



The Chemistry of Cleaning™

ABN 80 004 726 890 | MADE IN AUSTRALIA

VIC 03 9480 3000
NSW 02 9743 6020
SA 08 8293 2020
QLD 07 3274 3438
WA 08 9249 4566

Safety Data Sheet

Issued: November, 2016

Section 1 - Identification of the Material and Supplier

Chemical Nature: Peracetic acid, aqueous solution.

Trade Name: Hyperax 5

Product Use: Biocidal sanitiser for use in the food and agricultural industries. Also a sanitiser/safety bleach for laundering.

Creation Date: November, 2016

This version issued: This SDS issued November, 2016 shall remain valid for 5 years unless a new SDS is issued in the meantime. Please contact Agar Cleaning Systems P/L to ensure you have the latest version of this product's SDS.

Poisons Information Centre: Phone 13 1126 from anywhere in Australia

SUPPLIER DETAILS

Company: Agar Cleaning Systems Pty. Ltd.
Address: 12-14 Cope Street, Preston, Vic. 3072 AUSTRALIA
Telephone: 03 9480 3000 Facsimile: 03 9480 5100
Web: www.agar.com.au Agar SDS are available from this website.
Email: sales@agar.com.au

Section 2 - Hazards Identification

Statement of Hazardous Nature

This product is classified as: Xn, Harmful. N, Dangerous to the environment. O, oxidising. C, Corrosive. Xn, Harmful. Xi, Irritant. Hazardous according to the criteria of SWA.

Dangerous according to Australian Dangerous Goods (ADG) Code, IATA and IMDG/IMSBC criteria.

SUSMP Classification: S6

ADG Classification: Class 5.1: Oxidising Substances. Sub Risk: Class 8, Corrosive Substances.

UN Number: 3149, HYDROGEN PEROXIDE & PEROXYACETIC ACID MIXTURE, with acid(s), water and not more than 5% peroxyacetic acid, STABILIZED.



GHS Signal word: DANGER

Acute toxicity, oral – Category 4
Acute toxicity, inhalation – Category 4
Skin corrosion – Category 1B
Eye damage – Category 1

HAZARD STATEMENT:

H227: Combustible liquid
H272: May intensify fire; oxidiser.
H290: May be corrosive to metals.
H302+H312+H332: Harmful if swallowed, in contact with skin or if inhaled.
H314: Causes severe skin burns and eye damage.
H335: May cause respiratory irritation.

PREVENTION

P102: Keep out of reach of children.
P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P220: Keep away from clothing and other combustible materials.
P221: Take any precaution to avoid mixing with combustibles.
P234: Keep only in original packaging.
P260: Do not breathe dust, fumes, gas, mists, vapours or spray.
P264: Wash contacted areas thoroughly after handling.
P270: Do not eat, drink or smoke when using this product.
P271: Use only outdoors or in a well ventilated area.

P273: Avoid release to the environment.

P280: Wear protective gloves, protective clothing and eye or face protection.

RESPONSE

P310: Immediately call a POISON CENTRE phone Australia 131 126 or doctor/physician.

P301+P312: IF SWALLOWED: Call a POISON CENTRE phone Australia 131 126 or doctor if you feel unwell.

P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303+P361+P353: IF ON SKIN (or hair): Remove immediately all contaminated clothing. Rinse skin with water.

P363: Wash contaminated clothing before reuse.

P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P370+P378: In case of fire, use water or water spray to extinguish.

P390: Absorb spillage to prevent material damage.

STORAGE

P403+P233: Store in a well-ventilated place. Keep container tightly closed.

P405: Store locked up.

DISPOSAL

P501: If they can not be recycled, dispose of contents to an approved waste disposal plant and containers to landfill (see Section 13 of this SDS).

Emergency Overview

Physical Description & Colour: Clear, colourless liquid.

Odour: Vinegar odour.

Major Health Hazards: Causes severe burns, harmful if swallowed.

Section 3 - Composition/Information on Ingredients

Ingredients	CAS No	Conc,%	TWA (mg/m ³)	STEL (mg/m ³)
Hydrogen peroxide	7722-84-1	20-<25	1.4	not set
Acetic acid	64-19-7	10-<20		
Peracetic acid	79-21-0	5-<10		
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 13 1126 from anywhere in Australia (0800 764 766 in New Zealand) and is available at all times. Have this SDS with you when you call.

Inhalation: If inhalation has occurred, and irritation has developed, remove to fresh air and observe until recovered. Apply oxygen or artificial respiration if needed. Victim to lie down in the recovery position, cover and keep him/her warm. Call a doctor immediately.

