

SECTION 1: IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name: Nanoman Antimicrobial
Synonyms: Nanoman Antimicrobial Hard Surfaces

Company Name: Nanotech Products Pty Ltd (ABN 47 153 300 933)
Address: 8/50-54 Howleys Road, Notting Hill, VIC 3168

Telephone: 1300 696 266
 Business Hours 9:00am to 5:00pm, Monday to Friday

Other Names Not Applicable

Recommended Use: Applicable for use on all hard surfaces including all hard surfaces including metal, plastic, glass, polished timber and stone to provide protection against viruses, bacteria and germs.

SECTION 2: HAZARDS IDENTIFICATION

Hazard Statement H225 Highly flammable liquid and vapour.H411 Toxic to aquatic life with long lasting effects
 H319 Causes serious eye irritation
 H336 May cause drowsiness or dizziness
 H411 Toxic to aquatic life with long lasting effects



Precautionary Statement (Prevention) P210 Keep away from heat/sparks/open flames/hot surfaces – no smoking
 P233 Keep container tightly closed
 P240 Ground/bond container and receiving equipment
 P241 Use explosion-proof electrical/ventilating/lighting/...../equipment
 P242 Use only non-sparking tools
 P243 Take precautionary measures against static discharge
 P261 Avoid breathing dust/fume/gas/mist/ vapours/spray
 P264 Washthoroughly after handling
 P271 Use only outdoors or in a well-ventilated area
 P273 Avoid releases to the environment
 P280 Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statement (Response) P303+P361+P353 If on skin or hair: remove/take off immediately all contaminated clothing. Rinse skin with water/shower
 P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position 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.
 P312 Call a POISON CENTER or doctor/physician if victim feels unwell
 P337+P313 If eye irritation persists: Get medical advice/attention.
 P370+P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.

Precautionary Statement (Storage) P403+P233+P235 Store in a well-ventilated place. Keep cool. Keep container tightly closed
 P405 Store locked up.

Precautionary Statement (Disposal) P501 Dispose of contents/container to an approved waste disposal plant.

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SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Characterisation Ingredients

Ingredient	CAS Number	EC Number	Content
Quat-silisesquioxane	27668-52-6	248-595-8	>1.0% <4.0%
Methanol	67-56-1	200-659-6	>0.5% <2.0%
Ethanol	64-17-5	200-578-6	>70% <80%
Water	7732-18-5		>10.0% <20%
Proprietary Ingredients determined to be not hazardous			>10.0%

SECTION 4: FIRST AID MEASURES

- General Advice:** Remove contaminated or saturated clothing. When in doubt or symptoms persist seek medical advice.
- Inhalation:** Remove victim from exposure. Take affected persons out into the fresh air. In case of persistent discomfort seek medical attention
- Ingestion:** Have the mouth rinsed with water. Have the patient drink plenty of water in small sips. Do not induce vomiting. Obtain medical attention.
- Skin Contact:** Wash off immediately with plenty of water. If swelling, redness, blistering or irritation occurs seek medical advice.
- Eye contact:** Keeping eyelid open, immediately rinse thoroughly for at least 5 minutes using plenty of water or, eye rinsing solution. Seek medical attention.
- Notes to physician:** If required, therapy of irritative effect. After absorbing large amounts of substance: administration of activated charcoal. Acceleration of gastrointestinal passage.

SECTION 5: FIRE-FIGHTING MEASURES

- Specific Measures:** Caution: Use of water spray when fighting fire may be insufficient.
 Small fire: use foam, dry chemical, CO2 or water spray.
 Large Fire: Use foam, fog or water spray – Do not use water jets.
- Specific Hazards:** HIGHLY FLAMMABLE If safe to do so move undamaged containers from fire area. Cool containers with water until well after fire is out. Avoid getting water inside containers.. In case of fire toxic gases can be generated. Do not inhales gases / smoke.
- Hazchem Code:** 2YE
- Precautions for Firefighters** Firefighters should wear appropriate protective clothing for fire fighting (including helmets, protective gloves and boots) and self contained breathing apparatus with a full face piece.

SECTION 6: ACCIDENTAL RELEASE MEASURES

- Personal precautions:** In case of spill, particular danger of slipping on leaked / spilled product. Isolate hazard area and deny entry. Protective clothing should be worn to prevent excessive skin contact.
- Environmental Precautions:** Prevent liquid entering sewers. Do not allow to enter surface waters, storm drains, etc.
- Small spills:** Take immediate steps to stop and contain the spill. Caution should be excised regarding personnel safety and exposure to be spilled material. Eliminate all sources of ignition and wear protective clothing. Absorb small spills onto paper towels and evaporate in a safe place Flush the contaminated area with plenty of water.

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Large spills: Ensure adequate ventilation. Stop leak if you can do it without risk. Eliminate all sources of ignition and static; restrict access to area until completion of clean-up procedure. Wear adequate protective equipment, use self-contained breathing apparatus in confined poorly-ventilated areas. Large quantities should be absorbed on to sand, earth or non combustible absorbent material and removed to a safe area for disposal. Flush the contaminated area with plenty of water.

SECTION 7: HANDLING AND STORAGE

Handling and Storage: Avoid contact with skin or in eyes. Do not inhale vapour or mist. Keep away from sources of ignition - No smoking. Take measures to prevent the build-up of electrostatic charge. Open and handle container with care. Keep away from open fire. Keep away from heating sources. Keep away from sources of ignition.

Conditions for safe Storage: Keep container tightly closed in a cool, dry and well-ventilated place away from direct sunlight and other sources of heat or ignition. Store away from oxidising agents. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Check regularly for leakage.

