SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Mass Air Flow Sensor Cleaner, Aerosol

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture

Cleaning agent.

1.3. Details of the supplier of the safety data sheet

Company name:	Bluechem Australia	
Street:	UNIT 4, 63 BRUNEL ROAD	
Place:	SEAFORD VICTORIA 3198 AUSTRALIA	
Telephone:	(03) 9311 4456	Telefax: (03) 9311 7712
e-mail:	admin@bluechemaustralia.com.au	
Contact person:	Neil Cochrane	
Internet:	www.bluechemaustralia.com.au	

1.4. Emergency telephone number:

Emergency 24 HOUR: Neil Cochrane (03) 9311 4456 or 0498 880 115

Further Information

Article Number: 35006

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

CLASSIFIED AS HAZARDOUS CHEMICAL ACCORDING TO SAFE WORK AUSTRALIA AND WHS CRITERIA.
CLASSIFIED AS DANGEROUS GOODS ACCORDING TO THE ADG CODE.
POISON SCHEDULE: 5

Classification according to WHS

Hazard categories:
Aerosol: Aerosol 1
Skin corrosion/irritation: Skin Irrit. 2
Serious eye damage/eye irritation: Eye Irrit. 2A
Specific target organ toxicity - single exposure: STOT SE 3
Hazardous to the aquatic environment: Aquatic Chronic 3
Hazard Statements:
Extremely flammable aerosol.
Pressurised container: May burst if heated.
Causes skin irritation.
Causes serious eye irritation.
May cause drowsiness or dizziness.
Harmful to aquatic life with long lasting effects.

2.2. Label elements

Labeling according to WHS

Component(s) to be indicated on the label

propan-2-ol; isopropyl alcohol; isopropanol 55 -< 60 %
heptane 10 -< 15 %
Low boiling point hydrogen treated naphtha, Naphtha (petroleum, gasoline), hydrotreated light 1 -< 5 %

Signal word: Danger

Pictograms:

flame - exclamation mark

Hazard statements

H222 Extremely flammable aerosol.
H229 Pressurised container: May burst if heated.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

H101 If medical advice is needed, have product container or label at hand.
H102 Keep out of reach of children.
H210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
H211 Do not spray on an open flame or other ignition source.
H251 Do not pierce or burn, even after use.
H261 Avoid breathing aerosole.
H264 Wash hands thoroughly after handling.
H271 Use only outdoors or in a well-ventilated area.
H280 Wear protective gloves.
H302+P352 IF ON SKIN: Wash with plenty of water.
P304+P340 IF INHALED: Remove person to fresh air and keep 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.
P332+P313 If skin irritation occurs: Get medical advice/attention.
P337+P313 If eye irritation persists: Get medical advice/attention.
P312 Call a POISON CENTER/doctor if you feel unwell.
P362 Take off contaminated clothing.
P403+P233 Store in a well-ventilated place. Keep container tightly closed.
P405 Store locked up.
P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.
P501 Dispose of this material and its container to hazardous or special waste collection point.

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Solvent mixture
Cleaning agent

Propane/butane-mixture

Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification according to WHS criteria			
67-63-0	propan-2-ol; isopropyl alcohol; isopropanol			55 - < 60 %
	200-661-7		01-2119457558-25	
	Flam. Liq. 2, Eye Irrit. 2A, STOT SE 3; H225 H319 H336			
106-97-8	butane			15 - < 20 %
	203-448-7	601-004-00-0		
	Flam. Gas 1; H220			
142-82-5	heptane			10 - < 15 %
	927-510-4		01-2119475515-33	
	Flam. Liq. 2, Skin Irrit. 2, STOT SE 3, Asp. Tox. 1, Aquatic Chronic 2; H225 H315 H336 H304 H411			
74-98-6	propane			5 - < 10 %
	200-827-9	601-003-00-5		
	Flam. Gas 1; H220			
64742-49-0	Low boiling point hydrogen treated naphtha, Naphtha (petroleum, gasoline), hydrotreated light			1 - < 5 %
	265-151-9		01-2119475514-35	
	Flam. Liq. 2, Skin Irrit. 2, STOT SE 3, Asp. Tox. 1, Aquatic Chronic 2; H225 H315 H336 H304 H411			

