to where this product is being used.

Skin Protection: Because of the dangerous nature of this product, make sure that all skin areas are completely covered by impermeable gloves, overalls, hair covering, apron and face shield. See below for suitable material types.

Protective Material Types: We suggest that protective clothing be made from the following materials: rubber, butyl rubber, neoprene, Teflon, polyethylene.

MATERIAL SAFETY DATA SHEET

Respirator: Usually, no respirator is necessary when using this product. However, if you have any doubts consult the Australian Standard mentioned above. Otherwise, not normally necessary.
Safety deluge showers should, if practical, be provided near to where this product is being used.

Section 9 - Physical and Chemical Properties:

| | |
|---|---|
| Physical Description & colour: | Clear colourless liquid. |
| Odour: | No odour. |
| Boiling Point: | Approximately 100°C at 100kPa. |
| Freezing/Melting Point: | Below 0°C. |
| Volatiles: | Water component. |
| Vapour Pressure: | 2.37 kPa at 20°C (water vapour pressure). |
| Vapour Density: | No data. |
| Specific Gravity: | 1.08 approx |
| Water Solubility: | Completely soluble in water. |
| pH: | No data. |
| Volatility: | No data. |
| Odour Threshold: | No data. |
| Evaporation Rate: | No data. |
| Coeff Oil/water distribution: | No data |
| Autoignition temp: | Not applicable - does not burn. |

Section 10 - Stability and Reactivity

Reactivity: This product is unlikely to react or decompose under normal storage conditions. However, if you have any doubts, contact the supplier for advice on shelf life properties.

Conditions to Avoid: This product should be kept in a cool place, preferably below 30°C. Keep containers tightly closed.

Incompatibilities: bases, zinc, tin, aluminium and their alloys.

Fire Decomposition: This product is likely to decompose only after heating to dryness, followed by further strong heating. Combustion forms water. May form oxides of sulfur (sulfur dioxide is a respiratory hazard) and other sulfur compounds. Most will have a foul odour.

Polymerisation: This product will not undergo polymerisation reactions.

Section 11 - Toxicological Information

Target Organs: There is no data to hand indicating any particular target organs.

Classification of Hazardous Ingredients

| Ingredient | Risk Phrases |
|----------------|--------------------------|
| Sulphuric Acid | >=5%Conc<15%: Xi; R36/38 |

Section 12 - Ecological Information

This product is unlikely to adversely effect the environment. Salts, acids and bases are typically diluted and neutralised when released to the environment in small quantities. However, until diluted or neutralised it will kill all aquatic organisms it contacts due to extreme pH.

Section 13 - Disposal Considerations

Disposal: This product may be recycled if unused, or if it has not been contaminated so as to make it unsuitable for its intended use. If it has been contaminated, it may be possible to separate the contamination in some way. Only if neither of these options is suitable, consider landfill.

Section 14 - Transport Information

ADG Code: This product is not classified as a Dangerous Good. No special transport conditions are necessary unless required by other regulations.

Section 15 - Regulatory Information

AICS: All of the significant ingredients in this formulation are compliant with NICNAS regulations. The following ingredient: Sulphuric acid is mentioned in the SUSMP.

MATERIAL SAFETY DATA SHEET

Section 16 - Other Information

This MSDS contains only safety-related information. For other data see product literature.

Acronyms:

| | |
|---------------------|---|
| ADG Code | Australian Code for the Transport of Dangerous Goods by Road and Rail (7 th edition) |
| AICS | Australian Inventory of Chemical Substances |
| SWA | Safe Work Australia, formerly ASCC and NOHSC |
| CAS number | Chemical Abstracts Service Registry Number |
| Hazchem Code | Emergency action code of numbers and letters that provide information to emergency services especially firefighters |
| IARC | International Agency for Research on Cancer |
| NOS | Not otherwise specified |
| NTP | National Toxicology Program (USA) |
| R-Phrase | Risk Phrase |
| SUSMP | Standard for the Uniform Scheduling of Medicines & Poisons |
| UN Number | United Nations Number |

Contact Points:

| | |
|----------------------------------|---------------------|
| Pfizer Australia Pty Ltd: | 1800 814 883 |
| Police and Fire Brigade: | Dial 000 |

If ineffective:

**Dial Poisons Information Centre
(131 126 from anywhere in Australia)**

Please read all labels carefully before using product.

