

**SAFETY DATA SHEET (SDS)**

According to EC Directive 1907/2006 as amended by Regulation (EU) No 453/2010 &amp; 2015/830

**1. IDENTIFICATION OF SUBSTANCE & COMPANY IDENTIFICATION:**

- 1.1 Product **VIRUSOLVE®+ Concentrate**  
 Covering Also VIRUSOLVE®+ Concentrate Lavender  
 VIRUSOLVE®+ Concentrate Lemon  
 VIRUSOLVE®+ Concentrate Orchid  
 VIRUSOLVE®+ Concentrate Pine
- Product Code: J29
- 1.2 Use Sporidical High Level Disinfectant (Cold Sterilant)/Cleaner for Invasive & Non-Invasive Medical Devices, Dental & Surgical Instruments, Flexible Endoscopes and Surfaces
- 1.3 Company: Amity Ltd  
 Address: Libra House, West Street,  
 Worsbrough Dale,  
 BARNSELY, S YORKS, S70 5PG  
 UNITED KINGDOM
- Telephone: 01226 770787  
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 E-mail: [sales@amityinternational.com](mailto:sales@amityinternational.com)  
 Web site: [www.amityinternational.com](http://www.amityinternational.com)  
[www.virusolve.com](http://www.virusolve.com)

**1.4 Emergency Information: TEL NUMBER +44 (0) 1226 770787** (9.00am - 5.00pm Mon-Thurs,  
 9.00am – 3.30pm Fri UK time)

**2. HAZARDS IDENTIFICATION.****2.1 Classification of the product (Substance or Mixture)****Classification:**

- Physical Hazards** None
- Health hazards** Skin Corr 1A; H314 Causes severe skin burns and eye damage
- Environmental hazards** Aquat Chronic 1; H410 Very toxic to aquatic life with long lasting effects

**2.2 Label elements****Pictogram:****Signal Word** DANGER**Hazard statements:** see 2.1**GHS Precautionary Phrases**

- P260 Do not breathe vapour, mist or spray
- P273 Avoid release to the environment
- P280 Wear protective gloves and eye protection
- P301+330+331: IF SWALLOWED; rinse mouth. Do not induce vomiting.
- P303+361+353: IF ON SKIN (or hair); Remove immediately all contaminated clothing. Rinse skin with water.
- P305+352+338: IF IN EYES; Wash with plenty of water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

**2.3 Other hazards****PBT:** This product is not identified as a PBT/vPvB substance**EMERGENCY OVERVIEW:**

Clear, pale straw coloured liquid. Non flammable and will not support combustion

**3. COMPOSITION AND INFORMATION ON INGREDIENTS.**

**General Description:** A blend of low foam, non-ionic surfactants, chelating agents and biocides, with or without fragrance and/or dye.

**3.2 Mixtures - Hazardous Constituents**

2-Aminoethanol (Monoethanolamine)	EU Index no 603-030-00-8 Amity Ref RMP 4100	Content 1 to 5 %w/w
CAS No 141-43-5	EINEC No 205-483-3	REACH No 01-2119486455-28
Classification (GHS, EC Reg 1272/2008 ) Acute Tox 4; H302, H312, H332 Skin Corr 1B; H314 STOT SE 3; H335 Aquatic Chronic 3; H412	Classification (67/548/EEC or 1999/45/EC) Xn; R20 Xi; R36/37/38 C; R34	

Didecyldimethyl ammonium Chloride	EU Index no Amity Ref RMP 5052	Content 1 to 5 %w/w
CAS No 7173-51-5	EINEC No 230-525-2	REACH No 01-2119945987-15
Classification (GHS, EC Reg 1272/2008 ) Acute Tox 3; H301 Skin Corr 1A; H314 Aquat Acute 1; H400	Classification (67/548/EEC or 1999/45/EC) R10 R21/22 C; R34 R67	

Propan-2-ol	EU Index no 603-117-00-0 Amity Ref RMP 5052	Content 0.5 to 2 %w/w
CAS No 67-63-0	EINEC No 200-661-7	REACH No 01-2119457558-25
Classification (GHS, EC Reg 1272/2008 ) Flan liq2; H225 Eye Irrit 2; H319 STOT SE 3; H336	Classification (67/548/EEC or 1999/45/EC) F+; R11 R36 R67	

Potassium carbonate	EU Index no Amity Ref RMP 0103	Content 0.5 to 3 %w/w
CAS No 548-08-7	EINEC No 209-529-3	REACH No 01-2119532646-36
Classification (GHS, EC Reg 1272/2008 ) Skin Irrit 2; H315 Eye Irrit 2; H319 STOT SE 3; H335	Classification (67/548/EEC or 1999/45/EC)	

