



According to the Model WHS Regulations and the ADG code

Radiator Oil Cleaner Comp. 2

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

1.1. Product identifier

Radiator Oil Cleaner Comp. 2

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

Use of the substance/mixture

Cleaning agent for radiators

1.3. Details of the supplier of the safety data sheet

Company name: Bluechem Australia

Street: Unit 2, 102-110 NORTH VIEW DRIVE Place: 3020 SUNSHINE, VICTORIA, 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 Emergency 24 HOUR: Neil Cochrane (03) 9311 4456 or 0498 880 115

number:

Further Information

Article Number: 33336-1

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:

Flammable liquid: Flam. Liq. 2 Acute toxicity: Acute Tox. 4 Skin corrosion/irritation: Skin Irrit. 2

Serious eye damage/eye irritation: Eye Irrit. 2A

Specific target organ toxicity - single exposure: STOT SE 3 Specific target organ toxicity - single exposure: STOT SE 3 Specific target organ toxicity - repeated exposure: STOT RE 2

Aspiration hazard: Asp. Tox. 1

Hazardous to the aquatic environment: Aquatic Chronic 3

Hazard Statements:

Highly flammable liquid and vapour.

Harmful if inhaled.
Causes skin irritation.
Causes serious eye irritation.
May cause drowsiness or dizziness.
May cause respiratory irritation.

May cause damage to organs through prolonged or repeated exposure.

May be fatal if swallowed and enters airways. Harmful to aquatic life with long lasting effects.

2.2. Label elements

Labeling according to WHS

Component(s) to be indicated on the label





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xylene 30 -< 60 %

propan-2-ol; isopropyl alcohol; isopropanol 10 -< 30 %

acetone; propan-2-one; propanone 10 -< 30 %

Aliphatic Hydrocarbons, C9-C11, n-Alkanes, Isoalkanes, Cyclenes, < 2% Aromates 10 -< 30 %

phenoles, ethoxylised < 10 %

Signal word: Danger

Pictograms:







flame - exclamation mark - health hazard

Hazard statements

H225 Highly flammable liquid and vapour.

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H332 Harmful if inhaled.

H335 May cause respiratory irritation.

H336 May cause drowsiness or dizziness.

H373 May cause damage to organs through prolonged or repeated exposure.

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P233 Keep container tightly closed.

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P264 Wash hands thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P312 Call a POISON CENTER/doctor if you feel unwell.

P331 Do NOT induce vomiting.

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.

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

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.

P362+P364 Take off contaminated clothing and wash it before reuse.

P405 Store locked up.

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

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





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Chemical characterization

Detergents Dispersants Organic solvents

Hazardous components

CAS No	Chemical name				
	EC No	Index No	REACH No		
	Classification according to WH	S criteria			
1330-20-7	xylene			30 -< 60 %	
	215-535-7		01-2119488216-32		
	Flam. Liq. 3, Acute Tox. 4, Acu H226 H312 H332 H315 H319		rrit. 2A, STOT SE 3, STOT RE 2, Asp. Tox. 1;		
67-63-0	propan-2-ol; isopropyl alcohol;	isopropanol		10 -< 30 %	
	200-661-7		01-2119457558-25		
	Flam. Liq. 2, Eye Irrit. 2A, STOT SE 3; H225 H319 H336				
67-64-1	acetone; propan-2-one; propanone				
	200-662-2		01-2119471330-49		
	Flam. Liq. 2, Eye Irrit. 2A, STOT SE 3; H225 H319 H336 AUH066				
64742-48-9	Hydrocarbons, C9-C11, n-Alkanes, Isoalkanes, Cyclenes, < 2% Aromates				
	919-857-5		01-2119463258-33		
	Flam. Liq. 3, STOT SE 3, Asp.	Tox. 1; H226 H336 H304 A	UH066		
64742-47-8	Hydrocarbons, C9-C11, Isoalkanes, Cycloalcanes, < 2% Aromates				
	920-134-1		01-2119480153-44		
	Flam. Liq. 3, STOT SE 3, Asp. Tox. 1, Aquatic Chronic 2; H226 H336 H304 H411 AUH066				
37205-87-1	phenoles, ethoxylised				
	Acute Tox. 4, Eye Dam. 1, Aquatic Chronic 2; H302 H318 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.