This MSDS copyright © Kilford & Kilford Pty Ltd, June 2011.
<http://www.kilford.com.au/> Phone (02)9251 4532

MSDS33-VERSION1

MATERIAL SAFETY DATA SHEET

Section 1 - Identification of the Material and Supplier



Pfizer Australia Pty Ltd
38-42 Wharf Road
West Ryde NSW 2114
Tel: 1800 814 883
Fax: (02) 9850 3399

Pfizer Australia Pty Ltd
A.B.N. 50 008 422 348

| | |
|-----------------------------|---|
| Chemical nature: | Solution of methanol, water and other ingredients. |
| Trade Name: | Peroxydase Substrate Solution |
| Product Use: | This product is a component of several ReproCHEK [®] and SERELISA [®] test kits including: ReproCHEK [®] /ReproCHEK [®] Relaxin SERELISA [®] Brucella OCB Ab Mono Indirect SERELISA [®] PCV2 Ab Mono Blocking SERSLISA [®] PCV2 Ag Capture |
| Creation Date: | June, 2011 |
| This version issued: | June, 2011 and is valid for 5 years from this date. |

Section 2 - Hazards Identification

Statement of Hazardous Nature

This product is classified as: Xi, Irritating. T, Toxic. Hazardous according to the criteria of SWA.

Not a Dangerous Good according to the Australian Dangerous Goods (ADG) Code.

Risk Phrases: R41, R23/24/25, R37/38, R39/23/24/25, R42/43. Risk of serious damage to eyes. Toxic by inhalation, in contact with skin, and if swallowed. Irritating to respiratory system and skin. Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed. May cause sensitisation by inhalation and skin contact.

Safety Phrases: S7, S20, S23, S28, S36, S38, S45, S1/2, S24/25. Keep container tightly closed. When using, do not eat or drink. Do not breathe vapours. After contact with skin, wash immediately with plenty of soap and water. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. In case of accident or if you feel unwell, contact a doctor or Poisons Information Centre immediately (show this MSDS where possible). Keep locked up and out of reach of children. Avoid contact with skin and eyes.

SUSMP Classification: S6

ADG Classification: None allocated. Not a Dangerous Good under the ADG Code.

UN Number: None allocated

Emergency Overview

Physical Description & colour: Liquid; no other details are available.

Odour: No data.

Major Health Hazards: SYMPTOMATOLOGY for Methanol poisoning:

1. A latency usually of 12-18 hours, during which time the only clinical signs are those of a generally mild and transient state of inebriation as after ethanol ingestion.
2. Headache, anorexia, weakness, fatigue, leg cramps, vertigo, restlessness.
3. Nausea, occasionally vomiting and diarrhoea. Violent abdominal pain, back pain, leg pain.
4. Apathy or delirium progressing sometimes rapidly to coma. Rarely excitement, mania, and convulsions.
5. Dimness of vision with dilated pupils, reacting poorly, if at all, to light, followed often by bilateral blindness (transient or permanent). Eyes are often sensitive to pressure, and eye movements are painful.
6. Breathing is rapid and shallow, not usually deep and laboured as seen in other types of metabolic acidosis.
7. Mild tachycardia is common, but the blood pressure is usually well maintained.
8. Death in coma is due to respiratory failure or rarely to circulatory collapse.

MATERIAL SAFETY DATA SHEET

9. Protracted convalescence with asthenia. Blindness is usually permanent. Toxic by inhalation, in contact with skin and if swallowed, may cause serious damage to eyes, irritating to respiratory system and skin, may cause sensitisation by inhalation and skin contact.

Potential Health Effects

Inhalation:

Short term exposure: Classified as a potential sensitiser by inhalation. Exposure to a sensitiser, once sensitisation has occurred, may manifest itself as an asthmatic condition, and in some individuals this reaction can be extremely severe. In addition product is an inhalation irritant. Symptoms may include headache, irritation of nose and throat and increased secretion of mucous in the nose and throat. Also toxic by inhalation (see above).

Long Term exposure: No data for health effects associated with long term inhalation.

Skin Contact:

Short term exposure: Available data shows that this product is toxic, see symptoms above. In addition product is a skin irritant. Symptoms may include itchiness and reddening of contacted skin. Other symptoms may also become evident.

Long Term exposure: No data for health effects associated with long term skin exposure.

Eye Contact:

Short term exposure: This product is a severe eye irritant. Symptoms may include stinging and reddening of eyes and watering which may become copious. Other symptoms such as swelling of eyelids and blurred vision may also become evident. If exposure is brief, symptoms should disappear once exposure has ceased. However, lengthy exposure or delayed treatment is likely to cause permanent damage.

