Safety Data Sheet

ALCOSAN VT10

Revision: 2019-01-08 **Version:** 01.1

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

1.1 Product identifier
Trade name: ALCOSAN VT10

1.2 Recommended use and restrictions on use
For professional use only.

1.3 Details of the supplier of the safety data sheet
Diversey (Malaysia) Sdn. Bhd.

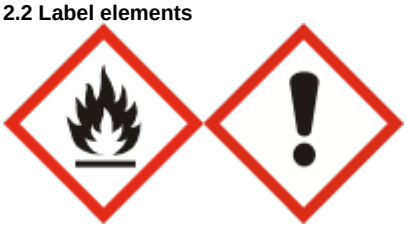
Contact details
No. 6, Jalan Pengarah U1/29, Seksyen U1
Hicom Glenmarie Industrial Park
40150 Shah Alam
Selangor, Malaysia
Tel : +603-5569-6363
Fax: +603-5569-6262

1.4 Emergency telephone number
Tel : +603-5569-6363

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture
Flam. Liq. 3 (H226)
STOT SE 3 (H336)
Eye Irrit. 2 (H319)

2.2 Label elements



Signal word: Warning.

Hazard statements:
H226 - Flammable liquid and vapour.
H336 - May cause drowsiness or dizziness.
H319 - Causes serious eye irritation.

Precautionary statements:
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P403 + P235 - Store in a well-ventilated place. Keep cool.

2.3 Other hazards
No other hazards known.

SECTION 3: Composition/information on ingredients

3.1 Substances / Mixtures

Ingredient(s)	CAS number	Classification	Weight percent

propan-2-ol	67-63-0	Flam. Liq. 2 (H225) STOT SE 3 (H336) Eye Irrit. 2 (H319)	20-30
didecyldimethylammonium chloride	7173-51-5	Skin Corr. 1B (H314) Acute Tox. 4 (H302) Aquatic Acute 1 (H400) Aquatic Chronic 2 (H411)	0.01-0.1

SECTION 4: First aid measures

4.1 Description of first aid measures

Inhalation: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTRE, doctor or physician if you feel unwell.

Skin contact: Wash skin with plenty of lukewarm, gently flowing water. Take off immediately all contaminated clothing and wash it before re-use. If skin irritation occurs: Get medical advice or attention.

Eye contact: Hold eyelids apart and flush eyes with plenty of lukewarm water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If irritation occurs and persists, get medical attention.

Ingestion: Rinse mouth. Immediately drink 1 glass of water. Never give anything by mouth to an unconscious person. Get medical attention or advice if you feel unwell.

Self-protection of first aider: Consider personal protective equipment as indicated in subsection 8.2.

4.2 Most important symptoms and effects, both acute and delayed

Inhalation: May cause drowsiness or dizziness.

Skin contact: No known effects or symptoms in normal use.

Eye contact: Causes severe irritation.

Ingestion: No known effects or symptoms in normal use.

4.3 Indication of any immediate medical attention and special treatment needed

No information available on clinical testing and medical monitoring. Specific toxicological information on substances, if available, can be found in section 11.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Carbon dioxide. Dry powder. Water spray jet. Fight larger fires with water spray jet or alcohol-resistant foam.

5.2 Special hazards arising from the substance or mixture

No special hazards known.

5.3 Advice for firefighters

As in any fire, wear self contained breathing apparatus and suitable protective clothing including gloves and eye/face protection.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Turn off all sources of ignition. Ventilate the area.

6.2 Environmental precautions

Do not allow to enter drainage system, surface or ground water. Dilute with plenty of water.

6.3 Methods and material for containment and cleaning up

Absorb with liquid-binding material (sand, diatomite, universal binders, sawdust).

6.4 Reference to other sections

For personal protective equipment see subsection 8.2. For disposal considerations see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Measures to prevent fire and explosions:

Keep away from flames and hot surfaces. No smoking. Keep away from heat. Take precautionary measures against static discharges.

Measures required to protect the environment:

For environmental exposure controls see subsection 8.2.

Advices on general occupational hygiene:

Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Do not mix with other products unless adviced by Diversey. Wash hands before breaks and at the end of workday. Wash face, hands and any exposed skin thoroughly after handling. Take off immediately all contaminated clothing. Store used personal protective equipment separately. Use personal protective equipment as required. Use only with adequate ventilation.

7.2 Conditions for safe storage, including any incompatibilities
Store in accordance with local and national regulations. Keep only in original packaging. Store in a closed container. Store in a well-ventilated place. Keep from freezing. Keep cool. Keep away from heat and direct sunlight.
For conditions to avoid see subsection 10.4. For incompatible materials see subsection 10.5.