Bis (3-aminopropyl) dodecylamine (N-(3-Aminopropyl)-N-dodecyl propane-1,3-diamine)	EU Index no Amity Ref RMP 5055	Content 1 to 5%w/w
CAS No 2372-82-9	EINEC No 219-145-8	REACH No 01-2119980592-29
Classification (GHS, EC Reg 1272/2008 ) Acute Tox 3; H301 Skin Corr 1A; H314 STOT RE2; H373 Aquat Acute 1; H400 Aquat Chronic 1; H410	Classification (67/548/EEC or 1999/45/EC) R 22 C; R34, N;R50	

For full text of H statements given in this Section refer Section 16

**3.3 Other Components**

Components not listed at section 3.2 are either non hazardous or present at levels below that requiring detailed disclosure. Common sense precautions should be observed during handling and use

**Ingredients according to EC Directive 648/2004 Annex VII (BPD)**

Less than 5% : non-ionic emulsifier, alcohol, Polycarboxylate

Didecyldimethyl ammonium Chloride and Bis (3-aminopropyl) dodecylamine disinfectants, Fragrance, dye

**4. FIRST AID****4.1 Description of First Aid measures:**

**General:** If you feel unwell seek medical advice (show this information or the container label where possible).

**Eye:** Irrigate with flowing water for at least 15 minutes. Seek medical attention if irritation or soreness persists.

**Skin:** After prolonged use, rinse affected area with water. In the unlikely event of irritation or soreness developing, seek medical advice. Launder contaminated clothing before re-use.

**Ingestion:** Do not induce vomiting, unless instructed to do so by medical personnel. Rinse mouth with water and drink 1 or 2 glasses of water or milk. Seek medical advice if discomfort persists.

**Inhalation:** Remove from exposure. Keep warm and at rest. If discomfort persists seek medical advice.

**4.2 Most Important Symptoms:**

**Contact with eyes:** Causes irritation, redness and non-reversible local damage if not immediately rinsed away after contact.

**Contact with skin:** Causes irritation and redness.

**Ingested:** Will irritate and cause soreness to mouth, throat and digestive system.

**Inhaled:** Mist or spray may cause soreness and irritation of the mucous membrane and the respiratory system.

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

**Note to physician:** Treat by observation and supportive measures as indicated by the patient's condition.

No specific antidote.

**5. FIRE FIGHTING MEASURES.****5.1 Extinguishing Media**

**Suitable Extinguishing Media:** Not applicable

**Media to be avoided:** None

**5.2 Special Hazards present in the mixture**

**Special Hazards** No unusual fire or explosive hazards

**Hazardous combustion products:** During a fire, smoke may contain the original material in addition to unidentified toxic and/or irritating compounds. Hazardous combustion products may include and are not limited to:

Oxides of carbon and nitrogen

**5.3 Advice for fire fighters**

**Protective actions during fire fighting:** Keep people away. Isolate fire area and deny unnecessary entry. In the event of an adjacent fire, cool containers with water spray.

**Special protective equipment:** Wear protective clothing and self contained breathing equipment.

**6. ACCIDENTAL RELEASE MEASURES.****6.1 Personal protection, protective equipment and emergency procedures**

**Personal protection:** Wear suitable protective clothing including eye protection, gloves and skin protection.

Ensure adequate ventilation. Evacuate personnel (Large spillage).

**6.2 Environmental precautions:**

Keep large spills out of sewers. If contamination of drainage systems or watercourses is unavoidable, immediately inform appropriate authorities. Small spills may however be safely flushed away to foul sewer with plenty of water.

**6.3 Methods and material containment and cleaning up**

**Clean up:** Contain and absorb with inert material such as earth, sand or non-organic absorbent granules. Remove contaminated material to plastic containers and thence to a safe location for subsequent disposal.

Final traces or small spillages may be flushed away to foul sewer with water.

**6.4 Reference to other sections**

For personal protection see Section 8

For waste disposal see Section 13

**7. HANDLING AND STORAGE.****7.1 Precautions for safe handling**

**Usage precautions:** Use only in accordance with label instructions in well ventilated areas.

Do not return unused material to original container.

**Advice on general hygiene**

Avoid inhalation of mists or spray. Avoid prolonged contact with skin & eyes. Wear protective clothing.

When using do not eat drink or smoke. Wash promptly with soap and water if skin becomes contaminated

**7.2 Conditions for safe storage, including any incompatibilities**

**Storage:** Do not store containers in open sunshine and keep away from heat. Store at a temperature between 5°C and 35°C. Keep container upright and closed when not in use.

Keep away from incompatible materials (see section 10).