Skin Contact: Seek urgent medical attention. Under running water, remove contaminated clothing, shoes and leather goods (e.g. watchbands, belts).. Flush contaminated area with lukewarm, gently flowing water for at least 60 minutes, by the clock. DO NOT INTERRUPT FLUSHING. If necessary, keep emergency vehicle waiting (show paramedics this MSDS and take their advice).

Eye Contact: Call a Poisons Information Centre or a doctor urgently. Immediately flush the contaminated eye(s) with lukewarm, gently flowing water for at least 60 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. Take special care if exposed person is wearing contact lenses. Take victim to hospital immediately.

Ingestion: Contact a Poisons Information Centre or doctor immediately. If swallowed, do NOT induce vomiting; rinse mouth thoroughly with water (only if the person is conscious). Urgent hospital treatment is likely to be needed. Give activated charcoal if instructed. Apply oxygen or artificial respiration if needed.

Section 5 - Fire Fighting Measures

Fire and Explosion Hazards: Liberates oxygen. The major hazard in fires is usually inhalation of heated and toxic or oxygen deficient (or both), fire gases. There is a moderate risk of an explosion from this product if commercial quantities are involved in a fire. Firefighters should take care and appropriate precautions. The presence of this product in a fire is likely to intensify the fire due to its oxidising properties.

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

Extinguishing Media: Not combustible. Use extinguishing media suited to burning materials. Water fog or fine spray is the preferred medium for large fires. Aim to dilute the material with large quantities of water. If practical, contain diluted material and prevent from entering drains and water courses.

Fire Fighting: If a significant quantity of this product is involved in a fire, call the fire brigade. There is a danger of a violent reaction or explosion if significant quantities of this product are involved in a fire. Recommended personal protective equipment is liquid-tight chemical protective clothing and self-contained breathing apparatus. Risk of overpressure and burst due to decomposition in confined spaces and pipes.

Flash point: Not measurable (foam formation).

Upper Flammability Limit: No data available.

Lower Flammability Limit: No data available.

Autoignition temperature: Not spontaneously flammable. Ignition temp 395°C. Method DIN 51794.

Flammability Class: Does not burn.

Section 6 – Accidental Release Measures

General response procedure: Avoid accidents: clean up immediately. Slippery when spilled. Eliminate all sources of ignition. Increase ventilation. Use clean, non-sparking tools and equipment.

Accidental release: Minor spills: dilute product with lots of water and rinse away.

In the event of a major spill, prevent spillage from entering drains or water courses. Evacuate the spill area and deny entry to unnecessary and unprotected personnel. Immediately call the Fire Brigade. 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, Nitrile, butyl rubber, 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. If you have any doubts consult the Australian Standard mentioned below (section 8).

Containment: Stop leak if safe to do so, and contain spill. Absorb onto sand, vermiculite or other suitable absorbent material. Do NOT use textiles, sawdust or a combustible substance. 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. Under no circumstances should sawdust or other combustible material be used. Because of the corrosiveness of this product, special personal care should be taken in any cleanup operation. Do NOT touch damaged containers or spilled material unless wearing appropriate protective equipment. Sweep up and shovel or collect recoverable product into labelled plastic (not metal) 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 reducing agent. 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. Ensure an eye-bath and safety shower are available and ready for use. Observe good personal hygiene practices and recommended procedures. Wash thoroughly after handling. Do not inhale vapour. Immediately change moistened and saturated workclothes. Immediately rinse contaminated or saturated clothing with water. Check Section 8 of this SDS for details of personal protective measures, and make sure that those measures are followed. 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. Store in a cool, well-ventilated area. Check containers periodically for corrosion and leaks. Containers should be kept closed in order to minimise contamination, especially from combustible or reducing materials. Keep away from flammable and combustible substances. Never return spilled product into its original container for re-use (risk of decomposition). Make sure that the product does not come into contact with or substances listed under "Incompatibilities" in Section 10. 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)
Hydrogen peroxide	1.4	not set
Acetic acid	25	37

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: Make sure that the work environment remains clean and that vapours and mists are minimised and kept below exposure limits.

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, nitrile, butyl rubber, polyethylene.

Respirator: Usually, no respirator is necessary when using this product. However, if vapours have formed and engineering controls are inadequate, wear an approved respirator with a vapour filter (EN141). Recommended filter type: ABEK-P2.

If you have any doubts consult the Australian Standard mentioned above.

Safety deluge showers should, if practical, be provided near to where this product is being handled commercially.