Long Term exposure: No data for health effects associated with long term eye exposure.

Ingestion:

Short term exposure: Significant oral exposure is considered to be unlikely. Available data shows that this product is toxic, see symptoms above. This product is an oral irritant. Symptoms may include burning sensation and reddening of skin in mouth and throat. Other symptoms may also become evident.

Long Term exposure: No data for health effects associated with long term ingestion.

Carcinogen Status:

SWA: No significant ingredient is classified as carcinogenic by SWA.

NTP: No significant ingredient is classified as carcinogenic by NTP.

IARC: No significant ingredient is classified as carcinogenic by IARC.

Section 3 - Composition/Information on Ingredients

| Ingredients | CAS No | Conc,% | TWA (mg/m ³) | STEL (mg/m ³) |
|--|------------|--------|--------------------------|---------------------------|
| Methanol | 67-56-1 | >20 | 262 | 328 |
| Dimethylsulfoxide | 67-68-5 | <5 | not set | not set |
| Acetone | 67-64-1 | <5 | 1185 | 2375 |
| [1,1'-Biphenyl]-4,4'-diamine, 3,3',5,5'-tetramethyl- | 54827-17-7 | <0.1 | not set | not set |
| Water | 7732-18-5 | to 100 | not set | not set |

This is a commercial product whose exact ratio of components may vary slightly. Minor quantities of other non hazardous ingredients are also possible.

The SWA TWA exposure value is the average airborne concentration of a particular substance when calculated over a normal 8 hour working day for a 5 day working week. The STEL (Short Term Exposure Limit) is an exposure value that may be equalled (but should not be exceeded) for no longer than 15 minutes and should not be repeated more than 4 times per day. There should be at least 60 minutes between successive exposures at the STEL. The term "peak" is used when the TWA limit, because of the rapid action of the substance, should never be exceeded, even briefly.

MATERIAL SAFETY DATA SHEET

Section 4 - First Aid Measures

General Information:

You should call The Poisons Information Centre if you feel that you may have been poisoned, burned or irritated by this product. The number is 131 126 from anywhere in Australia (0800 764 766 in New Zealand) and is available at all times. Have this MSDS with you when you call.

Inhalation: If inhalation occurs, contact a Poisons Information Centre. Urgent hospital treatment is likely to be needed. Remove source of contamination or move victim to fresh air. If breathing is difficult, oxygen may be beneficial if administered by trained personnel, preferably on a doctor's advice. DO NOT allow victim to move about unnecessarily. Symptoms of pulmonary oedema can be delayed up to 48 hours after exposure.

Skin Contact: Quickly and gently blot away excess liquid. Flush contaminated area with lukewarm, gently flowing water for at least 20-30 minutes, by the clock. DO NOT INTERRUPT FLUSHING. If necessary, keep emergency vehicle waiting (show paramedics this MSDS and take their advice). Under running water, remove contaminated clothing, shoes and leather goods (eg watchbands and belts). If breathing has stopped, trained personnel should begin artificial respiration or, if the heart has stopped, cardiopulmonary resuscitation (CPR) immediately.

Eye Contact: Immediately flush the contaminated eye(s) with lukewarm, gently flowing water for 20 minutes or until the product is removed, while holding the eyelid(s) open. Take care not to rinse contaminated water into the unaffected eye or onto the face. Obtain medical attention immediately. Take special care if exposed person is wearing contact lenses.

Ingestion: If swallowed, do NOT induce vomiting; rinse mouth thoroughly with water and contact a Poisons Information Centre, or call a doctor at once. Give activated charcoal if instructed.

Section 5 - Fire Fighting Measures

Fire and Explosion Hazards: The major hazard in fires is usually inhalation of heated and toxic or oxygen deficient (or both), fire gases. This product is classified as flammable. There is little risk of an explosion from this product if commercial quantities are involved in a fire. Vapours from this product are heavier than air and may accumulate in sumps, pits and other low-lying spaces, forming potentially explosive mixtures. They may also flash back considerable distances.

This product is likely to decompose only after heating to dryness, followed by further strong heating.

Fire decomposition products from this product may be toxic if inhaled. Take appropriate protective measures.

Extinguishing Media: Suitable extinguishing media are carbon dioxide, dry chemical.

Fire Fighting: If a significant quantity of this product is involved in a fire, call the fire brigade. Cool closed, undamaged containers exposed to fire with water spray.

