

SAFETY DATA SHEET

0081

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

1.1 Product identifier

Product name PESTIGAS CONCENTRATE
Synonym(s) 081 - SDS NUMBER • BOC PESTIGAS CONCENTRATE • PRODUCT CODE: 196DRUM • SYNERGISED NATURAL PYRETHRUM INSECTICIDE IN SOLVENT

1.2 Uses and uses advised against

Use(s) CONCENTRATE • PESTICIDE

1.3 Details of the supplier of the product

Supplier name BOC LIMITED (AUSTRALIA)
Address 10 Julius Avenue, North Ryde, NSW, 2113, AUSTRALIA
Telephone 131 262, (02) 8874 4400
Fax 132 427 (24 hours)
Website <http://www.boc.com.au>

1.4 Emergency telephone number(s)

Emergency 1800 653 572 (24/7) (Australia only)

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

CLASSIFIED AS HAZARDOUS ACCORDING TO AUSTRALIAN WHS REGULATIONS

GHS classification(s) Flammable Liquids: Category 4
Aspiration Hazard: Category 1
Aquatic Toxicity (Chronic): Category 2

2.2 Label elements

Signal word DANGER

Pictogram(s)



Hazard statement(s)

H227 Combustible liquid.
H304 May be fatal if swallowed and enters airways.
H411 Toxic to aquatic life with long lasting effects.

Prevention statement(s)

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection/face protection.

Response statement(s)

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P331 Do NOT induce vomiting.
P370 + P378 In case of fire: Use appropriate media for extinction.
P391 Collect spillage.

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Storage statement(s)

P403 + P235 Store in a well-ventilated place. Keep cool.
P405 Store locked up.

Disposal statement(s)

P501 Dispose of contents/container in accordance with relevant regulations.

2.3 Other hazards

No information provided.

3. COMPOSITION/ INFORMATION ON INGREDIENTS

3.1 Substances / Mixtures

Ingredient	CAS Number	EC Number	Content
NAPHTHA, PETROLEUM HEAVY ALKYLATE	64741-65-7	265-067-2	80.8%
PYRETHRUM	8003-34-7	232-319-8	3.2%
PIPERONYL BUTOXIDE	51-03-6	200-076-7	16%

4. FIRST AID MEASURES

4.1 Description of first aid measures

Eye If in eyes, hold eyelids apart and flush continuously with running water. Continue flushing until advised to stop by a Poisons Information Centre, a doctor, or for at least 15 minutes.

Inhalation If inhaled, remove from contaminated area. To protect rescuer, use a Type A (Organic vapour) respirator or an Air-line respirator (in poorly ventilated areas). Apply artificial respiration if not breathing.

Skin If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water.

Ingestion For advice, contact a Poison Information Centre on 13 11 26 (Australia Wide) or a doctor (at once). If swallowed, do not induce vomiting.

First aid facilities No information provided.

4.2 Most important symptoms and effects, both acute and delayed

See Section 11 for more detailed information on health effects and symptoms.

4.3 Immediate medical attention and special treatment needed

Treat symptomatically.

5. FIRE FIGHTING MEASURES

5.1 Extinguishing media

Dry agent, carbon dioxide or foam. Prevent contamination of drains and waterways.

5.2 Special hazards arising from the substance or mixture

Combustible. May evolve toxic gases (carbon/ nitrogen oxides, chlorides, hydrogen cyanide, cyanides, hydrocarbons) when heated to decomposition.

5.3 Advice for firefighters

Evacuate area and contact emergency services. Toxic gases may be evolved in a fire situation. Remain upwind and notify those downwind of hazard. Wear full protective equipment including Self Contained Breathing Apparatus (SCBA) when combating fire. Use waterfog to cool intact containers and nearby storage areas.

5.4 Hazchem code

3YE
3 Normal Foam (protein based foam that is not alcohol resistant).
Y Risk of violent reaction or explosion. Wear full fire kit and breathing apparatus. Contain spill and run-off.
E Evacuation of people in and around the immediate vicinity of the incident should be considered.

6. ACCIDENTAL RELEASE MEASURES

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6.1 Personal precautions, protective equipment and emergency procedures

Wear Personal Protective Equipment (PPE) as detailed in section 8 of the SDS. Clear area of all unprotected personnel. Ventilate area where possible. Contact emergency services where appropriate.

6.2 Environmental precautions

Prevent product from entering drains and waterways.

6.3 Methods of cleaning up

Contain spillage, then cover / absorb spill with sodium carbonate or similar, collect and place in suitable containers for treatment and/or disposal. Only trained personnel should undertake clean up.

