1. Identification of the substance/ mixture and of the company/undertaking

1.1 Product identifier

Trade name: *Wave 2.0 Urinal Screen*

1.2 Relevant identified uses of the substance or mixture and uses advised against on Application of the substance/ mixture:
Consumer use, for urinal deodorizing.

1.3 Details of the supplier of the safety data sheet

- **NAME: CHEMSOLVE PTY LTD.**
- **ADDRESS:** 3 Warin Avenue Pemulwuy NSW 2145 Australia
- **TEL:** +61 435 313 535
- **EMAIL**: dhaval@chemsolve.com.au
- **POISION INFORMATION CONTACT** – 13 11 26

2. Hazards identification

2.1 Classification of the substance or mixture

2.1.1 Classification according to regulation (EC) 1272/2008:

2.1.2 Additional information: For full text of Hazard- and EU Hazard-statements: see SECTION 16**.**

2.2 Label elements

Labeling according to Regulation (EC) No 1272/2008:

The product is labelled according to CLP Regulation.

Hazard pictograms:

GHS07 GHS09

Signal word: Warning

Hazard-determining components of labelling: 2,4-dimethylcyclohex-3-ene-1-carbaldehyde.

Hazard statements:

H317	May cause an allergic skin reaction
H411	Toxic to aquatic life with long lasting effects

Precautionary statement:

P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P103	Read carefully and follow all instructions.
P273	Avoid release to the environment.
P280	Wear protective gloves.
P302+P352	IF ON SKIN: Wash with plenty of soap and water.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P391	Collect spillage.

- P501 Dispose of contents/container in accordance with local/regional/national/international regulation.

Supplemental label elements: Contains D-Limonene; Geraniol.

2.3 Other hazards

None ingredients (≥0.1%) meets the criteria for PBT/vPvB in accordance with Annex XIII.

Galaxolide (CAS: 1222-05-5) identified as having endocrine disrupting properties according to Regulation (EU) 2017/2100.

3. Composition/information on

3.1 Substance

Not applicable

3.2 Mixtures

Description of the mixture: Wave 2.0 Urinal Screen ((Lemon, Apple, Ocean Mist, Cucumber Melon))

Ingredients:						
Substance	**CAS No.**	**Index No.**	**EC No.**	**w/w, %**	**CLP Classification**	**SCL/M-factor/ATE**
Ethylene vinyl acetate (EVA)	24937-78-8	-	-	79.5	None	-
Undecan-4-olide	104-67-6	-	203-225-4	4-5	Aquatic Chronic 3, H412	-
2-tert-butylcyclohexyl acetate	88-41-5	-	201-828-7	2-3	Aquatic Chronic 2, H411	-
Fructone	6413-10-1	-	229-114-0	2-3	None	-
Dihydromyrcenol	18479-58-8	-	242-362-4	2-3	Skin Irrit. 2, H315 Eye Irrit. 2, H319	-
Galaxolide	1222-05-5	603-212-00-7	214-946-9	1-2	Aquatic Acute 1, H400 Aquatic Chronic 1, H410	M=1 M(Chronic)=1
2,4-dimethylcyclohex-3- ene-1-carbaldehyde	68039-49-6	-	268-264-1	1-2	Skin Irrit. 2, H315 Skin Sens. 1B, H317 Eye Irrit. 2, H319 Aquatic Chronic 2, H411	-
Benzyl benzoate	120-51-4	607-085-00-9	204-402-9	1-2	Acute Tox. 4, H302 Aquatic Acute 1, H400 Aquatic Chronic 2, H411	ATE (oral)=1900 mg/kg M=1
D-Limonene	5989-27-5	601-029-00-7	227-813-5	0.2-1	Flam. Liq. 3, H226 Asp. Tox. 1, H304 Skin Irrit. 2, H315 Skin Sens. 1B, H317 Aquatic Acute 1, H400 Aquatic Chronic 3, H412	Skin Irrit. 2, H315: C≥20% M=1
Pigment	-	-	-	0.5	-	-
Geraniol	106-24-1	603-241-00-5	203-377-1	0.02-0.2	Skin Irrit. 2, H315 Skin Sens. 1, H317 Eye Dam. 1, H318	-
Additional information: Full text of H-statements, see SECTION 16.						