Section 9 - Physical and Chemical Properties:

Physical Description & colour:	Clear, colourless liquid.
Odour:	Vinegar odour.
Boiling Point:	Approximately 105°C at 100kPa.
Freezing/Melting Point:	Below 0°C, ca -28°C
Volatiles:	100%
Vapour Pressure:	2.37 kPa at 20°C (water vapour pressure).
Vapour Density:	As for water.
Specific Gravity:	1.12 g/cc
Water Solubility:	Completely soluble in water.
pH:	ca 0.6 (@20°C
Volatility:	No data.
Odour Threshold:	No data.
Evaporation Rate:	As for water.
Coeff Oil/water Distribution:	No data
Autoignition temp:	Not applicable - does not burn. Decomposes @ >60°C

Section 10 - Stability and Reactivity

Reactivity: This product is unlikely to react or decompose under normal storage conditions. However, product is an oxidising agent and reactive. Product is supplied in stabilised form. 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. Under no circumstances should the container be sealed (must be vented). Keep isolated from combustible materials. Protect this product from light. Avoid flammable materials: possible hazardous reaction: spontaneous ignition.

Incompatibilities: Reducing agents, zinc, tin, aluminium and their alloys, combustible materials. Avoid impurities, decomposition catalysts and metals.

Fire Decomposition: This product is likely to decompose only after heating to dryness, followed by further strong heating. Liberates oxygen.

Polymerisation: This product will not undergo polymerisation reactions.

Section 11 - Toxicological Information

Information on toxicological effects:

Acute toxicity	Harmful if swallowed. Acute Oral LD50: Rat = approx. 1859 mg/kg (calculated, based on data from components). Harmful if inhaled. Acute inhalation toxicity LC: Rat = approx. 0.49 mg/l. Vapour as peracetic acid.
Skin corrosion/irritation	Corrosion.
Serious eye damage/irritation	Serious eye damage. Causes burns.
Respiratory or skin sensitisation	No known significant effects or hazards.
Germ cell mutagenicity	No known significant effects or hazards.
Carcinogenicity	No known significant effects or hazards.
Reproductive toxicity	No known significant effects or hazards.
Specific target organ toxicity (STOT)- single exposure	May cause respiratory irritation.
Specific target organ toxicity (STOT)- repeated exposure	No known significant effects or hazards.
Aspiration hazard	No known significant effects or hazards.

Classification of Hazardous Ingredients

Ingredient:	Health effects:
Hydrogen Peroxide	Oxidising liquid - category 1. Acute toxicity - category 4. Skin corrosion. LD ₅₀ Oral, Rat 801mg/kg Inhalation 8hr LC ₅₀ (rat) = > 2000 ppm, 90% solution. Skin absorption LD ₅₀ (rabbit) = 700 mg/kg, 90% solution.
Acetic acid	Flammable liquid – Category 3 Skin corrosion category 1A Serious eye damage Category 1
Peracetic acid	Flammable liquid Category 3 Organic peroxide Type D Acute Toxicity category 4 (oral inhalation and dermal) Skin corrosion category 1A Serious eye damage Category 1 Specific target organ toxicity – Category 3 (Respiratory system).

Potential Health Effects

Inhalation:

Short Term Exposure: Symptoms include breathing difficulties, coughing, chemical pneumonitis and pulmonary oedema. Severe respiratory irritant.

Long Term Exposure: Nose bleeding and risk of chronic bronchitis.

Skin Contact:

Short Term Exposure: This product is very corrosive to the skin. Capable of causing severe burns with deep ulceration, and 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. Burns may not be immediately painful; the onset of pain may be minutes to hours.

Long Term Exposure: Corrosive.

Eye Contact:

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

Long Term Exposure: Corrosive. May cause irreversible eye damage.

Ingestion:

Short Term Exposure: Available data shows that this product is harmful and symptoms include nausea, abdominal pain, bloody vomiting, diarrhoea, suffocation, coughing and shortness of breath. This product is very corrosive to the gastrointestinal tract. Capable of causing severe burns with deep ulceration, and 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. There is also a danger of perforation of the oesophagus and the stomach. Risk of respiratory disorder.

Long Term Exposure: Corrosion will continue until product is removed or neutralised.

Carcinogen Status:

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

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

IARC: Hydrogen Peroxide is Class 3 - unclassifiable as to carcinogenicity to humans.

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

Section 12 - Ecological Information

This product is toxic to aquatic organisms. This product is biodegradable. It will not accumulate in the soil or water or cause long term problems.

Fish: LC₅₀ *Lepomis macrochirus* (Bluegill sunfish): 1.1mg/L

Daphnia: EC₅₀ - 48 h: 0.73mg/L

Persistence and degradability:

Exposure time: 28d. result: Readily biodegradable. Method: OECD TG 301 E At non-bacteriotoxic concentration. Under ambient conditions, quick hydrolysis, reduction or decomposition occurs.

The following substances are formed: oxygen, water, acetic acid. Acetic acid is easily biodegradable.

Mobility: water soluble, mobile.

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, we suggest that you contact a specialist disposal company to arrange disposal, but we recommend that it be neutralised in a controlled manner before disposal.

Section 14 - Transport Information

Dangerous according to Australian Dangerous Goods (ADG) Code, IATA and IMDG/IMSB criteria.