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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 (CO2).

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

HAZCHEM: .3YE

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





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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
	Xylene (o-,m-,p)	80	350	TWA
	Xylene (o-,m-,p)	150	655	STEL
67-61-1	Acetone	500	1185	TWA
67-61-1	Acetone	1000	2375	STEL
67-63-0	Isopropyl alcohol	400	983	TWA
67-63-0	Isopropyl alcohol	500	1230	STEL

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m³	fibres/ml	Category	Origin
67-64-1	Acetone	500	1210		TWA (8 h)	WEL
		1500	3620		STEL (15 min)	WEL
67-63-0	Propan-2-ol	400	999		TWA (8 h)	WEL
		500	1250		STEL (15 min)	WEL
1330-20-7	Xylene: mixed isomers	50	220		TWA (8 h)	WEL
		100	441		STEL (15 min)	WEL

Biological Monitoring Guidance Values (EH40)

CAS No	Substance	Parameter	Value	Test material	Sampling time
1330-20-7	Xylene, o-, m-, p- or mixed isomers	methyl hippuric acid	650 mmol/mol		Post shift

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)





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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: liquid
Colour: red
Odour: aromatic

Test method

Changes in the physical state

Initial boiling point and boiling range: $110 - 116 \, ^{\circ}\text{C}$ Flash point: $-6.5 \, ^{\circ}\text{C}$ Lower explosion limits: $0,6 \, \text{vol.} \, \%$ Upper explosion limits: $12 \, \text{vol.} \, \%$ Ignition temperature: $> 200 \, ^{\circ}\text{C}$ Vapour pressure: $(at \, 20 \, ^{\circ}\text{C})$

Density (at 20 °C): 0.78-0.82 g/cm³
Water solubility: insoluble (at 20 °C)

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





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ATEmix calculated

ATE (inhalative aerosol) 4,795 mg/l

Acute toxicity

CAS No	Chemical name						
	Exposure route	Dose		Species	Source		
1330-20-7	xylene						
	oral	LD50	4300 mg/kg	Rat			
	dermal	LD50	3200 mg/kg	Rabbit			
	inhalative (4 h) vapour	LC50	21,7 mg/l	Rat			
	inhalative aerosol	ATE	1,5 mg/l				
67-63-0	propan-2-ol; isopropyl alcohol; iso	propanol					
	oral	LD50	5280 mg/kg	Rat			
	dermal	LD50	12800 mg/kg	Rabbit			
	inhalative (4 h) vapour	LC50	47,5 mg/l	Rat			
67-64-1	acetone; propan-2-one; propanone						
	oral	LD50	5800 mg/kg	Rat	RTECS		
	dermal	LD50	20000 mg/kg	Rabbit	IUCLID		
	inhalative (4 h) vapour	LC50	76 mg/l	Rat			
64742-48-9	Hydrocarbons, C9-C11, n-Alkanes, Isoalkanes, Cyclenes, < 2% Aromates						
	oral	LD50	>5000 mg/kg	Rat			
	dermal	LD50	>5000 mg/kg	Rabbit			
	inhalative (4 h) aerosol	LC50	>5 mg/l	Rat			
64742-47-8	Hydrocarbons, C9-C11, Isoalkanes, Cycloalcanes, < 2% Aromates						
	oral	LD50	>5000 mg/kg	Rat			
	dermal	LD50	>5000 mg/kg	Rabbit			
	inhalative (4 h) aerosol	LC50	>5 mg/l	Rat			
37205-87-1	phenoles, ethoxylised						
	oral	LD50	2000 mg/kg	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