4. First aid measures

4.1 Description of first aid measures

General advice:

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

After inhalation:

Supply with fresh air.

Get medical attention if you feel unwell.

After skin contact:

Wash with plenty of soap and water.

If skin irritation or rash occurs: Get medical advice/attention.

After eye contact:

Rinse cautiously with water for several minutes.

If eye irritation occurs: Get medical advice/attention.

After swallowing:

Rinse mouth.

Call a POISON CENTER/doctor if you feel unwell.

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

May cause an allergic skin reaction.

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

Treat according to symptom, there is not known specific medicine.

5. Fire-fighting

5.1 Extinguishing media

Suitable extinguishing agents: Use CO_2, chemical powder, water spray or alcohol resistant foam to extinguish.

Unsuitable extinguishing media: Water with full jet.

5.2 Special hazards arising from the substance or mixture:

May produce allergic / irritant vapor in air under fire.

5.3 Advice for firefighters Protective equipment: Wear an approved positive pressure self-contained breathing apparatus (Comply with EN 133).

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

6.1.1 For non-emergency personnel Protective equipment: Protective gloves and respiration protection.

Emergency procedures:

Ensure well ventilation.

Avoid breathing vapor.

Avoid contact with skin and eyes.

Avoid release to the environment.

6.1.2 For emergency responders Personal protective equipment: Protective gloves and respiration protection.

6.2 Environmental precautions:

Prevent further leakage or spillage if safe to do so.

Prevent spillage from entering drains, sewer, basement or confined areas.

If the spillage contaminates rivers, lakes or drains inform respective authorities.

6.3 Methods and material for containment and cleaning up:

Sweep up without creating dust and shovel into suitable containers for disposal. Ensure good ventilation.

Dispose contaminated material as waste according to section 13.

6.4 Reference to other sections:

See section 7 for information on safe handing.

See section 8 for information on personal protection equipment. See section 13 for disposal in formation.

7. Handling and Storage

7.1 Precautions for safe handling:

Read carefully and follow all instructions.

Ensure adequate ventilation at workplace.

Wear protective gloves.

Avoid breathing vapor.

Avoid contact with eyes and skin. Avoid release to the environment.

Information about fire and explosion protection:

Normal measures for preventive fire protection.

7.2 Conditions for safe storage, including any non-compatibility

Requirements to be met by storerooms and receptacles:

Store in a cool and well-ventilated place.

Information about storage in one common storage facility:

Keep out of reach of children.

Further information about storage conditions:

Store locked up.

Storage class: 13.

7.3 Specific end use(s): See section 1.2.

8. Exposure controls/personal protection

8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace:

Country	*Limit value - Eight hours*	*Limit value - Short term*
5989-27-5 D-Limonene		
Finland	*25ppm;140mg/m^3*	*50ppm;280mg/m^3 15 minutes average value*
Germany (AGS)	*5ppm;28mg/m^3*	*20ppm;110mg/m^3 15 minutes reference period*
Germany (DFG)	*5ppm;28mg/m^3*	*20ppm;112mg/m^3 15 minutes average value*

- **DNELs:**

DNEL type		**DNEL worker value**	**DNEL consumer value**
1222-05-5 Galaxolide			
Systemic Effects	Long-term, inhalation exposure	22 mg/m³	6.5 mg/m³
	Long-term, dermal exposure	60 mg/kg bw/day	36 mg/kg bw/day
	Long-term, oral exposure	-	3.8 mg/kg bw/day
120-51-4 Benzyl benzoate			
Systemic effects	Long-term, inhalation exposure	5.1 mg/m³	1.25 mg/m³
	Acute /short term, inhalation exposure	102 mg/m³	-
	Long-term, dermal exposure	2.6 mg/kg bw/day	1.3 mg/kg bw/day
	Long-term, oral exposure	-	400 µg/kg bw/day
	Acute /short term, oral exposure	-	78 mg/kg bw/day
5989-27-5 D-Limonene			
Systemic effects	Long-term, inhalation exposure	66.7 mg/m³	16.6 mg/m³
	Long-term, dermal exposure	9.5 mg/kg bw/day	4.8 mg/kg bw/day
	Long-term, oral exposure	-	4.8 mg/kg bw/day