**8. EXPOSURE CONTROL/PERSONAL PROTECTION.****8.1 Workplace exposure guidelines:**

STATE	Component	LTE (8h TWA)	STE (15 Minute TWA)	Comment
UK HSE EH40	2-Aminoethanol	1ppm (2.5 mg/m <sup>3</sup> )	3ppm (7.6 mg/m <sup>3</sup> )	Contains Skin notation to warn of danger of skin adsorption Component present at <5% in concentrate and < 0.3 in the working solution
UK HSE EH40	Propan-2-ol	400 ppm (999 mg/m <sup>3</sup> )	500 ppm (1250 mg/m <sup>3</sup> )	

**DNEL for workers** To be advised

**8.2 Exposure controls:****Protective equipment**

**Engineering controls:** Good general ventilation should be sufficient for most conditions. Provision of appropriate exhaust ventilation is required when spray or mist is present.

**Eye/face protection:** Use chemical goggles or face shield when handling neat or dilute product or if the risk of splashes is a concern. Eyewash stations should be provisioned.

**Skin protection:** Use suitable protective clothing, gloves/coveralls, for periods of prolonged contact. PVC, Butyl or nitrile rubber gloves are suitable. Use aprons if splash protection is required during prolonged exposure.

**Respiratory protection:** Not normally required

**Hygiene measures:** When using, do not eat, drink, or smoke. Wash hands after use

**9. PHYSICAL AND CHEMICAL PROPERTIES.****9.1 Information on basic physical and chemical properties**

Property		Typical Value
APPEARANCE		Clear colourless liquid (or coloured with dye)
ODOUR		Low odour (or as added fragrance)
pH	@ 20 °C Neat 1% solution	12.2 min 10.7 min
DENSITY	g/cm <sup>3</sup> @ 20 °C	1.02
SOLUBILITY	g/L @ 20 °C	Completely miscible
PARTITION COEFFICIENT	Log Pow (Octanol/water)	Not established
FLAMMABILITY	°C Open Cup, Explosivity - lower limit % - Upper limit % Auto ignition Temp, °C	None Not applicable Not applicable Not established
THERMAL DECOMPOSITION	°C	Not established

**9.2 Other information**

No data

**10. STABILITY AND REACTIVITY**

**10.1 Reactivity** Stable

**10.2 Chemical stability:** Stable under recommended storage and use conditions.

**10.3 Possibility of hazardous reactions:** none known

**10.4 Conditions to avoid:** Avoid high temperatures, heat.

**10.5 Incompatible materials:** Do not mix with strong acids, oxidising agents or other cleaning materials.

**10.6 Hazardous decomposition products:** Does not decompose under normal use conditions

**11. TOXICOLOGICAL INFORMATION:****11.1 Toxicological effects:****Components:**

2- Aminoethanol	LD50 (Rat, Oral)	1720 mg/Kg
	LD50 (Rabbit, Dermal)	>1200 mg/Kg
	LD50 (Rat, IVN)	225 mg/Kg
Didecyldimethyl ammonium chloride	LD50 (Rat, IPR)	45 mg/Kg
	LD50 (Mouse, Oral)	268 mg/Kg
Potassium Carbonate	LD50 (Mouse, Oral)	>2500 mg/Kg
Bis (3-aminopropyl) dodecylamine	LD50 (Rat, Oral)	261 mg/Kg
	LD50 (Rat, Dermal)	>600 mg/Kg

**Mixture:** No significant health hazard when properly used for the application it was designed for.

See section 4 for exposure symptoms

Not known to be a skin or respiratory sensitizer.

**Route of exposure:**

Dermal and eye contact

Ingestion or inhalation

**12. ECOLOGICAL INFORMATION.****12.1 Ecotoxicity**

2- Aminoethanol	EC50 (Daphnia, 48h)	65 mg/L
Didecyldimethyl ammonium chloride	No data	
Bis (3-aminopropyl) dodecylamine	EC50 (Daphnia, 48h)	0.073 mg/L
	LC50 (Rainbow trout, 96h)	0.68 mg/L

**12.2 Mobility**

Miscible in water. No information on soil mobility.

**12.3 Degradation and Persistence:**

Chelating agents are fully biodegradable according to appropriate OECD criteria. Main concern is the high alkalinity of the product should it enter surface drains or rivers, etc.

The surfactant(s) contained in this preparation comply with the biodegradability requirements as laid down in Regulation (EC) No. 648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the member states and will be made available to them, at their direct request or at the request of a detergent manufacturer.

**12.4 Bioaccumulative potential**

The product does not contain any substances that have potential for bioaccumulation.