Full text of H and AUH phrases: see section 16

Further Information

According to note P to labelling (Australian Hazardous Substances Information System (HSIS)), "Solvent naphta (petroleum)" is not to be classified as "carcinogenic" or "mutagen" ingredient because a benzene content (EINECS No. 200-753-7) is below 0.1 % by weight.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Move victim to fresh air. Put victim at rest and keep warm.

After inhalation

Move victim to fresh air. Put victim at rest and keep warm.
In case of difficulties of breathing consult physician.
If victim is at risk of losing consciousness, position and transport on their side.

After contact with skin

Take off immediately all contaminated clothing, including underwear and shoes .
After contact with skin, wash immediately with plenty of water and soap.
Rub greasy ointment into the skin.

After contact with eyes

Immediately flush eyes with plenty of flowing water for 10 to 15 minutes holding eyelids apart.
Consult physician.

After ingestion

Let water be drunken in little sips (dilution effect). Consult physician.

4.2. Most important symptoms and effects, both acute and delayed

Frequently or prolonged contact with skin may cause dermal irritation.

Irritation of eyes: Irritant effect possible.
After ingestion: Harmful: may cause lung damage if swallowed.
Harmful: danger of serious damage to health by prolonged exposure through inhalation.

4.3. Indication of any immediate medical attention and special treatment needed

Warning about danger of aspiration.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Extinguishing powder.
Sand.
alcohol resistant foam.
Carbon dioxide (CO_2).

Unsuitable extinguishing media

High power water jet.

5.2. Special hazards arising from the substance or mixture

Formation of decomposition products possible.
In case of fire and/or explosion do not breathe fumes.

5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus.
HAZCHEM: none allocated

Additional information

Cool endangered container in case of fire.
Contaminated fire-fighting water must be collected separately.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

In case of fire: Wear self-contained breathing apparatus.
Keep away from sources of ignition. - No smoking.

6.2. Environmental precautions

Beat down gas/vapours/mist with water spray.
Do not empty into drains or the aquatic environment.
In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

6.3. Methods and material for containment and cleaning up

Prevent spreading of spillages (e.g. by oil barrier).
Wipe up with absorbent material (eg. cloth, fleece).

6.4. Reference to other sections

Information for safe handling look up chapter 7.
Information for personal protective equipment look up chapter 8.
Information for disposal see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Closed devices. Vapours / aerosols must be extracted by suction immediately at point of origin.
Avoid contact with skin and eyes.

Advice on protection against fire and explosion

Keep away from sources of ignition. - No smoking. Take precautionary measures against static discharges.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed in a cool, well-ventilated place.

Further information on storage conditions

Packaging materials: metal.

7.3. Specific end use(s)

No information available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational Exposure Limits (OEL) - Australia

CAS No	Substance	ppm	mg/m3	Category
106-97-8	Butane	800	1.900	TWA
106-97-8	Butane	-	-	STEL
67-63-0	Isopropyl alcohol	400	983	TWA
67-63-0	Isopropyl alcohol	500	1.230	STEL
142-82-5	Heptane	400	1.640	TWA
142-82-5	Heptane	500	2.050	STEL

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m³	fibres/ml	Category	Origin
106-97-8	Butane	600	1450		TWA (8 h)	WEL
		750	1810		STEL (15 min)	WEL
67-63-0	Propan-2-ol	400	999		TWA (8 h)	WEL
		500	1250		STEL (15 min)	WEL

8.2. Exposure controls

Protective and hygiene measures

When using do not eat, drink or smoke.
Wash hands before breaks and after work.

