

ANTICIPATED CHEMICAL & PHARMACEUTICAL USE WITHIN THE FARM

Chemical/ Pharmaceutical	General Uses	Typical Expected Frequency of Use (Approx.)	Typical Amount Used (Approx. - per dose)	Approximate Amount held within Farm	Storage Location	ADG Code Class ¹	Safety Phrase ²
Hydrogen peroxide*	Spawning stimulant	2-3 doses per year	20ml	500ml	Designated chemicals refrigerator within Facility Shed	5.1 8	S1/2, S3, S6, S24/25, S26, S36/37/39, S45
Benzocaine*	Anaesthetic	2-3 doses per year	10g	200g	Designated chemicals cupboard within Facility Shed	N/A	S22, S24/25
Un-denatured ethanol*	Solvent (to dissolve benzocaine)	2-3 doses per year	20ml	20L	Flammables cupboard within Facility Shed	3	S7, S9, S16, S23, S24, S25, S26, S29, S37, S39, S40, S46, S51, S60
Sodium percarbonate	Bactericide (to clean benchtops etc)	Daily	100g	10kg	Designated chemicals cupboard within Facility Shed	5.1	S9, S13, S17, S22, S24, S25, S26, S36, S37, S39, S40, S46, S51, S60
Tris*	Buffering agent (to manage pH for spawning)	2-3 doses per year	10g	200g	Designated chemicals cupboard within Facility Shed	N/A	S22, S24, S25, S26, S37, S39, S40, S46
Gaseous oxygen	Aerate transport bags (after Abalone harvest)	Weekly	10L per bag	3 tanks	Tanks stored within Facility Shed	2.2 5.1	S7, S9, S17, S23, S24, S37, S46, S51, S53,

Chemical/ Pharmaceutical	General Uses	Typical Expected Frequency of Use (Approx.)	Typical Amount Used (Approx. - per dose)	Approximate Amount held within Farm	Storage Location	ADG Code Class ¹	Safety Phrase ²
							S60
Diesel fuel	Fuel (backup generator/ pump)	Rare- during power outages	10L	350L	Within Pumphouse and generator building	N/A	S2, S36/37, S61, S62
Pool chlorine*	Bactericide	Daily	4ml	30L	Designated chemicals cupboard within Facility Shed	8	S1, S17, S23, S24, S25, S26, S27, S29, S36, S35, S37, S39, S40, S45, S46, S57, S60, S61
Sodium thiosulphate*	Neutraliser for chlorine	Daily	<0.5ml	200g	Designated chemicals cupboard within Facility Shed	9	S9, S22, S24, S25, S26, S29, S35, S37, S39, S40, S46, S51, S57, S60, S61
Sodium metasilicate*	Growth supporter for diatom algae	2-3 doses per year	<0.5g	50g	Designated chemicals cupboard within Facility Shed	8	S1, S22, S24, S25, S26, S27, S36, S37, S39, S40, S45, S60
Sodium phosphate dibasic- Potassium phosphate monobasic solution pH 6.8	Solutions to verify pH calibration	Daily	200ml	2L	Designated chemicals cupboard within Facility Shed	N/A	S23, S24
Potassium hydrogen phthalate	Solutions to verify pH	Daily	200ml	2L	Designated chemicals cupboard within Facility Shed	N/A	N/A

Chemical/ Pharmaceutical	General Uses	Typical Expected Frequency of Use (Approx.)	Typical Amount Used (Approx. - per dose)	Approximate Amount held within Farm	Storage Location	ADG Code Class ¹	Safety Phrase ²
pH 4	calibration						
Sodium tetraborate solution pH 9	Solutions to verify pH calibration	Daily	200ml	2L	Designated chemicals cupboard within Facility Shed	N/A	N/A
Salinity calibration solutions	Solutions to verify salinity calibration	Daily	200ml	2L	Designated chemicals cupboard within Facility Shed	N/A	N/A
Oxygen calibration solutions	Solution for zero calibration of oxygen probes	Monthly	200ml	1L	Designated chemicals cupboard within Facility Shed	N/A	S26, 236/37
Iodine	Hand cleansing	Daily	10ml	10L	Designated chemicals cupboard within Facility Shed	3	S16, S25
Sodium hydroxide	Solution for footbaths	Daily	500ml	40L	Designated chemicals cupboard within Facility Shed	8	S24/25, S27, S28, S36/37/39, S64
Formaldehyde solution	Sample preservation (histological examination)	Rare- during disease outbreaks	100ml	40L	Designated chemicals cupboard within Facility Shed	9	S7, S9, S13, S23, S24, S25, S26, S36, S37, S39, S40, S46, S51, S60, S63
Ozone*	Disinfection of effluent water	Continuously	0.2-0.4 ppm residual ozone for 1-5 minutes	Nil (generated on-demand via commercial unit and utilised immediately)	N/A	2.3 5.1	S1, S7, S9, S13, S17, S23, S24, S25, S26, S27, S35, S36, S37, S38, S39,