- **PNECs:**

1222-05-5	Galaxolide
Freshwater	4.4 µg/L
Intermittent releases (freshwater)	30 µg/L
Marine water	440 ng/L
Sewage treatment plant (STP)	1 mg/L
Sediment (freshwater)	2 mg/kg sediment dw
Sediment (marine water)	394 µg/kg sediment dw
120-51-4 Benzyl benzoate	
Freshwater	16.8 µg/L
Marine water	1.68 µg/L
Sewage treatment plant (STP)	100 mg/L
Sediment (freshwater)	10.66 mg/kg sediment dw
Sediment (marine water)	1.07 mg/kg sediment dw
5989-27-5 D-Limonene	
Freshwater	14 µg/L

Marine water	1.4 µg/L
Sewage treatment plant (STP)	1.8 mg/L
Sediment (freshwater)	3.85 mg/kg sediment dw
Sediment (marine water)	385 µg/kg sediment dw

Additional information:
The lists valid during the marking were used as a basis.

8.2 Exposure controls

Based on the composition shown in section 3, the following measures are suggested for occupational safety measure.

Appropriate engineering controls:
Handle in accordance with good industrial hygiene and safety practice.
Wash hands and face before breaks and at the end of work.
Take off contaminated clothing and wash it before reuse.
See section 7 for information about design of technical facilities.

Personal protective equipment

Eye and face protection:

Safety glasses
Protective goggles with side-shields.

Skin protection

Hand protection:

Protective gloves
Gloves made from butyl rubber Neoprene™ rubber, nitrile rubber (thickness> 0.3mm; breakthrough times up to 480 minutes).

Other skin protection:
Gauntlets, boots, bodysuit are recommended.

Respiration protection:
Use positive pressure breathing mask if concentrations in air could exceed occupational exposure standard.

Thermal hazards:
The gauntlets, boots, bodysuit and other personal protective equipment must be flame retardant and no heat-conducting.

Environmental exposure controls:
Control measures must be made in accordance with Community environmental protection legislation.

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	Solid
Color	Yellow (Lemon), Green (Apple), Blue (Ocean Mist), Pink (Cucumber Melon)
Odor & Odor threshold	(Lemon, Apple, Ocean Mist, Cucumber Melon)
Melting point/freezing point (or softening point/range)	Not determined
Boiling point or initial boiling point and boiling range	Not determined
Flammability	Not flammable solid.
Lower and upper explosion limit	Not determined
Flash point	Not applicable
Auto-ignition temperature	Not applicable
Decomposition temperature	Not determined

pH	Not determined, mixture is insoluble in water.

9.2 Other information

9.2.1 Information with regard to physical hazard classes: Not applicable

9.2.2 Other safety characteristics – Not applicable

10. Stability and reactivity

10.1 Reactivity:
The product is not-reactive under normal conditions of use, storage and transport.

10.2 Chemical stability:
Under storage at normal ambient temperatures, the product is stable.

10.3 Possibility of hazardous reactions:
No known hazardous reaction.

10.4 Conditions to avoid:
High temperature and flame.

10.5 Incompatible materials:
Strong bases, strong oxidizing agents.

10.6 Hazardous decomposition products:
Does not decompose when used for intended uses.

11. Toxicological Information

11.1 Information on toxicological effects

Acute toxicity: Based on available data, the classification criteria are not met.

LD50/LC50 values relevant for classification:		
120-51-4 Benzyl benzoate		
Rat	LD50-oral LD50-skin	1900 mg/kg 4mL/kg
Mouse	LD50-oral	1400uL/kg
Rabbit	LD50-oral LD50-skin	1680mg/kg 4000mg/kg
5989-27-5 D-Limonene		
Rabbit	LD50-skin	> 5000mg/kg
Rat	LD50-oral	4400mg /kg
Mouse	LD50-oral	5600mg/kg
Remark: All the above data are from literature.		