Eye/face protection

Wear tightly sealed safety glasses against possible splashes into the eyes. (DIN EN 166)

Hand protection

Tested protective gloves are to be worn: Butyl rubber. (DIN EN 374)

Skin protection

Wear suitable solvent-proof protective clothing according to EN 465.

Respiratory protection

In case of accumulation of fumes/aerosols, provide adequate ventilation.
In case of insufficient ventilation, wear suitable respiratory equipment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	aerosole
Colour:	transparent
Odour:	aromatic

Test method

Changes in the physical state

Initial boiling point and boiling range:	110 - 116 °C
Ignition temperature:	> 200 °C
Density (at 20 °C):	0.75-0.81 g/cm³
Water solubility: (at 20 °C)	insoluble

Solubility in other solvents

Organic solvents

9.2. Other information

No data

SECTION 10: Stability and reactivity

10.1. Reactivity

No information available.

10.2. Chemical stability

No decomposition when used as intended.

10.3. Possibility of hazardous reactions

No dangerous reactions are known.

10.4. Conditions to avoid

Only use the material in places where open light, fire and other flammable sources can be kept away.

10.5. Incompatible materials

Oxidizing agents.
acid, concentrated.
Alkalis (alkalis), concentrated.

10.6. Hazardous decomposition products

Carbon monoxide (CO).
Carbon dioxide (CO2).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

CAS No	Chemical name				
	Exposure route	Dose		Species	Source
67-63-0	propan-2-ol; isopropyl alcohol; isopropanol				
	oral	LD50	5280 mg/kg	Rat	
	dermal	LD50	12800 mg/kg	Rabbit	
	inhalative (4 h) vapour	LC50	47,5 mg/l	Rat	
106-97-8	butane				
	inhalative (4 h) gas	LC50	273000 ppm	Rat	GESTIS
142-82-5	heptane				
	oral	LD50	>5840 mg/kg	Rat	
	dermal	LD50	>2920 mg/kg	Rabbit	
	inhalative (4 h) vapour	LC50	>23,3 mg/l	Rat	
64742-49-0	Low boiling point hydrogen treated naphtha, Naphtha (petroleum, gasoline), hydrotreated light				
	oral	LD50	>2000 mg/kg	Rat	
	dermal	LD50	>2000 mg/kg	Rabbit	
	inhalative (4 h) vapour	LC50	>20 mg/l		
	inhalative (4 h) aerosol	LC50	>5 mg/l	Rat	

Irritation and corrosivity

After skin contact: Frequently or prolonged contact with skin may cause dermal irritation.
Irritation of eyes: Irritant effect possible.
After ingestion:
Harmful: may cause lung damage if swallowed.

SECTION 12: Ecological information

12.1. Toxicity

CAS No	Chemical name					
	Aquatic toxicity	Dose		[h] | [d]	Species	Source
67-63-0	propan-2-ol; isopropyl alcohol; isopropanol					
	Acute fish toxicity	LC50	9640 mg/l	96 h	Pimephales promelas	
	Acute algae toxicity	ErC50	1000 mg/l	72 h	Algae	
	Acute crustacea toxicity	EC50	13299 mg/l	48 h	Daphnia magna	
142-82-5	heptane					
	Acute fish toxicity	LC50	13,4 mg/l	96 h	Oncorhynchus mykiss	
	Acute algae toxicity	ErC50	10 mg/l	72 h	Pseudokirchneriella subcapitata	
	Acute crustacea toxicity	EC50	3,0 mg/l	48 h	Daphnia magna	
	Algea toxicity	NOEC	10-30 mg/l	3 d	Pseudokirchneriella subcapitata	
64742-49-0	Low boiling point hydrogen treated naphtha, Naphtha (petroleum, gasoline), hydrotreated light					
	Acute crustacea toxicity	EC50	1-10 mg/l	48 h	Daphnia magna	
	Crustacea toxicity	NOEC	1 mg/l		Daphnia magna	

12.2. Persistence and degradability

No information available.

12.3. Bioaccumulative potential

Swims on the water.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
106-97-8	butane	2,89
74-98-6	propane	2,36

12.4. Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

No information available.