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CAS No	Chemical name					
	Aquatic toxicity	Dose		[h] [d]	Species	Source
1330-20-7	xylene					
	Acute fish toxicity	LC50	26,7 mg/l	96 h	Pimephales promelas	
67-63-0	propan-2-ol; isopropyl alcoho	; isopropan	ol			
	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	
67-64-1	acetone; propan-2-one; propa	anone				
	Acute fish toxicity	LC50	5540 mg/l	96 h	Onchorhynchus mykiss	
	Acute crustacea toxicity	EC50	6100 mg/l	48 h	Daphnia magna	
64742-48-9	Hydrocarbons, C9-C11, n-Alk	anes, Isoall	kanes, Cyclenes,	< 2% Ar	romates	
	Acute fish toxicity	LC50	>1000 mg/l	96 h	Oncorhynchus mykiss	
	Acute algae toxicity	ErC50	>1000 mg/l	72 h	Pseudokirchneriella subcapitata	
	Acute crustacea toxicity	EC50	1000 mg/l	48 h	Daphnia magna	
64742-47-8	Hydrocarbons, C9-C11, Isoal	kanes, Cycl	oalcanes, < 2% A	romates	3	
	Acute fish toxicity	LC50	>1000 mg/l	96 h	Oncorhynchus mykiss	
	Acute algae toxicity	ErC50	>1000 mg/l	72 h	Pseudokirchneriella subcapitata	
	Acute crustacea toxicity	EC50	1000 mg/l	48 h	Daphnia magna	
37205-87-1	phenoles, ethoxylised					
	Acute fish toxicity	LC50	1-10 mg/l	96 h	Brachydanio rerio	
	Acute algae toxicity	ErC50	1-10 mg/l	72 h	Scenedesmus subspicatus	

12.2. Persistence and degradability

No information available.

12.3. Bioaccumulative potential

Swims on the water.

Low potential of bio-accumulation.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
67-64-1	acetone; propan-2-one; propanone	-0,24

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.





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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 1993

14.2. UN proper shipping name: FLAMMABLE LIQUID, N.O.S.

14.3. Transport hazard class(es):314.4. Packing group:IIHazard label:3



Special Provisions: 274 Limited quantity: 1 L

Other applicable information (land transport)

HAZCHEM: .3YE

Marine transport (IMDG)

14.1. UN number: UN 1993

14.2. UN proper shipping name: FLAMMABLE LIQUID, N.O.S.

14.3. Transport hazard class(es):314.4. Packing group:IIHazard label:3



Marine pollutant:

Special Provisions: 274
Limited quantity: 1 L
Excepted quantity: E2
EmS: F-E, S-E

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number: UN 1993

14.2. UN proper shipping name: FLAMMABLE LIQUID, N.O.S.

14.3. Transport hazard class(es):314.4. Packing group:IIHazard label:3



Special Provisions:

Limited quantity Passenger:

Passenger LQ:

Excepted quantity:

A3

1 L

Y341

Excepted quantity:

E2

IATA-packing instructions - Passenger: 353





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IATA-max. quantity - Passenger: 5 L
IATA-packing instructions - Cargo: 364
IATA-max. quantity - Cargo: 60 L

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

Authorisations (REACH, annex XIV):

Substances of very high concern, SVHC (REACH, article 59):

phenoles, ethoxylised

Restrictions on use (REACH, annex XVII):

Entry 28: Hydrocarbons, C9-C11, n-Alkanes, Isoalkanes, Cyclenes, < 2% Aromates

Entry 46a: phenoles, ethoxylised

Additional information

Contains:

< 5 % phenoles, ethoxylised

15 - 30 % hydrocarbons, aliphatic.

> 30 % hydrocarbons, aromatic.

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





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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)

H225	Highly	flammable	liquid	and	vapour.

- H226 Flammable liquid and vapour.
- H302 Harmful if swallowed.
- H304 May be fatal if swallowed and enters airways.
- H312 Harmful in contact with skin.
- H315 Causes skin irritation.
- H318 Causes serious eye damage.
- H319 Causes serious eye irritation.
- H332 Harmful if inhaled.
- H335 May cause respiratory irritation.
- H336 May cause drowsiness or dizziness.
- H373 May cause damage to organs through prolonged or repeated exposure.
- H411 Toxic to aquatic life with long lasting effects.
- H412 Harmful to aquatic life with long lasting effects.

AUH066 Repeated exposure may cause skin dryness or cracking.

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.)