

Product name : Spring Valley Enviro 500 Disinfectant Detergent
Version : 5.00

Page: 1/5
Date of issue : 01/06/2024
Date of previous issue : 01/06/2023

1. Identification of the substance/preparation and of the company

Product name : Spring Valley Enviro 500 Disinfectant / Detergent
Supplier : Angelchem (Pty) Ltd
7 Freight City, 35 Innes Rd
Jet Park
Telephone number : 011 740 7883
Fax number : 086 527 9485
Emergency telephone number : 082 462 5144

2. Composition/information on ingredients

Chemical characterization : Aqueous mixture.

Ingredient name	CAS number	%	EC number	Classification
2-butoxyethanol	111-76-2	5 - 10	203-905-0	Xn; R20/21/22 Xi; R36/38
triposphoric acid, pentasodium salt	7758-29-4	<5	231-838-7	Xi; R36/38
dodecylbenzenesulfonic acid	27176-87-0	<5	248-289-4	Xn; R22
Ethanol	64-17-5	<5	200-578-6	F; R11
Potassium hydroxide	1310-58-3	<5	215-181-3	Xn; R22 C; R35
Chlorocresol	59-50-7	<1	200-431-6	Xn; R21/22 Xi; R41 R43 N; R50
Methanol	67-56-1	<1	200-659-6	F; R11 T; R23/24/25, R39/23/24/25
See section 16 for the full text of the R-phrases declared above				

Occupational exposure limits, if available, are listed in section 8.

3. Hazards identification

The preparation is classified as dangerous according to Directive 1999/45/EC and its amendments.

Classification : Xi; R36/38
Physical/chemical hazards : No known significant effects or critical hazards.
Human health hazards : Irritating to eyes and skin.
Environmental hazards : No known significant effects or critical hazards.

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

4. First aid measures

Inhalation : Move exposed person to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if symptoms occur. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Product name : Spring Valley Enviro 500 Disinfectant Detergent
Version : 5.00

Date of issue : 01/06/2024
Date of previous issue : 01/06/2023

Ingestion	Wash out mouth with water. Remove dentures if any. Move exposed person to fresh air. Keep person warm and at rest. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if symptoms occur. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
Skin contact	: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Eye contact	: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention.

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

5. Fire-fighting measures

Extinguishing media

Suitable Not suitable	: Use an extinguishing agent suitable for the surrounding fire. : None known.
Special exposure hazards	: No specific hazard.
Special protective equipment for fire-fighters	: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6. Accidental release measures

Personal precautions	: Immediately contact emergency personnel. Keep unnecessary personnel away. Use suitable protective equipment.
Environmental precautions	: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.
Methods for cleaning up	: If emergency personnel are unavailable, contain spilled material. For small spills, add absorbent (soil may be used in the absence of other suitable materials), scoop up material and place in a sealable, liquid-proof container for disposal. For large spills, dike spilled material or otherwise contain material to ensure runoff does not reach a waterway. Place spilled material in an appropriate container for disposal.

7. Handling and storage

Handling	: Avoid contact with eyes, skin and clothing. Wash thoroughly after handling.
Storage	: Keep container tightly closed. Keep container in a cool, well-ventilated area.
Packaging materials	: Use original container.
Recommended	

8. Exposure controls/personal protection

<u>Ingredient name</u>	<u>Occupational exposure limits</u>
2-butoxyethanol	EU OEL (Europe, 6/2000). Skin STEL: 246 mg/m ³ 15 minute/minutes. Form: All forms STEL: 50 ppm 15 minute/minutes. Form: All forms TWA: 98 mg/m ³ 8 hour/hours. Form: All forms TWA: 20 ppm 8 hour/hours. Form: All forms
Ethanol	ACGIH (United States, 1996). TWA: 1000 ppm ACGIH TLV (United States, 1/2004). Notes: 1996 Adoption Refers to Appendix A -- Carcinogens. TWA: 1880 mg/m ³ 8 hour/hours. Form: All forms TWA: 1000 ppm 8 hour/hours. Form: All forms
Potassium hydroxide	ACGIH (United States). CEIL: 2 mg/m ³ CEIL: 2 mg/m ³
Methanol	ACGIH TLV (United States, 1/2004). CEIL: 2 mg/m ³ Form: All forms EU OEL (Europe, 6/2000). Notes: Indicative TWA: 260 mg/m ³ 8 hour/hours. Form: All forms TWA: 200 ppm 8 hour/hours. Form: All forms

Occupational exposure controls	: Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective occupational exposure limits.
	:

Product name : Spring Valley Enviro 500 Disinfectant Detergent
Version : 5.00

Date of issue : 01/06/2024
Date of previous issue : 01/06/2023

Respiratory protection	Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
Hand protection	: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
Eye protection	: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts.
Skin protection	: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

9. Physical and chemical properties

General information

Appearance	: Liquid. (Clear sparkling liquid.)
Physical state Color	: Green. (Light.)
Odor threshold	: The lowest known value is 4 ppm (dodecylbenzenesulfonic acid) Weighted average: 84.24 ppm

Important health, safety and environmental information

pH	: 8 to 9 [Basic.]
Boiling point	: The lowest known value is 78.35°C (173°F) (Ethanol). Weighted average: 141.22°C (286.2°F)
Melting point	: May start to solidify at 0°C (32°F) based on data for: water. Weighted average: -55.46°C (-67.8°F)
Vapor pressure	: The highest known value is 28.3 kPa (212 mm Hg) (at 20°C) (2-butoxyethanol). Weighted average: 21.1 kPa (158.26 mm Hg) (at 20°C)
Relative density Solubility	: 1.045 to 1.065 g/cm ³ (20°C / 68°F)
Relative density Solubility	: Easily soluble in cold water, hot water
Octanol/water partition coefficient	: The product is more soluble in water.
Vapor density	: The highest known value is 4.07 (Air = 1) (2-butoxyethanol). Weighted average: 3.3 (Air = 1)
Evaporation rate (butyl acetate = 1)	: The highest known value is 1.7 (Ethanol) Weighted average: 0.58 compared with Butyl acetate.

10. Stability and reactivity

Stability Conditions to avoid	: The product is stable.
Materials to avoid	: None identified.
Hazardous decomposition products	: Reactive or incompatible with the following materials: organic materials and acids.
	: No specific data.

11. Toxicological information

Potential acute health effects

Inhalation	: No known significant effects or critical hazards.
Ingestion	: No known significant effects or critical hazards.
Skin contact	: Irritating to skin.
Eye contact	: Irritating to eyes.

Acute toxicity

<u>Product/ingredient name</u>	<u>Test</u>	<u>Result</u>	<u>Route</u>	<u>Species</u>
2-butoxyethanol	LD50	470 mg/kg	Oral Oral	Rat
	LD50	300 mg/kg	Oral	Rabbit
	LD50	1200 mg/kg	Dermal	Guinea pig
	LD50	220 mg/kg		Rabbit
triphosphoric acid, pentasodium salt	LD50	3120 mg/kg	Oral Oral	Rat
	LD50	3100 mg/kg	Dermal	Mouse
	LD50	>4640 mg/kg	Oral	Rabbit
dodecylbenzenesulfonic acid	LD50	650 mg/kg		Rat
Ethanol	LD50	7060 mg/kg	Oral	Rat
	LD50	6300 mg/kg	Oral	Rabbit
	LD50	3450 mg/kg	Oral	Mouse
	LDLo	1400 mg/kg	Oral	human
	LDLo	5500 mg/kg	Oral	Dog Rat
Potassium hydroxide	LC50	20000 mg/m ³ (10 hour/hours)	Inhalation	Rat
	LD50	273 mg/kg	Oral	
Chlorocresol	LD50	1830 mg/kg	Oral	Rat

Product name : Spring Valley Enviro 500 Disinfectant Detergent
Version : 5.00

Date of issue : 01/06/2024
Date of previous issue : 01/06/2023

Methanol	LD50	600 mg/kg	Oral	Mouse
	LD50	5628 mg/kg	Oral	Rat
	LD50	14200 mg/kg	Oral	Rabbit
	LD50	7300 mg/kg	Oral	Mouse
	LD50	15800 mg/kg	Dermal	Rabbit
	LDLo	143 mg/kg	Oral	human
	LDLo	428 mg/kg	Oral	human
	LDLo	6422 mg/kg	Oral	man
	LDLo	393 mg/kg	Dermal	Monkey.
LC50	64000 mg/l (4 hour/hours)	Inhalation	Rat	

Potential chronic health effects

Carcinogenicity : No known significant effects or critical hazards. No

Mutagenicity : known significant effects or critical hazards. No

Reproductive toxicity : known significant effects or critical hazards.

Over-exposure signs/symptoms

Inhalation : No specific data.

Ingestion : No specific data.

Skin : No specific data.