**12.5 PBT & vPvB Assessment**

Does not contain any PBT or vPvB substances

**12.6 Other adverse effects**

None known

**13. DISPOSAL CONSIDERATIONS.**

**General:** Do not discharge into surface drains, on the ground or into any body of water.

**Disposal Methods:** All disposal methods must be in compliance with local laws and regulations (Regulations may vary in different locations.)

Disposal of dilute solutions via the foul sewer will not cause any problems to waste treatment facilities.

For unused and uncontaminated product, the preferred disposal options include sending to a licensed, permitted recycler or reclaimer.

Packaging containers are recyclable. Rinse out well with water and send for recycling or dispose of in accordance with local authority requirements.

**14. TRANSPORT INFORMATION**

14.1 UN No:

14.2 Proper Shipping Name:

14.3 Hazard Classification: NON HAZARDOUS FOR TRANSPORTATION

14.4 Packaging Group:

14.5 Environmental Hazard

Marine Pollutant:

**Label for Carriage:** None

**15. REGULATORY INFORMATION.****15.1 Safety, health and environment regulations/legislation specific for the substance/mixture**

This Safety Data Sheet is provided in compliance with the European REACH Directive (1907/2006/EC) and is in agreement with the GHS (Globally Harmonised System) for the classification and labelling of Dangerous Chemicals. This safety data sheet is distributed solely for the purpose of the Health and Safety at Work Act 1974; included under this heading is article 10 of Directive 88/379/EEC.

All components that make up this product are registered, or are not required to be listed, with:  
EUROPEAN INVENTORY OF NEW AND EXISTANT CHEMICAL SUBSTANCES (EINECS), and  
TOXIC SUBSTANCES CONTROL ACT (TSCA).

REACH – Regulation 1907/2006/EC, The raw materials used within this preparation have been pre-registered in accordance with the requirements of REACH

**Regulatory References:**

REGULATION (EC) 1272/2008 ON CLASSIFICATION, LABELLING AND PACKAGING.

UN Globally Harmonised System for Classification & Labelling GHS ST-SG-AC10-30

UK - Occupational Exposure Limits Guidance Note EH40

EU Detergents Directive 648/2004

**15.2 Chemical Safety Assessment**

A Chemical Safety Assessment has not been carried out for this product

**16. OTHER INFORMATION.**

The data contained in this data sheet is based on Amity's present knowledge of the health and safety properties of the product, and is believed to be accurate and given in good faith.

The physical and chemical properties are typical values only and do not constitute the specification of the product, which will be agreed separately.

The data given here only applies when product is used for proper application(s). The product is not sold as suitable for applications other than those identified at section 1, usage as such may cause risks not mentioned in this sheet.

It is for the customer to satisfy itself on the suitability of the product for its own particular purpose. Amity gives no warranty as to the fitness of the product for any particular purpose and any implied warranty or condition (statutory or otherwise) is excluded, except to the extent that law prevents such exclusion.

**Hazard Phrases used in Sections 3 and not given at Section 2:**

H301	Toxic if swallowed
H302	Harmful if swallowed
H312	Harmful in contact with skin
H314	Causes severe skin burns and eye damage
H318	Causes serious eye damage
H320	Causes 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
H400	Very toxic to aquatic life

**Risk Phrases used in Section 3:**

R10	Flammable
R11	Highly flammable
R20	Harmful by inhalation
R22	Harmful if swallowed
R21/22	Harmful in contact with skin and if swallowed
R34	Causes burns
R36	Irritating to eyes
R36/37/38	Irritating to eyes, respiratory system and skin
R50	Very toxic to aquatic organisms
R67	Vapours may cause drowsiness and dizziness

The following definitions of terms and abbreviations that may be used within this document are:

NTP: National Toxicology Programme (US);

IARC: International Agency for Research on Cancer;

EINECS: European Inventory of New and Existent Chemical Substances;

OSHA: Occupational Safety & Health Administration (US);

OECD: Organisation for Economic Co-operation and Development;

ACGIH: American Conference of Governmental Industrial Hygienists;

CAS: Chemical Abstracts Number;

STOT SE Specific Target Organ Toxicity – Single Exposure

STOT RE Specific Target Organ Toxicity – Repeated Exposure

**OTHER INFORMATION (Continued)**

PBT: Persistent, Bio-accumulative and Toxic

vPvB: Very persistent and very bio-accumulative

OES: Occupational Exposure Standard.

TLV: Threshold Limit Value.

TWA: Time Weighted Average.

LTEL: Long Term Exposure Limit

STEL: Short Term Exposure Limit.

HSE: Health & Safety Executive (UK)

LEV: Local Exhaust Ventilation

It is the responsibility of the user to ensure safe working conditions. The health hazards and general information contained within this Material Safety Data Sheet are given as a guide to the precautions required to maintain a safe working environment.