6.4 Reference to other sections

See Sections 8 and 13 for exposure controls and disposal.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Before use carefully read the product label. Use of safe work practices are recommended to avoid eye or skin contact and inhalation. Observe good personal hygiene, including washing hands before eating. Prohibit eating, drinking and smoking in contaminated areas.

7.2 Conditions for safe storage, including any incompatibilities

Store tightly sealed in a cool, dry, well ventilated area, removed from incompatible substances, heat or ignition sources and foodstuffs. Ensure containers are adequately labelled, protected from physical damage and sealed when not in use. Check regularly for leaks or spills. Large storage areas should be bunded and have appropriate fire protection and ventilation systems. Store as a Class C1 Combustible Liquid (AS1940).

7.3 Specific end use(s)

No information provided.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

Exposure standards

Ingredient	Reference	TWA		STEL	
		ppm	mg/m ³	ppm	mg/m ³
Pyrethrum	SWA (AUS)	--	5	--	--

Biological limits

No biological limit values have been entered for this product.

8.2 Exposure controls

Engineering controls Avoid inhalation. If using indoors, ensure there is adequate natural ventilation. Increase air flow by opening windows/doors or using mechanical extraction units. Maintain vapour levels below the recommended exposure standard.

PPE

Eye / Face	Wear splash-proof goggles.
Hands	Wear nitrile or neoprene gloves.
Body	Wear coveralls.
Respiratory	Where an inhalation risk exists, wear a Type A (Organic vapour) respirator.



9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance CLEAR PALE YELLOW LIQUID

9.1 Information on basic physical and chemical properties

Odour	CHRYSANthemum ODOUR
Flammability	CLASS C1 COMBUSTIBLE
Flash point	71°C (Distillate)
Boiling point	187°C to 259°C (Distillate)
Melting point	NOT AVAILABLE
Evaporation rate	NOT AVAILABLE
pH	NOT AVAILABLE
Vapour density	NOT AVAILABLE
Specific gravity	0.81 (Distillate)
Solubility (water)	INSOLUBLE
Vapour pressure	0.45 torr @ 38°C
Upper explosion limit	4.7 % (Distillate)
Lower explosion limit	0.6 % (Distillate)
Partition coefficient	NOT AVAILABLE
Autoignition temperature	231°C (Distillate)
Decomposition temperature	NOT AVAILABLE
Viscosity	NOT AVAILABLE
Explosive properties	NOT AVAILABLE
Oxidising properties	NOT AVAILABLE
Odour threshold	NOT AVAILABLE

10. STABILITY AND REACTIVITY

10.1 Reactivity

Carefully review all information provided in sections 10.2 to 10.6.

10.2 Chemical stability

Stable under recommended conditions of storage.

10.3 Possibility of hazardous reactions

Polymerization is not expected to occur.

10.4 Conditions to avoid

Avoid heat, sparks, open flames and other ignition sources.

10.5 Incompatible materials

Incompatible with oxidising agents (e.g. hypochlorites), acids (e.g. nitric acid), alkalis (e.g. sodium hydroxide), heat and ignition sources.

10.6 Hazardous decomposition products

May evolve toxic gases (carbon/ nitrogen oxides, chlorides, hydrogen cyanide, cyanides, hydrocarbons) when heated to decomposition.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

Information available for the product:

No known toxicological effects from this product. Based on available data, the classification criteria are not met.

Information available for the ingredient(s):

Ingredient	Oral Toxicity (LD50)	Dermal Toxicity (LD50)	Inhalation Toxicity (LC50)
PIPERONYL BUTOXIDE	2600 mg/kg (mouse)	200 mg/kg (rabbit)	--

Skin Contact may result in irritation, stinging sensation, rash and possible numbness.

Eye Contact may result in irritation, lacrimation, pain and redness.

Sensitization Not classified as causing skin or respiratory sensitisation.

Mutagenicity Not classified as a mutagen.

Carcinogenicity Not classified as a carcinogen.

Reproductive Not classified as a reproductive toxin.

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STOT – single exposure	Over exposure may result in irritation of the nose and throat, nausea and dizziness. High level exposure to pyrethrins may result in breathing difficulties
STOT – repeated exposure	Not classified as causing organ damage from repeated exposure. However, repeated exposure to some solvents have been reported to cause adverse effects to the central nervous system (CNS).
Aspiration	Aspiration into the lungs may cause chemical pneumonitis and pulmonary oedema.

12. ECOLOGICAL INFORMATION

12.1 Toxicity

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

12.2 Persistence and degradability

No information provided.

12.3 Bioaccumulative potential

No information provided.

12.4 Mobility in soil

No information provided.

12.5 Other adverse effects

No information provided.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Waste disposal Residual product will be disposed of when the container is returned. Contact the manufacturer/supplier for additional information (if required).