Flash point: >55°C

Upper Flammability Limit: Does not burn.

Lower Flammability Limit: Does not burn.

Autoignition temperature: Does not burn.

Flammability Class: Flammable

Section 6 - Accidental Release Measures

Accidental release: This product is sold in small packages, and the accidental release from one of these is not usually a cause for concern. For minor spills, clean up, rinsing to sewer and put empty container in garbage. Although no special protective clothing is normally necessary because of occasional minor contact with this product, it is good practice to wear impermeable gloves when handling chemical products. In the event of a major spill, prevent spillage from entering drains or water courses and call emergency services.

Section 7 - Handling and Storage

Handling: Keep exposure to this product to a minimum, and minimise the quantities kept in work areas. Check Section 8 of this MSDS for details of personal protective measures, and make sure that those measures are followed. The measures detailed below under "Storage" should be followed during handling in order to minimise risks to persons using the product in the workplace. Also, avoid contact or contamination of product with incompatible materials listed in Section 10.

Storage: This product is a Scheduled Poison. Observe all relevant regulations regarding sale, transport and storage of this schedule of poison. Refrigerate, preferably between 2 and 8°C, but do not freeze. Make sure that containers of this product are kept tightly closed. Make sure that the product does not come into contact with substances listed under "Incompatibilities" in Section 10. Some liquid preparations settle or separate on standing and may require stirring before use. Check packaging - there may be further storage instructions on the label.

MATERIAL SAFETY DATA SHEET

Section 8 - Exposure Controls and Personal Protection

The following Australian Standards will provide general advice regarding safety clothing and equipment:

Respiratory equipment: **AS/NZS 1715**, Protective Gloves: **AS 2161**, Occupational Protective Clothing: AS/NZS 4501 set 2008, Industrial Eye Protection: **AS1336** and **AS/NZS 1337**, Occupational Protective Footwear: **AS/NZS2210**.

| SWA Exposure limits | TWA (mg/m ³) | STEL (mg/m ³) |
|---------------------|--------------------------|---------------------------|
| Methanol | 262 | 328 |
| Acetone | 1185 | 2375 |

No special equipment is usually needed when occasionally handling small quantities. The following instructions are for bulk handling or where regular exposure in an occupational setting occurs without proper containment systems.

Ventilation: This product should only be used in a well ventilated area. If natural ventilation is inadequate, use of a fan is suggested.

Eye Protection: Protective glasses or goggles must be worn when this product is being used. Failure to protect your eyes may lead to severe harm to them or to general health. Emergency eye wash facilities must also be available in an area close to where this product is being used.

Skin Protection: It is essential that all skin areas are adequately covered by impermeable gloves, overalls, hair covering, apron and face shield. See below for suitable material types.

Protective Material Types: We suggest that protective clothing be made from the following materials: nitrile, butyl rubber.

Respirator: As this product is classed as a respiratory sensitiser, special care should be taken with respiratory selection if you are sensitised to this product or any of its declared ingredients. If there is a significant chance that vapours or mists are likely to build up in the area where this product is being used, we recommend that you use a respirator. It should be fitted with a suitable cartridge. Consult AS/NZS 1715.

Eyebaths or eyewash stations and safety deluge showers should be provided near to where this product is being used.

Section 9 - Physical and Chemical Properties:

| | |
|---|--|
| Physical Description & colour: | Liquid; no other details are available. |
| Odour: | No data. |
| Boiling Point: | Approximately 85°C at 100kPa. |
| Freezing/Melting Point: | No specific data. Liquid at normal temperatures. |
| Volatiles: | Water component. |
| Vapour Pressure: | 2.37 kPa at 20°C (water vapour pressure). |
| Vapour Density: | No data. |
| Specific Gravity: | 0.96 approx |
| Water Solubility: | Completely soluble in water. |
| pH: | 5.4 |
| Volatility: | No data. |
| Odour Threshold: | No data. |
| Evaporation Rate: | No data. |
| Coeff Oil/water distribution: | No data |
| Autoignition temp: | Does not burn. |

Section 10 - Stability and Reactivity

Reactivity: This product is unlikely to react or decompose under normal storage conditions. However, if you have any doubts, contact the supplier for advice on shelf life properties.

Conditions to Avoid: This product should be kept in a cool place, preferably below 30°C. Keep containers tightly closed. Keep containers and surrounding areas well ventilated.

Incompatibilities: strong oxidising agents, reducing agents, perchlorates, peroxides, alkaline hypochlorites, periodic and perchloric acid, bromide, chlorine, acid chloride and anhydride, alkaline metals.