7.3 Specific end use(s)
No specific advice for end use available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters
Workplace exposure limits

Air limit values, if available:

Ingredient(s)	Long term value(s)	Ceiling value(s)
propan-2-ol	400 ppm 983 mg/m³	

Biological limit values, if available:

8.2 Exposure controls

The following information applies for the uses indicated in subsection 1.2 of the Safety Data Sheet.
If available, please refer to the product information sheet for application and handling instructions.
Normal use conditions are assumed for this section.

Recommended safety measures for handling the undiluted product:

Appropriate engineering controls: No special requirements under normal use conditions.
Appropriate organisational controls: Avoid direct contact and/or splashes where possible. Train personnel.

Personal protective equipment
Eye / face protection: No special requirements under normal use conditions.
Hand protection: No special requirements under normal use conditions.
Body protection: No special requirements under normal use conditions.
Respiratory protection: No special requirements under normal use conditions.

Environmental exposure controls: Should not reach sewage water or drainage ditch undiluted or unneutralised.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

	Method / remark
Physical State: Liquid	
Colour: Clear Colourless	
Odour: Product specific	
Odour threshold: Not applicable	
pH: ≈ 5 (neat)	ISO 4316
Melting point/freezing point (°C): Not determined	Not relevant to classification of this product
Initial boiling point and boiling range (°C): Not determined	
Flammability (liquid): Flammable.	
Flash point (°C): ≈ 25	closed cup
Sustained combustion: Not applicable. *(UN Manual of Tests and Criteria, section 32, L.2)*	
Evaporation rate: Not determined	Not relevant to classification of this product
Flammability (solid, gas): Not applicable to liquids	
Upper/lower flammability limit (%): Not determined	
Vapour pressure: Not determined	
Vapour density: Not determined	Not relevant to classification of this product
Relative density: ≈ 0.96 (20 °C)	OECD 109 (EU A.3)
Solubility in / Miscibility with Water: Fully miscible	
Partition coefficient: n-octanol/water No information available.	
Substance data, partition coefficient n-octanol/water (log Kow): see subsection 12.3	
Autoignition temperature: Not determined	
Decomposition temperature: Not applicable.	
Viscosity: Not determined	Not relevant to classification of this product
Explosive properties: Not explosive. Vapours may form explosive mixtures with air.	
Oxidising properties: Not oxidising	

9.2 Other information

Surface tension (N/m): Not determined
Corrosion to metals: Not corrosive

SECTION 10: Stability and reactivity

10.1 Reactivity
No reactivity hazards known under normal storage and use conditions.

10.2 Chemical stability
Stable under normal storage and use conditions.

10.3 Possibility of hazardous reactions
No hazardous reactions known under normal storage and use conditions.

10.4 Conditions to avoid
None known under normal storage and use conditions.

10.5 Incompatible materials
None known under normal use conditions.

10.6 Hazardous decomposition products
None known under normal storage and use conditions.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Mixture data:.

Relevant calculated ATE(s):
ATE - Oral (mg/kg): >5000

Substance data, where relevant and available, are listed below:.

Acute toxicity
Acute oral toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)
propan-2-ol	LD_{50}	3570	Rat	Method not given	
didecyldimethylammonium chloride	LD_{50}	238	Rat	Method not given	

Acute dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)
propan-2-ol	LD_{50}	> 2000	Rabbit	Method not given	
didecyldimethylammonium chloride		No data available			

Acute inhalative toxicity

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
propan-2-ol	LC_{50}	> 25 (vapour)	Rat	OECD 403 (EU B.2)	6
didecyldimethylammonium chloride		No data available			

Irritation and corrosivity
Skin irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
propan-2-ol	Not irritant	Rabbit	OECD 404 (EU B.4)	
didecyldimethylammonium chloride	Corrosive	Rabbit	OECD 404 (EU B.4)	

Eye irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
propan-2-ol	Irritant	Rabbit	OECD 405 (EU B.5)	
didecyldimethylammonium chloride	No data available			

Respiratory tract irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
propan-2-ol	No data available			
didecyldimethylammonium chloride	No data available			

Sensitisation

Sensitisation by skin contact

Ingredient(s)	Result	Species	Method	Exposure time (h)
propan-2-ol	Not sensitising	Guinea pig	OECD 406 (EU B.6) / Buehler test	
didecyldimethylammonium chloride	Not sensitising	Guinea pig	OECD 406 (EU B.6) / Buehler test	