Storage Regulations: Refer Australian Standard AS 1940 -2004 "the storage and handling of flammable and combustible liquids".

Storage class: 2A flammable liquid.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

National Exposure Standard:	Name	CAS No	STEL		TWA	
			mg/m3	ppm	mg/m3	ppm
	Methanol	67-56-1	250	333	200	266
	Ethyl alcohol	64-17-5			1,880	1,000
	Quat-Silsequioxane		No value assigned for this specific material			

Other Exposure Information The exposure value at the TWA is the average airborne concentration of a particular substance when calculated over a normal 8 hour working day for a 5 day working week The STEL is the maximum average concentration to which an unprotected worker may be exposed in any fifteen-minute interval during the day. Any fifteen-minute periods in which the average STEL concentration exceeds the permissible level must be separated from each other by at least one hour.

Appropriate Engineering Controls In industrial situations maintain the concentrations values below the TWA. This may be achieved by process modification, use of local exhaust ventilation, capturing substances at the source, or other methods. Provide adequate ventilation. If using indoors keep windows and doors open during use. Keep containers closed when not in use.

Respiratory Protection: Where ventilation is not adequate, respiratory protection may be required. Avoid breathing vapours or mists. Select and use respirators in accordance with AS 1716 – Respiratory Protective Devices and be selected in accordance with AS 1715 – Selection, Use and Maintenance of Respiratory Protective Devices

Eye Protection: The use of a face shield, chemical goggles or safety glasses with side shield protection as appropriate. Must comply with Australian Standards AS 1337 and be selected and used in accordance with AS 1336.

Skin Protection: Use of occupational protective gloves of PVC, neoprene, or nitrile rubber gloves are recommended.

Other Protective Clothing Equipment: Impermeable clothing. Final choice of personal protective equipment will depend on individual circumstances and/or according to risk assessments undertaken.

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Hygienic Measures: Always wash hand before smoking, eating or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.

Footwear: Safety boots in industrial situations is advisory. Foot protection should comply with AS 2210, occupational protective footwear- Guide to selection, care and use.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Form:	Liquid
Appearance:	Colourless
Odor:	Alcoholic, mild
Melting Point:	not available
Boiling Point:	82-83°C
Solubility in Water:	fully miscible
Flash Point:	12°C
Vapor Pressure:	42 hPa at 20 °C
Specific Gravity:	0.79 – 0.81 g/m ³ at 20 °C
Relative Density:	0.84 g/m ³ - 0.88 g/m ³ (at 20° C)
Ignition Temp.	ca. 425 °C
Evaporation Rate:	0.300 (n=BuAc = 1)
Explosion Limits:	lower: 2,0 Vol-% upper: 12,0 Vol-%
pH (500 g/l H₂O):	not available
Dynamic viscosity:	not available
Kinematic viscosity	not available
Volatile Organic Compounds (VOC):	not available

SECTION 10: STABILITY AND REACTIVITY

Chemical Stability: The material is stable under normal use and conditions

Conditions to Avoid Heat, sparks, flame and build up of static electricity.

Hazardous Reactions None known.

Incompatibility (Material To Avoid): acids, alkalines, oxidants, reductants.

Hazardous Decomposition Under normal use no hazardous decomposition expected.

SECTION 11: TOXICOLOGICAL INFORMATION

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Toxicological Effects: Acute toxicity

LD50 Oral (Rat) 5,628 mg/kg (methanol)
LD50 Dermal (Rabbit) 15,800 mg/kg (methanol)
LC50 Inhalation (Rat) 4 h > 130.7 mg/l(methanol)

LD50 Oral (Rat) 10,470 mg/kg (ethanol)
LD50 Dermal (Rabbit) NA/kg (ethanol)
LC50 Inhalation (Rat) 4 h > 1124.7 mg/l(ethanol)

Other Information: Chronic effects on Humans – not available
Toxic effects on Humans – not available

General: From our experience and the information provided to us this product does present any adverse health effects if the product is handled in accordance with this Safety Data Sheet and product label.

Ingestion: Unlikely under normal occupational exposures, but swallowing a minor amount may cause nausea, vomiting, headache, dizziness and gastric irritation.

Eye Contact: May cause irritation and watering. High concentration of vapours may cause irritation.

Skin Contact: The product is not classified as irritating to skin, but prolonged exposure may result in irritation

Inhalation: Where the material is used in a poorly ventilated area, at elevated temperature or in confined spaces, vapour may cause irritation to the mucous membranes of the respiratory tract. May cause headaches, dizziness and nausea.

SECTION 12: ECOLOGICAL INFORMATION

Ecological Information: No ecological problems are expected to occur when the product is handled and used with due care and attention

Ecotoxicity: Avoid contaminating waterways. Toxic to aquatic life with long lasting effects.

Further Information: No ecotoxicological study available

SECTION 13: DISPOSAL CONSIDERATIONS

Disposal Considerations Whatever cannot be saved for recovery or recycling should be disposed of according to relevant local authority, state and federal government regulations.

SECTION 14: TRANSPORT INFORMATION

	Land Transport ADR/RID/GGVS/GGVE	Sea Transport (IMDG / IMO)	Air Transport (IATA / ICAO)
UN Number	1987	1987	1987
Proper Shipping Name	Ethanol Solution / Mixture	Ethanol Solution / Mixture	Ethanol Solution / Mixture
DG Class	3	3	3
Identification Number of Hazard	33	33	33
Hazchem Code	2YE	2YE	2YE
Packaging Group	II	II	II
Marine / Environmental Pollutant	Yes	Yes	Yes

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SECTION 15: REGULATORY INFORMATION

Classification: Highly Flammable

Poisons Schedule: Not scheduled

SECTION 16: OTHER INFORMATION

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