Chemical/ Pharmaceutical	General Uses	Typical Expected Frequency of Use (Approx.)	Typical Amount Used (Approx. - per dose)	Approximate Amount held within Farm	Storage Location	ADG Code Class ¹	Safety Phrase ²
							S46, S51, S53, S60, S63

*Substances which may be utilised within the marine water stream

1- Australian Dangerous Goods Code

The ADG Code (7th Edition, National Transport Commission Australia) sets out the requirements for transporting dangerous goods by road or rail. It also categorises dangerous goods into particular classes according to the hazard or the most predominant of the hazards they represent. Each class of goods requires particular actions to minimise risks during transportation. The following classes (and divisions) are relevant to this proposal (*sourced from Material Safety Data Sheets*):

- Class 2, Division 2.2: Non-flammable, non-toxic gases
- Class 2, Division 2.3: Toxic gases
- Class 3: Flammable liquids
- Class 5, Division 5.1: Oxidising substances
- Class 8: Corrosive substances
- Class 9: Miscellaneous dangerous substances and articles

2- Safety Phrases

The referenced safety phrases (*sourced from Material Safety Data Sheets*) relate to the Hazardous Substances Information System (Safe Work Australia). They provide general information with regard to special handling and storage actions which should be taken to minimise the risk of harm. Additional information on how to handle and manage chemicals will be provided in the relevant Material Safety Data Sheets. The phrases referenced are defined below:

S1	*Keep locked up.
S2	*Keep out of reach of children.
S3	Keep in a cool place.
S6	Keep under... (inert gas to be specified by the manufacturer).
S7	Keep container tightly closed.
S9	Keep container in a well-ventilated place.
S13	Keep away from food, drink and animal feeding stuffs.
S16	Keep away from sources of ignition - No smoking.
S17	Keep away from combustible material.
S22	Do not breathe dust.
S23	Do not breathe gas/fumes/vapour/spray (appropriate wording to be specified by the manufacturer).
S24	Avoid contact with skin.
S25	Avoid contact with eyes.
S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S27	Take off immediately all contaminated clothing.
S28	After contact with skin, wash immediately with plenty of... (to be specified by the manufacturer).
S29	Do not empty into drains.
S35	This material and its container must be disposed of in a safe way.
S36	Wear suitable protective clothing.
S37	Wear suitable gloves.
S38	In case of insufficient ventilation, wear suitable respiratory equipment.
S39	Wear eye/face protection.
S40	To clean the floor and all objects contaminated by this material, use... (to be specified by the manufacturer).
S45	In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
S46	If swallowed, seek medical advice immediately and show this container or label.
S51	Use only in well ventilated areas.
S53	Avoid exposure-obtain special instructions before use.
S57	Use appropriate container to avoid environmental contamination.
S60	This material and its container must be disposed of as hazardous waste.

S61	Avoid release to the environment. Refer to special instructions/Material Safety Data Sheets.
S62	If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.
S63	In case of accident by inhalation: remove casualty to fresh air and keep at rest.
S64	If swallowed, rinse mouth with water, (only if the person is conscious).
S1/2	*Keep locked up and out of the reach of children.
S24/25	Avoid contact with skin and eyes.
S36/37	Wear suitable protective clothing and gloves.
S36/37/39	Wear suitable protective clothing, gloves and eye/face protection.