Sensitisation by inhalation

Ingredient(s)	Result	Species	Method	Exposure time
propan-2-ol	No data available			
didecyldimethylammonium chloride	No data available			

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Mutagenicity

Ingredient(s)	Result (in-vitro)	Method (in-vitro)	Result (in-vivo)	Method (in-vivo)
propan-2-ol	No evidence for mutagenicity, negative test results No evidence of genotoxicity, negative test results	OECD 471 (EU B.12/13)	No evidence of genotoxicity, negative test results	OECD 474 (EU B.12)
didecyldimethylammonium chloride	No evidence of genotoxicity, negative test results	OECD 471 (EU B.12/13) OECD 473 OECD 476	No data available	

Carcinogenicity

Ingredient(s)	Effect
propan-2-ol	No data available
didecyldimethylammonium chloride	No data available

Toxicity for reproduction

Ingredient(s)	Endpoint	Specific effect	Value (mg/kg bw/d)	Species	Method	Exposure time	Remarks and other effects reported
propan-2-ol			No data available				
didecyldimethylammonium chloride			No data available				

Repeated dose toxicity

Sub-acute or sub-chronic oral toxicity

Ingredient(s)	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time (days)	Specific effects and organs affected
propan-2-ol		No data available				
didecyldimethylammonium chloride		No data available				

Sub-chronic dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time (days)	Specific effects and organs affected
propan-2-ol		No data available				
didecyldimethylammonium chloride		No data available				

Sub-chronic inhalation toxicity

Ingredient(s)	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time (days)	Specific effects and organs affected
propan-2-ol		No data available				
didecyldimethylammonium chloride		No data available				

Chronic toxicity

Ingredient(s)	Exposure route	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time	Specific effects and organs affected	Remark
propan-2-ol			No data available					
didecyldimethylammonium chloride			No data available					

STOT-single exposure

Ingredient(s)	Affected organ(s)
propan-2-ol	No data available
didecyldimethylammonium chloride	No data available

STOT-repeated exposure

Ingredient(s)	Affected organ(s)
propan-2-ol	No data available

didecyldimethylammonium chloride	No data available

Aspiration hazard
Substances with an aspiration hazard (H304), if any, are listed in section 3. If relevant, see section 9 for dynamic viscosity and relative density of the product.

Potential adverse health effects and symptoms
Effects and symptoms related to the product, if any, are listed in subsection 4.2.

SECTION 12: Ecological information

12.1 Toxicity

No data is available on the mixture.

Substance data, where relevant and available, are listed below:

Aquatic short-term toxicity
Aquatic short-term toxicity - fish

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
propan-2-ol	LC_{50}	> 100	*Pimephales promelas*	Method not given	48
didecyldimethylammonium chloride	LC_{50}	0.97	*Brachydanio rerio*	OECD 203 (EU C.1)	96

Aquatic short-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
propan-2-ol	EC_{50}	> 100	*Daphnia magna Straus*	Method not given	48
didecyldimethylammonium chloride	EC_{50}	0.053	*Daphnia magna Straus*	OECD 202 (EU C.2)	48

Aquatic short-term toxicity - algae

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
propan-2-ol	EC_{50}	> 100	*Scenedesmus quadricauda*	Method not given	72
didecyldimethylammonium chloride	EC_{50}	0.053	*Pseudokirchneriella subcapitata*	OECD 201 (EU C.3)	72

Aquatic short-term toxicity - marine species

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (days)
propan-2-ol		No data available			-
didecyldimethylammonium chloride		No data available			-

Impact on sewage plants - toxicity to bacteria

Ingredient(s)	Endpoint	Value (mg/l)	Inoculum	Method	Exposure time
propan-2-ol	EC_{50}	> 1000	*Activated sludge*	Method not given	
didecyldimethylammonium chloride		No data available			

Aquatic long-term toxicity
Aquatic long-term toxicity - fish

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
propan-2-ol		No data available				
didecyldimethylammonium chloride		No data available				

Aquatic long-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
propan-2-ol		No data available				
didecyldimethylammonium chloride	NOEC	> 0.01-0.1	*Daphnia magna*	OECD 211	21 day(s)	

Aquatic toxicity to other aquatic benthic organisms, including sediment-dwelling organisms, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw sediment)	Species	Method	Exposure time (days)	Effects observed
propan-2-ol		No data available			-	
didecyldimethylammonium chloride		No data available			-	

Terrestrial toxicity

Terrestrial toxicity - soil invertebrates, including earthworms, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
propan-2-ol		No data available			-	
didecyldimethylammonium chloride		No data available			-	

Terrestrial toxicity - plants, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
propan-2-ol		No data available			-	
didecyldimethylammonium chloride		No data available			-	