Legislation Dispose of in accordance with relevant local legislation.

14. TRANSPORT INFORMATION

CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF THE ADG CODE



	LAND TRANSPORT (ADG)	SEA TRANSPORT (IMDG / IMO)	AIR TRANSPORT (IATA / ICAO)
14.1 UN Number	3082	3082	3082
14.2 Proper Shipping Name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
14.3 Transport hazard class	9	9	9
14.4 Packing Group	III	III	III

14.5 Environmental hazards No information provided

14.6 Special precautions for user

Hazchem code 3YE

GTEPG 9C1

EMS F-A, S-F

Other information Environmentally Hazardous Substances meeting the descriptions of UN 3077 or UN 3082 are not subject to this Code when transported by road or rail in;
(a) packagings;
(b) IBCs; or
(c) any other receptacle not exceeding 500 kg(L).
- Australian Special Provisions (SP AU01) - ADG Code 7th Ed.

15. REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Poison schedule	Classified as a Schedule 5 (S5) Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP).	
Classifications	Safework Australia criteria is based on the Globally Harmonised System (GHS) of Classification and Labelling of Chemicals. The classifications and phrases listed below are based on the Approved Criteria for Classifying Hazardous Substances [NOHSC: 1008(2004)].	
Hazard codes	N Xn	Dangerous for the environment Harmful
Risk phrases	R51/53 R65	Toxic to aquatic organisms, may cause long term adverse effects in the aquatic environment. Harmful: May cause lung damage if swallowed.
Safety phrases	S23 S24 S62	Do not breathe gas/fumes/vapour/spray (where applicable). Avoid contact with skin. If swallowed, do not induce vomiting; seek medical advice immediately and show this container or label.
Inventory listing(s)	AUSTRALIA: AICS (Australian Inventory of Chemical Substances) All components are listed on AICS, or are exempt.	

16. OTHER INFORMATION

Additional information APPLICATION METHOD: Liquid feed to specialised cylinder filling equipment.

EXPOSURE STANDARDS - TIME WEIGHTED AVERAGES: Exposure standards are established on the premise of an 8 hour work period of normal intensity, under normal climatic conditions and where a 16 hour break between shifts exists to enable the body to eliminate absorbed contaminants. In the following circumstances, exposure standards must be reduced: Strenuous work conditions; hot, humid climates; high altitude conditions; extended shifts (which increase the exposure period and shorten the period of recuperation).

PERSONAL PROTECTIVE EQUIPMENT GUIDELINES:

The recommendation for protective equipment contained within this report is provided as a guide only. Factors such as method of application, working environment, quantity used, product concentration and the availability of engineering controls should be considered before final selection of personal protective equipment is made.

HEALTH EFFECTS FROM EXPOSURE:

It should be noted that the effects from exposure to this product will depend on several factors including: frequency and duration of use; quantity used; effectiveness of control measures; protective equipment used and method of application. Given that it is impractical to prepare a ChemAlert report which would encompass all possible scenarios, it is anticipated that users will assess the risks and apply control methods where appropriate.

PRODUCT NAME PESTIGAS CONCENTRATE**Abbreviations**

ACGIH	American Conference of Governmental Industrial Hygienists
CAS #	Chemical Abstract Service number - used to uniquely identify chemical compounds
CNS	Central Nervous System
EC No.	EC No - European Community Number
EMS	Emergency Schedules (Emergency Procedures for Ships Carrying Dangerous Goods)
GHS	Globally Harmonized System
GTEPG	Group Text Emergency Procedure Guide
IARC	International Agency for Research on Cancer
LC50	Lethal Concentration, 50% / Median Lethal Concentration
LD50	Lethal Dose, 50% / Median Lethal Dose
mg/m ³	Milligrams per Cubic Metre
OEL	Occupational Exposure Limit
pH	relates to hydrogen ion concentration using a scale of 0 (high acidic) to 14 (highly alkaline).
ppm	Parts Per Million
STEL	Short-Term Exposure Limit
STOT-RE	Specific target organ toxicity (repeated exposure)
STOT-SE	Specific target organ toxicity (single exposure)
SUSMP	Standard for the Uniform Scheduling of Medicines and Poisons
SWA	Safe Work Australia
TLV	Threshold Limit Value
TWA	Time Weighted Average

Report status

This document has been compiled by RMT on behalf of the manufacturer, importer or supplier of the product and serves as their Safety Data Sheet ('SDS').

It is based on information concerning the product which has been provided to RMT by the manufacturer, importer or supplier or obtained from third party sources and is believed to represent the current state of knowledge as to the appropriate safety and handling precautions for the product at the time of issue. Further clarification regarding any aspect of the product should be obtained directly from the manufacturer, importer or supplier.

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