- **Skin corrosion/irritation:** Based on available data, the classification criteria are not met.
- **Serious eyes damage/ irritation:** Based on available data, the classification criteria are not met.
- **Respiratory or skin sensitization:** May cause an allergic skin reaction.
- **Germ cell mutagenicity:** Based on available data, the classification criteria are not met.
- **Carcinogenicity:** Based on available data, the classification criteria are not met.
- **Reproductive toxicity:** Based on available data, the classification criteria are not met.
- **Summary of evaluation of the CMR properties:** Not classified as CMR product.
- **STOT-single exposure:** Based on available data, the classification criteria are not met.

- **STOT-repeated exposure:** Based on available data, the classification criteria are not met.
- **Aspiration hazard:** Based on available data, the classification criteria are not met.
- **Information on other hazards**
- **Endocrine disrupting properties:** Galaxolide (CAS: 1222-05-5) is considered to have endocrine-disrupting properties with respect to humans as it meets the criteria set out in section A of Regulation (EU) No 2017/2100. Galaxolide shows weak estrogenic.
- **Other information:** No known other relevant information on adverse health effects.

12. Ecological

12.1 Toxicity:

LC50/EC50/NOEC values relevant for classification:	
1222-05-5 Galaxolide	
Short–term toxicity to fish	LC50 (4 days) 950 µg/L
Long–term toxicity to fish	NOEC (36 days) 68 µg/L LC50 (36 days) 140 µg/L
Short–term toxicity to aquatic invertebrates	EC50 (48
Long–term toxicity to aquatic invertebrates	NOEC (21
Toxicity to aquatic algae and cyanobacteria	EC50 (72 h) 723 - 854 µg/L NOEC (72 h) 201 µg/L
120-51-4 Benzyl benzoate	
Long–term toxicity to aquatic invertebrates	NOEC (21 days) 258 - 970 µg/L
Toxicity to aquatic algae and cyanobacteria	EC50 (72 h) 475 µg/L NOEC (72 h) 247 µg/L
5989-27-5 D-Limonene	
Short–term toxicity to fish	LC50 (4 days) 460 - 720 µg/L EC50 (4 days) 688 - 702 µg/L
Long–term toxicity to fish	NOEC (28 days) 80 µg/L
Short–term toxicity to aquatic invertebrates	EC50 (48 h) 307 - 510 µg/L EC50 (24 h) 840 µg/L
Long–term toxicity to aquatic invertebrates	NOEC (21 days) 50 - 80 µg/L EC50 (21 days) 188 µg/L
Toxicity to aquatic algae and cyanobacteria	EC50 (72 h) 214 - 320 µg/L NOEC (48 h) 90 µg/L

1222-05-5	Galaxolide	COD= 3 g O_2/g test material; Under test conditions no biodegradation observed
120-51-4	Benzyl benzoate	Readily biodegradable in water
5989-27-5	D-Limonene	Readily biodegradable in water

1222-05-5	Galaxolide	Log Pow = 5.3 at 25 °C
120-51-4	Benzyl benzoate	Log Pow = 3.97 at 25 °C
5989-27-5	D-Limonene	Log Pow =4.38 at 37 °C

1222-05-5	Galaxolide	Log Koc= 4.39 at 20 °C
5989-27-5	D-Limonene	Log Koc=3.38

13. Disposal consideration

13.1 Waste treatment methods

Recommendation: Must not be disposed together with household garbage.

13.2 Un-cleaned packaging

Recommendation: Dispose of contents/container in according to the local/regional/national/ international regulation.

14. Transport Information

· **14.1 UN-Number** **ADR/RID/ADN, IMO/IMDG, IATA-DGR**	UN3077
· **14.2 UN proper shipping name** **ADR/RID/ADN, IMO/IMDG, IATA-DGR**	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
· **14.3 Transport hazard class (es)** **ADR/RID/ADN, IMO/IMDG, IATA-DGR** **Class** **Label**	 9 Miscellaneous dangerous substances and articles. 9
· **14.4 Packing group** **ADR/RID/ADN, IMO/IMDG, IATA-DGR**	III
· **14.5 Marine pollution**	No
· **14.6 Special precautions for user** · **Danger code (Kemler)** · **EMS number**	Warning: Miscellaneous dangerous substances and articles 90 F-A, S-F
· **14.7 Transport in bulkaccording to Annex II of MARPOL 73/78 and the IBC Code**	IBC08