Target organs : Contains material which causes damage to the following organs: blood, kidneys, lungs, the nervous system, the reproductive system, liver, lymphatic system, upper respiratory tract, skin, central nervous system (CNS), eye, lens or cornea, stomach

12. Ecological information

Ecotoxicity data

<u>Ingredient name</u>	<u>Species</u>	<u>Period</u>	<u>Result</u>
2-butoxyethanol	Lepomis macrochirus (LC50)	96 hour/hours	1490 mg/l
	triphosphoric acid, pentasodium salt	Trout (LC50)	>100 mg/l
dodecylbenzenesulfonic acid	daphnia (LC50)	48 hour/hours	>100 mg/l
	Trout (LC50)	24 hour/hours	11 mg/l
Ethanol	Bluegill (LC50)	24 hour/hours	8.2 mg/l
	Daphnia magna (EC50) Daphnia magna (EC50) Daphnia magna (EC50) Pimephales promelas (LC50)	48 hour/hours	2 mg/l
Chlorocresol	Daphnia magna (LC50)	48 hour/hours	9.3 mg/l
	Oncorhynchus mykiss (LC50)	96 hour/hours	>100 mg/l
Methanol	Daphnia magna (EC50) Daphnia magna (EC50)	96 hour/hours	13000 mg/l
	Scenedesmus subspicatus (EC50)	48 hour/hours	1.5 mg/l
Methanol	Oncorhynchus mykiss (LC50) Daphnia pulex (LC50)	48 hour/hours	>10 mg/l
	Pimephales promelas (LC50)	96 hour/hours	0.917 mg/l
Methanol	Daphnia magna (EC50)	96 hour/hours	3.1 mg/l
	Oncorhynchus mykiss (EC50)	96 hour/hours	4.05 mg/l
Methanol	Lepomis macrochirus (EC50)	48 hour/hours	>10000 mg/l
	Pimephales promelas (LC50)	48 hour/hours	13200 mg/l
Methanol	Daphnia magna (LC50) Lepomis macrochirus (LC50)	48 hour/hours	16000 mg/l
		96 hour/hours	>100 mg/l
		96 hour/hours	>100 mg/l
			15400 mg/l

Other ecological information

Persistence/degradability

<u>Ingredient name</u>	<u>BOD5</u>	<u>COD</u>	<u>ThOD</u>
2-butoxyethanol	>1 g O2/g [10 d]	-	-
dodecylbenzenesulfonic acid	<1 g O2/g	-	-
Ethanol	>1 g O2/g	2 g O2/g	-
Methanol	1.12 g O2/g	-	-

<u>Ingredient name</u>	<u>Aquatic half-life</u>	<u>Photolysis</u>	<u>Biodegradability</u>
2-butoxyethanol	-	1 day/days.	Readily
dodecylbenzenesulfonic acid	15 day/days	-	-
Ethanol	6 day/days	4 day/days.	Readily
Chlorocresol	-	1.1 day/days.	Readily
Methanol	1 to 7 day/days	3 to 29.7 day/days.	Readily

Bioaccumulative potential

<u>Ingredient name</u>	<u>LogPow</u>	<u>BCF</u>	<u>Potential</u>
------------------------	---------------	------------	------------------

2-butoxyethanol	-	2.5	low
Potassium hydroxide	0.65	-	low
Chlorocresol	3.1	0.77	high
Methanol	-	0.2	low

Other adverse effects : No known significant effects or critical hazards.

13. Disposal considerations

Methods of disposal : Non-hazardous waste
Waste must be disposed to a landfill permitted in terms of the Department of Water Affairs and Forestry's minimum requirements for waste disposal to landfill, and the minimum requirements for the handling, classification and disposal of hazardous waste.

14. Transport information

Regulatory information	UN number	Proper shipping name	Class	Packing group	Label	Additional information
ADR / SANS 10228 Class	Not regulated.	-	-	-		-
IMDG Class	Not regulated.	-	-	-		-
IATA Class	Not regulated.	-	-	-		-

15. Regulatory information

SANS 10265 / EU Regulations

Hazard symbol/symbols :



Irritant

Risk phrases : R36/38- Irritating to eyes and skin.

Safety phrases : S36/37- Wear suitable protective clothing and gloves.

Product use : Classification and labeling have been performed according to EU Directives 67/548/EEC and 1999/45/EC (including amendments) and the intended use.
- Industrial applications.

16. Other information

Full text of R-phrases referred to in sections 2 and 3 - Europe : R11- Highly flammable.
R23/24/25- Toxic by inhalation, in contact with skin and if swallowed.
R39/23/24/25- Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.
R20/21/22- Harmful by inhalation, in contact with skin and if swallowed.
R21/22- Harmful in contact with skin and if swallowed.
R22- Harmful if swallowed.
R35- Causes severe burns.
R36/38- Irritating to eyes and skin. R41- Risk of serious damage to eyes.
R43- May cause sensitization by skin contact. R50- Very toxic to aquatic organisms.

Prepared by : Angelchem EHS

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.