Fire Decomposition: This product is likely to decompose only after heating to dryness, followed by further strong heating. Combustion forms carbon dioxide, and if incomplete, carbon monoxide and smoke. Water is also formed. May form nitrogen and its compounds, and under some circumstances, oxides of nitrogen. Occasionally hydrogen cyanide gas in reducing atmospheres. May form oxides of sulfur (sulfur dioxide is a respiratory hazard) and other sulfur compounds. Most will have a foul odour. Carbon monoxide poisoning produces headache, weakness, nausea, dizziness, confusion, dimness of vision, disturbance of judgment, and unconsciousness followed by coma and death.

Polymerisation: This product will not undergo polymerisation reactions.

MATERIAL SAFETY DATA SHEET

Section 11 - Toxicological Information

There is no data to hand indicating any particular target organs.

Toxicity: The following figures suggest that this product is neither toxic nor even harmful. However, methanol causes severe health problems and even death in ways not adequately measured by quick LD₅₀ measurements.

Oral (rat) LD₅₀: 5628 mg/kg.

Oral (mouse) LD₅₀: 7300 mg/kg.

Oral (monkey) LD₅₀: 7000 mg/kg.

Skin (rabbit) LD₅₀: 15,800 mg/kg.

Inhalation (rat) LC₅₀: 64,000 ppm, 4-hr exposure.

Skin Irritation (rabbit): Moderate, 20 mg, 24-hr exposure

Eye Irritation (rabbit): Moderate, 100 mg, 24-hr exposure

Note symptoms in Section 2 of this MSDS. However if used by trained professionals in the laboratory environment, and if normal care is taken, this product should not cause health problems.

Classification of Hazardous Ingredients

| Ingredient | Risk Phrases |
|------------|---------------------------------------|
| Methanol | Conc>=20%: T; R23/24/25; R39/23/24/25 |

Section 12 - Ecological Information

Insufficient data to be sure of status.

Will biodegrade rapidly in soil, water, and air.

96-Hr LC₅₀ (fathead minnow, 28-29 days old): 29,400 mg/L, 25°C, 7.3 mg/L dissolved water, water hardness 43.5 mg/L (CaCO₃), alkalinity 46.6 CaCO₃, pH 7.66.

96-Hr LC₅₀ (rainbow trout fingerling): 13,680 mg/L, 12°C

96-Hr LC₅₀ (rainbow trout fingerling): 10,800 mg/L, 12°C

Section 13 - Disposal Considerations

Disposal: Dispose of small quantities and empty containers by wrapping with paper and putting in garbage. For larger quantities, if recycling or reclaiming is not possible, use a commercial waste disposal service.

Section 14 - Transport Information

ADG Code: This product is not classified as a Dangerous Good. No special transport conditions are necessary unless required by other regulations.

Section 15 - Regulatory Information

AICS: All of the significant ingredients in this formulation are compliant with NICNAS regulations.

The following ingredients: Methanol, Dimethylsulfoxide, Acetone, are mentioned in the SUSMP.

Section 16 - Other Information

This MSDS contains only safety-related information. For other data see product literature.

Acronyms:

| | |
|---------------------|---|
| ADG Code | Australian Code for the Transport of Dangerous Goods by Road and Rail (7 th edition) |
| AICS | Australian Inventory of Chemical Substances |
| SWA | Safe Work Australia, formerly ASCC and NOHSC |
| CAS number | Chemical Abstracts Service Registry Number |
| Hazchem Code | Emergency action code of numbers and letters that provide information to emergency services especially firefighters |
| IARC | International Agency for Research on Cancer |
| NOS | Not otherwise specified |
| NTP | National Toxicology Program (USA) |
| R-Phrase | Risk Phrase |
| SUSMP | Standard for the Uniform Scheduling of Medicines & Poisons |
| UN Number | United Nations Number |

MATERIAL SAFETY DATA SHEET

Contact Points:

| | |
|---------------------------|--------------|
| Pfizer Australia Pty Ltd: | 1800 814 883 |
| Police and Fire Brigade: | Dial 000 |

If ineffective:

**Dial Poisons Information Centre
(131 126 from anywhere in Australia)**

Please read all labels carefully before using product.

This MSDS copyright © Kilford & Kilford Pty Ltd, June 2011.
<http://www.kilford.com.au> Phone (02)9251 4532

MSDS31-VERSION1

MATERIAL SAFETY DATA SHEET