12.6. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Advice on disposal

Do not dispose with household waste.
Do not empty into drains or the aquatic environment.
Have to add a Special treatment in compliance with official regulations in contact with approved waste disposal companies and with authorities in charge.
Arrange about the exact waste code with the local waste disposal expert.

Contaminated packaging

Contaminated packing must be completely emptied and can be re-used following appropriate cleaning.
Do not pierce, cut up or weld unclean container. (Explosion hazard.)

SECTION 14: Transport information

Land transport (ADG)

14.1. UN number:	UN 1950
14.2. UN proper shipping name:	AEROSOLS Propane/butane-mixture
14.3. Transport hazard class(es):	2
14.4. Packing group:	-
Hazard label:	2.1

Special Provisions:	190 327 344 625
Limited quantity:	1 L

Other applicable information (land transport)

HAZCHEM: none allocated

Marine transport (IMDG)

14.1. UN number:	UN 1950
14.2. UN proper shipping name:	AEROSOLS Propane/butane-mixture
14.3. Transport hazard class(es):	2.1
14.4. Packing group:	-
Hazard label:	2.1

Marine pollutant:	-
Special Provisions:	63, 190, 277, 327, 344, 959
Limited quantity:	1000 mL
Excepted quantity:	E0
EmS:	F-D, S-U

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number:	UN 1950
14.2. UN proper shipping name:	AEROSOLS Propane/butane-mixture
14.3. Transport hazard class(es):	2.1
14.4. Packing group:	-
Hazard label:	2.1

Special Provisions:	A145 A167 A802
Limited quantity Passenger:	30 kg G
Passenger LQ:	Y203
Excepted quantity:	E0

IATA-packing instructions - Passenger:	203
IATA-max. quantity - Passenger:	75 kg
IATA-packing instructions - Cargo:	203
IATA-max. quantity - Cargo:	150 kg

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

14.6. Special precautions for user

No information available.

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

No information available.

SECTION 15: Regulatory information

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

EU regulatory information

Restrictions on use (REACH, annex XVII):

Entry 28: butane; Low boiling point hydrogen treated naphtha, Naphtha (petroleum, gasoline), hydrotreated light

Additional information

Contains:
> 30 % hydrocarbons, aliphatic.

National regulatory information

Water contaminating class (D): 2 - water contaminating

Additional information

POISON SCHEDULE: 5
All components of this mixture are listed on or exempted from AICS.

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Abbreviations and acronyms

ADG = Australian Code for the Transport of Dangerous Goods by Road & Rail
IMDG = International Maritime Code for Dangerous Goods
IATA/ICAO = International Air Transport Association / International Civil Aviation Organization
MARPOL = International Convention for the Prevention of Pollution from Ships
IBC-Code = International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk
HAZCHEM = HAZardous CHEMicals

WHS = Work Health and Safety
NOHSC = National Occupational Health and Safety Commission (Australia)
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
REACH = Registration, Evaluation, Authorization and Restriction of Chemicals
CAS = Chemical Abstract Service
EN = European norm
ISO = International Organization for Standardization
DIN = Deutsche Industrie Norm
PBT = Persistent Bioaccumulative and Toxic
vPvB = Very Persistent and very Bio-accumulative

LD = Lethal dose
LC = Lethal concentration
EC = Effect concentration
IC = Median immobilisation concentration or median inhibitory concentration

Relevant H and AUH phrases (number and full text)

H220 Extremely flammable gas.
H222 Extremely flammable aerosol.
H225 Highly flammable liquid and vapour.
H229 Pressurised container: May burst if heated.
H304 May be fatal if swallowed and enters airways.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.
H411 Toxic to aquatic life with long lasting effects.
H412 Harmful to aquatic life with long lasting effects.

Further Information

The information is based on present level of our knowledge. It does not, however, give assurances of product properties and establishes no contract legal rights.
The receiver of our product is singulary responsible for adhering to existing laws and regulations.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)