Terrestrial toxicity - birds, if available:

Ingredient(s)	Endpoint	Value	Species	Method	Exposure time (days)	Effects observed
propan-2-ol		No data available			-	
didecyldimethylammonium chloride		No data available			-	

Terrestrial toxicity - beneficial insects, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
propan-2-ol		No data available			-	
didecyldimethylammonium chloride		No data available			-	

Terrestrial toxicity - soil bacteria, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
propan-2-ol		No data available			-	
didecyldimethylammonium chloride		No data available			-	

12.2 Persistence and degradability

Abiotic degradation

Abiotic degradation - photodegradation in air, if available:

Abiotic degradation - hydrolysis, if available:

Abiotic degradation - other processes, if available:

Biodegradation

Ready biodegradability - aerobic conditions

Ingredient(s)	Inoculum	Analytical method	DT_{50}	Method	Evaluation
propan-2-ol			95 % in 21 day(s)	OECD 301E	Readily biodegradable
didecyldimethylammonium chloride		Oxygen depletion	> 60%	OECD 301D	Readily biodegradable

Ready biodegradability - anaerobic and marine conditions, if available:

Degradation in relevant environmental compartments, if available:

12.3 Bioaccumulative potential

Partition coefficient n-octanol/water (log Kow)

Ingredient(s)	Value	Method	Evaluation	Remark
propan-2-ol	0.05	OECD 107	No bioaccumulation expected	
didecyldimethylammonium chloride	No data available			

Bioconcentration factor (BCF)

Ingredient(s)	Value	Species	Method	Evaluation	Remark
propan-2-ol	No data available				
didecyldimethylammonium chloride	2.1		Method not given	No bioaccumulation expected	

12.4 Mobility in soil

Adsorption/Desorption to soil or sediment

Ingredient(s)	Adsorption coefficient Log Koc	Desorption coefficient Log Koc(des)	Method	Soil/sediment type	Evaluation
propan-2-ol	No data available				Potential for mobility in soil, soluble in water
didecyldimethylammonium chloride	No data available				

12.5 Other adverse effects

No other adverse effects known.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Waste from residues / unused products: The concentrated contents or contaminated packaging should be disposed of by a certified handler or according to the site permit. Release of waste to sewers is discouraged. The cleaned packaging material is suitable for energy recovery or recycling in line with local legislation.

Empty packaging

Recommendation: Dispose of observing national or local regulations.

Suitable cleaning agents: Water, if necessary with cleaning agent.

SECTION 14: Transport information

Land transport, Sea transport (IMDG), Air transport (ICAO-TI / IATA-DGR)

14.1 UN number: 1219

14.2 UN proper shipping name:

Isopropanol (isopropyl alcohol)

14.3 Transport hazard class(es):

Transport hazard class (and subsidiary risks): 3

14.4 Packing group: III

14.5 Environmental hazards:

Environmentally hazardous: No

Marine pollutant: No

14.6 Special precautions for user: None known.

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code: The product is not transported in bulk tankers.

Other relevant information:

IMO/IMDG

EmS: F-E, S-D

The product has been classified, labelled and packaged in accordance with the requirements of national road transport regulations and the provisions of the IMDG Code

Transport regulations include special provisions for certain classes of dangerous goods packed in limited quantities.

SECTION 15: Regulatory information

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

National regulations

- Occupational Safety and Health (Classification, Labelling and Safety Data Sheet of Hazardous Chemicals) Regulations 2013

SECTION 16: Other information

The information in this document is based on our best present knowledge. However, it does not constitute a guarantee for any specific product features and does not establish a legally binding contract

SDS code: MS4000177 **Version:** 01.1 **Revision:** 2019-01-08

Reason for revision:

This data sheet contains changes from the previous version in section(s):, 14

- H336 - May cause drowsiness or dizziness.
- H302 - Harmful if swallowed.
- H225 - Highly flammable liquid and vapour.
- H400 - Very toxic to aquatic life.
- H319 - Causes serious eye irritation.
- H411 - Toxic to aquatic life with long lasting effects.
- H314 - Causes severe skin burns and eye damage.

Abbreviations and acronyms:

- DNEL - Derived No Effect Limit
- PNEC - Predicted No Effect Concentration
- ATE - Acute Toxicity Estimate
- LC50 - Lethal Concentration, 50% / Median Lethal Concentration
- LD50 - Lethal Dose, 50% / Median Lethal dose
- STOT-RE - Specific target organ toxicity (repeated exposure)
- STOT-SE - Specific target organ toxicity (single exposure)

End of Safety Data Sheet