15. Regulatory Information

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

- **MAK (German Maximum Workplace Concentration):** None of the ingredients is listed.
- **Directive 2012/18/EU**
- **Named dangerous substances-ANNEX I:** None of the ingredients is listed.
- **Seveso category:** E2 Hazardous to the Aquatic Environment.
- **Qualifying quantity (tonnes) for the application of lower-tier requirements:** 200 ton(net).
- **Qualifying quantity (tonnes) for the application of upper-tier requirements:** 500 ton(net).
- **National regulations.**
- ***Water hazard class:*** *WGK2 (German Regulation) (self-assessment): Hazard to waters.*
- ***Other regulations, limitations and prohibitive regulations***
- **SVHC Candidate list of REACH Regulation Annex XIV Authorization:** None of the ingredients is listed.
- **REACH Regulation Annex XVII Restriction:** None of the ingredients is listed.
- **REACH Regulation Annex XIV Authorization List:** None of the ingredients is listed.

15.2 Chemical safety assessment: A Chemical Safe Assessment has not been carried out.

16. Other Information

16.1 Indication of changes:

None.

16.2 Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road).
IMDG: International Maritime Code for Dangerous Goods. IATA: International Air Transport Association.
CAS: Chemical Abstracts Service (division of the American Chemical Society) DNEL: Derived No-Effect Level (REACH)
PNEC: Predicted No-Effect Concentration (REACH)
PBT: Persistent, Bio accumulative and Toxic vPvB: very persistent and very bio accumulative SVHC: Substance of Very High Concern
LD50: Lethal dose, 50 percent
LC50: Lethal concentration, 50 percent
EC50: Concentration of maximal effect, 50 percent NOEC: No observed effect concentration
Flam. Liq. 3: Flammable liquids, hazard category 3
Acute Tox. 4: Acute toxicity, hazard category 4 Asp. Tox. 1: Aspiration toxicity, hazard category1
Skin Irrit.2: Skin corrosion/irritation, hazard category 2 Skin Sens. 1: Skin sensitization, hazard category 1
Skin Sens. 1B: Respiratory or skin sensitization, hazard category 1B Eye Dam. 1: Eye damage/irritation, hazard category 1
Eye Irrit. 2: Eye damage/irritation, hazard category 2
Aquatic Acute 1: Short-term (acute) aquatic hazard, hazard category 1
Aquatic Chronic 1: Long-term (chronic) aquatic hazard, hazard category 1 Aquatic Chronic 2: Long-term (chronic) aquatic hazard, hazard category 2 Aquatic Chronic 3: Long-term (chronic) aquatic hazard, hazard category 3

16.3 Key literature references and sources for data:

https://echa.europa.eu/

https://chem.nlm.nih.gov/
https://www.osha.gov/
http://www.unece.org/

http://www.imo.org/
https://www.dguv.de/
https://epa.govt.nz/
http://www.ilo.org/
https://www.phmsa.dot.gov/

16.4 Classification for mixtures and used evaluation method according to regulation (EC) 1207/2008 [CLP]:

See SECTION 2.1 (classification).

16.5 Relevant H- and EUH-phrases (number and full text):

H226 Flammable liquid and
vapour H302

Harmful if swallowed
H304 May be fatal if swallowed and enters airways
H315 Causes skin irritation
H317 May cause an allergic skin reaction
H318 Causes serious eye damage
H319 Causes serious eye irritation
H400 Very toxic to aquatic life
H410 Very toxic to aquatic life with long lasting effects
H411 Toxic to aquatic life with long lasting effects
H412 Harmful to aquatic life with long lasting effects

16.6 Training advice:

Workers must be educated and trained so they can read SDS and understand the hazards, and know how to work safely with hazardous products.

16.7 Further information:

The contents and format of this SDS are in accordance with Regulation (EC) No 1907/2006, its amendment Regulation (EU) No 2020/878 and (EC) No 1272/2008.

DISCLAIMER OF LIABILITY:

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** End of safety data sheet