UN Number: 3149, HYDROGEN PEROXIDE & PEROXYACETIC ACID MIXTURE, with acid(s), water and not more than 5% peroxyacetic acid, STABILIZED.

Hazchem Code: 2P

Special Provisions: None allocated

Limited quantities: ADG 7 specifies a Limited Quantity value of 1 L for this class of product.

Dangerous Goods Class: Class 5.1: Oxidising Agents.

Sub Risk: Class 8, Corrosive Substances.

Packing Group: II

Packing Instruction: P504, IBC02

Class 5.1 Oxidising Agents shall not be loaded in the same vehicle or packed in the same freight container with Classes 1 (Explosives), 2.1 (Flammable Gases), 2.3 (Toxic Gases), 3 (Flammable Liquids), 4.1 (Flammable Solids), 4.2 (Spontaneously Combustible Substances), 4.3 (Dangerous When Wet Substances), 5.2 (Organic Peroxides), 6 (Toxic Substances, where the Toxic Substance is a fire risk substance), 7 (Radioactive Substances), 8 (Corrosive Substances), 9 (Miscellaneous Dangerous Goods, where the substance is a fire risk substance), Fire risk substances other than Dangerous Goods. They may however be loaded in the same vehicle or packed in the same freight container with Classes 2.2 (Non-Flammable, Non-Toxic Gases), 6 (Toxic Substances except where the substances are fire risk substances), 9 (Miscellaneous Dangerous Goods except where the goods are fire risk substances) Foodstuffs and foodstuff empties.

Section 15 - Regulatory Information

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

The following ingredient: Hydrogen peroxide, is mentioned in the SUSMP.

Section 16 - Other Information

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

THIS SDS SUMMARISES OUR BEST KNOWLEDGE OF THE HEALTH AND SAFETY HAZARD INFORMATION OF THE PRODUCT AND HOW TO SAFELY HANDLE AND USE THE PRODUCT IN THE WORKPLACE. EACH USER MUST REVIEW THIS SDS IN THE CONTEXT OF HOW THE PRODUCT WILL BE HANDLED AND USED IN THE WORKPLACE.

IF CLARIFICATION OR FURTHER INFORMATION IS NEEDED TO ENSURE THAT AN APPROPRIATE RISK ASSESSMENT CAN BE MADE, THE USER SHOULD CONTACT THIS COMPANY SO WE CAN ATTEMPT TO PROVIDE ADDITIONAL INFORMATION.

OUR RESPONSIBILITY FOR PRODUCTS SOLD IS SUBJECT TO OUR STANDARD TERMS AND CONDITIONS, A COPY OF WHICH IS SENT TO OUR CUSTOMERS AND IS ALSO AVAILABLE ON REQUEST.

Please read all labels carefully before using product.

This SDS is prepared in accord with the SWA document "Preparation of Safety Data Sheets for Hazardous Chemicals - Code of Practice" (December 2011) and is Copyright ©.

Abbreviations and Definitions of terms used:

<	less than
>	greater than
ADG CODE	Australian Code for the Transport of Dangerous Goods by Road and Rail (7 th edition)
AICS	Australian Inventory of Chemical Substances
CAS	Chemical Abstracts Service (Registry Number)
COD	Chemical Oxygen Demand
deg C	Degrees Celsius
g	gram
g/L	grams per litre
Hazchem Code	Emergency action code of numbers and letters that provide information to emergency services especially firefighters
HSIS	Hazardous Substance Information System
IARC	International Agency for Research on Cancer
kg	kilogram
L	Litre
LC50	The concentration of a material (inhaled) that will be lethal to 50% of the test animals.
LD50	The dose (swallowed all at once) which is lethal to 50% of a group of test animals.
m3	Cubic metre

mg	milligram
mg/m3	milligrams per cubic metre
miscible	A liquid that mixes homogeneously with another liquid
N/A	Not applicable
N/K	Not Known
NIOSH	National Institute for Occupational Safety and Health
non-haz	Non- hazardous
NOS	Not otherwise specified
NTP	National Toxicology Program (USA)
PEL	Permissible Exposure Limit
ppb	Parts per billion
ppm	Parts per million
R-Phrase	Risk Phrase
STEL	Short term exposure limit
SUSMP	Standard for the Uniform Scheduling of Medicines & Poisons
SWA	Safe Work Australia, formerly ASCC and NOHSC
TLV	Threshold Limit Value
TWA	Time Weighted average
UN Number	United Nations (Number)
wt	weight

The information in this Data Sheet is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship. As far as lawfully possible, Agar Cleaning Systems accepts no liability for any loss, injury or damage (including consequential loss) suffered or incurred by any person as a consequence of reliance on the information and advice contained herein.

End of SDS.